Summer Edition

2019-20 Bulletin

The University of Mississippi Medical Center
Jackson, Mississippi
The University of Mississippi Medical Center (UMMC) Bulletin presents information, which at the time of publication, accurately describes the current curricula and the regulations and requirements of the Medical Center. The **Bulletin is updated at the beginning of each academic session, three times a year.** THIS CATALOG IS NEITHER A CONTRACT NOR AN OFFER TO CONTRACT.

All statements in this publication are statements of the present policies only and are subject to change at any time by proper authority to be effective whenever determined by UMMC. The right to change any provision, offering, or requirement may occur within a student’s period of study at UMMC. The University of Mississippi Medical Center reserves the right to require a student to withdraw from any program for cause at any time.

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general information

The University of Mississippi Medical Center
The University of Mississippi established the Medical Center campus on July 1, 1955, when the School of Medicine was relocated from the Oxford campus to Jackson under the leadership of Chancellor J.D. Williams and Dean David Pankratz. The School of Medicine, originally founded in 1903, had been a two-year course of study. However, the move to Jackson provided a traditional program leading to the four-year MD degree, a medical library and a teaching hospital situated on 164 acres.

The Jackson campus, now referred to as the University of Mississippi Medical Center (UMMC), of the University presently serves over 3,000 students through the School of Medicine, established in 1955; the School of Nursing (1958), the School of Health Related Professions (1971); the School of Pharmacy (1971); the School of Dentistry (1973); the School of Graduate Studies in the Health Sciences (2001); and the School of Population Health (2016).

As the academic health sciences campus of the University of Mississippi, UMMC functions as a separately accredited, semi-autonomous unit responsible to the chancellor of the university and through him to the constitutional Board of Trustees of State Institutions of Higher Learning. The University of Mississippi Medical Center is accredited by the Southern Association of Colleges and Schools Commission on Colleges (SACSCOC) to award baccalaureate, master and doctorate degrees. Contact the Southern Association of Colleges and Schools Commission on Colleges at 1866 Southern Lane, Decatur, GA 30033-4097, by telephone (404) 679-4500 or online at www.sacscoc.org for questions about the accreditation of the University of Mississippi Medical Center. For academic questions about the University of Mississippi Medical Center, such as admission requirements, financial aid and educational programs, visit online or call (601) 984-5009.

UNIVERSITY OF MISSISSIPPI MEDICAL CENTER MISSION STATEMENT
The mission of the University of Mississippi Medical Center is to improve the health and well-being of patients and the community through excellent training for health care professionals, engagement in innovative research and the delivery of state-of-the-art health care.

UNIVERSITY OF MISSISSIPPI MEDICAL CENTER VISION
The University of Mississippi Medical Center will be a premier academic health sciences system that is recognized nationally for high-quality clinical care, for innovative research and for training committed health care professionals who work together to improve health outcomes and eliminate health disparities.

FACILITIES
The University of Mississippi Medical Center is located in the heart of the capital city with the original eight-story building now serving as the nucleus of a major academic health sciences complex. The Jackson campus is home to seven health science schools: Medicine, Nursing, Health Related Professions, Dentistry, Graduate Studies, Pharmacy and Population Health. Although the School of Pharmacy is based on the Oxford campus, students receive their final two years of clinical training at the Medical Center. The main campus and clinics of UMMC have grown to over 4 million feet of space and UMMC continues to expand services throughout the State by opening clinics and through collaboration with other providers.

Over the years, the vision and mission of education, research, and healthcare has prompted continuous growth in the form of new buildings and major additions. These include the Arthur C. Guyton Laboratory Research Center (with a later addition); the state’s only children’s hospital (Blair E. Batson) with a two-story addition of a pediatric surgical suite; the School of Health Related Professions building; Winfred L. Wiser Hospital for Women and Children; the Norman C. Nelson Student Union; the Wallace Conerly Hospital for Critical Care; a new adult hospital; a major addition to the School of Nursing; a Classroom Wing; the School of Pharmacy building; the Col. Harland Sanders Children’s Emergency Department; Selby and Richard McRae Children’s Trauma Unit, University Heart, Translational Research Facility and the Phil Bryant Medical Education building. A parking garage was recently completed. Progress extends beyond the Jackson campus and spreads across the state of Mississippi to include multiple clinics in the Jackson area, specialty clinics in Rankin County, and hospitals in Grenada and Lexington. UMMC realizes that exercise and nutrition are essential to health. The addition of the University Wellness Centers located in Madison, and Flowood brings the mission of a healthier Mississippi full circle.

THE UNIVERSITY HOSPITALS AND HEALTH SYSTEM — The 697-bed University Hospitals and Health System (UHHS) is the teaching enterprise for the University of Mississippi Medical Center’s educational programs and the state’s principal diagnostic and referral center. The health system is comprised of six hospitals, including Children’s Healthcare of Mississippi, the Wallace Conerly Hospital for Critical Care, the Winfred L. Wiser Hospital for Women and Infants, University Hospital, Holmes County Hospital and Grenada Medical Center. In addition, UHHS serves the outpatient population in over 25 different ambulatory facilities across the state of Mississippi, with a primary presence in the counties of Hinds, Jackson, Rankin, Lee, and Grenada.

As the state’s only Academic Medical Center, the hospitals and health system focus on quality improvement consisting of systematic and continuous actions that lead to measurable improvement in health care services and the health status of targeted patient groups. The organization strives to be the leader in the delivery of high quality, value based care for all Mississippians. UMMC unites the interrelated activities of education in the health sciences and accepts responsibility for teaching, research, and clinical service. UMMC utilizes efforts to make changes that will lead to better patient outcomes, system performance, enhanced teaching and professional development.

AFFILIATED HOSPITALS — The G.V. “Sonny” Montgomery Veterans Affairs Medical Center of Jackson, with 163 general patient beds, is the principal teaching affiliate for Medical Center educational programs. The Addie McBryde Rehabilitation Center for
the Blind, completed in 1972, adjoins the University Hospital as does the Mississippi Methodist Hospital and Rehabilitation Center, which opened in 1975.

NORMAN C. NELSON STUDENT UNION — The Norman C. Nelson Student Union houses the bookstore, convention facilities, food services and student facilities. Student facilities include conference room, study rooms, television/recreational areas, gymnasium, running track, aerobics room, exercise facilities, locker room and equipment checkout.

ROWLAND MEDICAL LIBRARY — The nearly 45,000-square-foot Rowland Medical Library is the general library for the Medical Center community. Named in honor of Dr. Peter Rowland, former professor of pharmacology, the library houses a print collection of more than 318,000 volumes and provides access to electronic books and journals. The main floor provides access to current journal and reference collections and a computer lab while the second floor houses textbooks, monographs, bound journals, and archives. There are small group and individual study areas on both floors.

Library services include interlibrary loan, document delivery and circulation along with individual consultation and instruction on information retrieval. The library instructional program introduces students to biomedical literature retrieval skills within the curriculum to facilitate identifying best practice and evidence-based information for clinical decision making. The Medical Center's wireless network is accessible throughout the library.

Rowland Medical Library is a resource library within the National Network of Libraries of Medicine Southeastern/Atlantic Region.

ACADEMIC REGULATIONS
The academic regulations of the institution are set forth in Academic Affairs policy and procedure. All Academic Affairs policy and procedure will conform to SACSCOC expectations to be approved through appropriate institutional procedures, published in appropriate institutional documents, accessible to those affected, and enforced by the institution. These policies and procedures may be available in the UMMC Bulletin, the UMMC Document Center, or in the school-specific student handbooks. Changes may be made to the academic policy or procedure at any time to promote the best interests of the Medical Center and its students. The dean of each school is the final arbiter of academic regulations for that school. The Associate Vice Chancellor for Academic Affairs adjudicates academic regulations that affect more than a single school at the Medical Center.

INSTRUCTIONAL PROGRAMS

SCHOOL OF DENTISTRY — The School of Dentistry offers programs leading to the Bachelor of Science in Dental Hygiene and the Doctor of Dental Medicine.

SCHOOL OF GRADUATE STUDIES IN THE HEALTH SCIENCES — The School of Graduate Studies in the Health Sciences offers programs leading to the Master of Science (Biomedical Materials Science (program no longer accepting new graduate students), Biomedical Sciences, and Clinical Investigation) and the Doctor of Philosophy (Biomedical Materials Science (program no longer accepting new graduate students), Biomedical Sciences, Cell and Molecular Biology, Clinical Anatomy, Medical Pharmacology, Microbiology and Immunology, Neuroscience, Nursing, Pathology, and Physiology and Biophysics).

SCHOOL OF HEALTH RELATED PROFessions — The School of Health Related Professions offers programs leading to the Bachelor of Science in Health Informatics and Information Management, Health Sciences, Histotechnology, Medical Laboratory Science and Radiologic Sciences, Post-Baccalaureate Certificate in Health Informatics, Master of Science in Magnetic Resonance Imaging and in Nuclear Medicine Technology, Master of Health Informatics and Information Management, Master of Health Sciences, Doctor of Health Administration, Doctor of Occupational Therapy, and the Doctor of Physical Therapy.

SCHOOL OF MEDICINE — The School of Medicine offers a four-year program leading to the degree of Doctor of Medicine. Additionally, a combined MD/PhD program is offered to highly qualified students by the School of Medicine in collaboration with the School of Graduate Studies in the Health Sciences.

SCHOOL OF NURSING — The School of Nursing offers programs leading to the Bachelor of Science in Nursing, the Master of Science in Nursing, and the Doctor of Nursing Practice. Additionally, the School offers post-master’s certificate programs in adult-gerontology acute care nurse practitioner, family nurse practitioner, family psychiatric mental health nurse practitioner, neonatal nurse practitioner, nurse educator, nursing and health care administrator, adult-gerontology (primary care) nurse practitioner and primary/acute care pediatric nurse practitioner.

SCHOOL OF PHARMACY — The School of Pharmacy offers a seven-year program leading to the degree of Doctor of Pharmacy, including three years of a pre-pharmacy early entry program and four years in the professional program. The first two years of the professional program are administered on the Oxford campus and the final two years are administered on the UMMC campus.

SCHOOL OF POPULATION HEALTH — The School of Population Health offers programs leading to a Master of Science (Biostatistics and Data Science and Population Health Science – pending SACSCOC approval), an Executive Master of Science in Population Health Management – pending SACSCOC approval, and the Doctor of Philosophy (Biostatistics and Data Sciences and Population Health Science – pending SACSCOC approval).

ADMISSION
Admission to the University of Mississippi Medical Center is administered under policies established by state law, the Board of Trustees of State Institutions of Higher Learning and the Medical Center’s faculty. For program-specific admission requirements, please see the respective schools’ sections of this Bulletin. Admission requirements are subject to change without notice at the direction of the Board of Trustees.
STUDENT ENROLLMENT STATUS
Certification of full-, half- or less than half-time enrollment status for loan deferment, medical insurance, etc. is based on hours of enrollment in a term (fall, spring, summer). Listed below are the requirements that determine student status for official enrollment certification purposes by the Office of Student Records and Registrar and for financial assistance. Students are required to be enrolled in at least half-time status to receive federal student loans, be covered for health/medical insurance or to defer repayment of student loans.

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<tr>
<th>UNDERGRADUATE</th>
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<tr>
<td>Full-Time</td>
<td>Full-Time</td>
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<tr>
<td>12 Hours and above</td>
<td>9 Hours and above</td>
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<tr>
<td>Three-Quarter Time</td>
<td>Three-Quarter Time</td>
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<tr>
<td>9, 10, 11 Hours</td>
<td>7 and 8 Hours</td>
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<tr>
<td>Half-Time</td>
<td>Half-Time</td>
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<tr>
<td>6, 7, 8 Hours</td>
<td>5 and 6 Hours</td>
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<tr>
<td>Less Than Half Time</td>
<td>Less Than Half Time</td>
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<tr>
<td>5 or less Hours</td>
<td>4 or less Hours</td>
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Graduate students enrolled in traditional research-based graduate degree programs (those requiring a thesis or dissertation) are considered full-time students if they are enrolled in 9 credit hours in a semester, except for the summer term when 1 credit hour is sufficient. Additionally, graduate students who are admitted to candidacy and are working on their thesis/dissertation may be classified as full-time while registering for 1 credit hour in any semester. Students and advisors must complete the required Approval to Register form online.

TUITION AND FEES
It is the intent of the University of Mississippi Medical Center to provide the highest quality education at a reasonable cost. Since student tuition and fee charges are used for operating costs, including scholarships and waivers, the Medical Center reserves the right to increase or modify tuition and fees without prior notice subject to the approval of the Board of Trustees of State Institutions of Higher Learning as required by the Department of Education. Information regarding tuition and fees for programs available at the Medical Center can be found within the respective schools’ sections of this Bulletin. Billing statements are emailed to each student’s UMMC email account. Students are expected to check their email account on a regular basis. Payment is due by June 15, September 30 and February 15 for the summer, fall and spring semesters, respectively.

Students who register for courses at the University of Mississippi Medical Center acknowledge a financial obligation when they sign their registration agreement. If payment is not received by the due date, late charges and/or service fees may be assessed on the unpaid balance. Nonpayment of accounts does not constitute class withdrawal or cancellation of health insurance. Delinquent accounts may be referred to outside collection agencies and credit bureaus. Any collection costs or legal fees incurred in collecting unpaid accounts will be charged to the student. Additional information concerning billing and payment of fees is available online.

RETURNED CHECKS — Checks returned by the bank are charged back to the student’s account, and a $30 non-sufficient funds fee is assessed. The student will be notified of the return and must make payment within 15 days or legal action may be initiated. Online payments returned for non-sufficient funds are also subject to the non-sufficient funds fee. Accounts with a balance due to charge backs are subject to late fees.

TUITION REFUNDS — By registering for school, students incur a financial obligation to pay for the entire academic term for which they are registered. Registering for a term includes early registration and all courses added after the student’s initial registration. Students who withdraw or go on an approved leave of absence may be eligible for a refund of their tuition and fees provided they complete the official withdrawal or leave of absence procedures within the refund period. Failure to attend classes is not considered an official withdrawal. For purposes of this section, withdrawals and leaves of absence will all be termed “withdrawals.” Refund dates are included in the academic calendar and are also posted on the student portal. In the event a student who was receiving financial aid drops hours, withdraws or goes on leave of absence, all or a portion of that aid may have to be returned to the source based upon the Return to Title IV (R2T4) formula, as outlined in Federal Regulation 34 CFR 668.22. Tuition reversals based upon last date of attendance may not wholly offset the amount of aid returned and the student will be required to pay the difference to clear their account.

In the event that the student is owed a refund, a check will be mailed to the student at the address provided during the exit process. Students who owe money to the school at the time of withdrawal will be required to pay the account balance at the time they withdraw. If the account is not paid, the account will be considered delinquent and may be referred to an outside collection agency and reported to a credit bureau. The student will be required to pay for any collection costs and legal fees incurred in the collection process.

GENERAL FEES — The following fees are applicable to all students.

- Tuition .......................................................... Varies by school
- Application fee ................................................. Varies by school
- School of Health Related Professions, School of Nursing and School of Graduate Studies in the Health Sciences............ $25
- Application fee for residents – School of Medicine and School of Dentistry................................................................. $50
- Transcript fee ...................................................... $5 per transcript

Requests for transcripts initiated by other persons and agencies will not be filled until written authorization has been received from the student and remittance of fee has been made.
Health Insurance. See the Student Health section of the Bulletin for more information regarding health insurance.

Contact the Office of Student Accounting for plan benefits and prices.

Course audit fee. Same per hour rate as tuition

Returned check fee. $30

Distance Education Fee (Distance Education programs only). $150 per semester

WITHDRAWAL POLICY

Registration for a course makes the student responsible for meeting course requirements until the course is completed or until, with the permission of the dean or designee, the student withdraws from the course. The withdrawal from courses and/or programs policy is available in the UMMC Document Center.

Individual schools may have stricter withdrawal policies, and a student is allowed only as many withdrawals as his/her specific school prescribes.

For program specific withdrawal requirements, please see the respective schools’ sections of this Bulletin.

LEGAL RESIDENCE

The Medical Center applies the definitions and conditions stated here as required by state law in the classification of students as residents or nonresidents for the assessment of fees. Requests for a review of residency classification should be submitted to the Office of Student Records and Registrar.

RESIDENCE OF A MINOR — The residence of a person less than 21 years of age is determined based on the residence of the father, the mother or a general guardian duly appointed by a proper court in Mississippi. If a court has granted custody of the minor to one parent, the residence of the minor is that of the parent who was granted custody by the court. If both parents are dead, the residence of the minor is that of the last surviving parent at the time of that parent’s death, unless the minor lives with a general guardian duly appointed by a proper court of Mississippi, in which case his/her residence becomes that of the guardian.

A minor student who, upon registration at the University of Mississippi Medical Center, presents a transcript demonstrating graduation from a Mississippi secondary school and who has been a secondary school student in Mississippi for not less than the final four years of secondary school attendance shall not be required to pay out-of-state tuition.

RESIDENCE OF AN ADULT — The residence of an adult is that place where he/she is domiciled, that is, the place where he/she actually physically resides with the intention of remaining there indefinitely or of returning there permanently when temporarily absent.

REMOVAL OF PARENTS FROM MISSISSIPPI — If the parents of a minor who is enrolled as a student at the University of Mississippi Medical Center move their legal residence from Mississippi, the minor shall be immediately classified as a nonresident student; such a change in classification shall not affect the tuition to be charged upon completion of the semester in which the move takes place.

RESIDENCE REQUIRED — No student may be admitted to the University of Mississippi Medical Center as a resident of Mississippi unless his/her residence has been in Mississippi preceding his/her admission.

RESIDENCY PETITIONS — Nonresidents may petition the University of Mississippi Medical Center for a change of residency classification. A person who enters Mississippi from another state and enters a system institution is considered a nonresident, unless the person meets the residency requirements as a minor or adult as set out above. Provided, however, that any person who has attained 21 years of age and has thereafter actually established residency as an adult and resided within Mississippi for 12 consecutive months after attaining 21 years of age upon sworn affidavit and other representation, may petition the University of Mississippi Medical Center for a change in residency classification for the purposes of fees and tuition assessment.

The Medical Center may make reasonable inquiry into the validity of the petitioner’s claim. Such petition for change of residency must be made on or before the last day a student may register at the Medical Center without penalty.

LEGAL RESIDENCE OF A MARRIED PERSON — A married person may claim the residence status of his/her spouse, or he/she may claim independent residence status under the same regulations set out above as any other adult.

CHILDREN OF FACULTY OR STAFF — Children of parents who are members of the faculty or staff of the University of Mississippi Medical Center may be classified as residents for the purpose of attendance at the Medical Center.

MILITARY PERSONNEL ON ACTIVE DUTY STATION IN MISSISSIPPI — Members of the U.S. Armed Forces on extended active duty and stationed within Mississippi medical center may be classified as residents for the purpose of attendance at the University of Mississippi Medical Center. Resident status of such military personnel, who are not legal residents of Mississippi, shall terminate upon their reassignment for duty in the continental United States outside of Mississippi.

SPOUSE OR CHILD OF MILITARY PERSONNEL — Resident status of a spouse or child of a member of the U.S. Armed Forces on extended active duty shall be that of the military spouse or parent for the purpose of attending the University of Mississippi Medical Center during the time that their military spouse or parent is stationed within Mississippi and shall be continued through the time that the military spouse or parent is stationed in an overseas area with last duty assignment within Mississippi, excepting temporary training assignments en route from Mississippi.

Resident status of a minor child terminates upon reassignment under Permanent Change of Station Orders of the military parent for duty in the continental United States outside Mississippi, excepting temporary training assignments in route from Mississippi. The spouse or child of a member of the U.S. Armed Forces who dies or is killed is entitled to pay the resident tuition fee if the spouse or child becomes a resident of Mississippi. If a member of the U.S. Armed Forces is stationed outside Mississippi...
and the member’s spouse or child establishes residence in Mississippi and registers at the University of Mississippi Medical Center, the Medical Center shall permit the spouse or child to pay the tuition, fees and other charges provided for Mississippi residents without regard to length of time that the spouse or child has resided in Mississippi. A member of the U.S. Armed Forces or the child or spouse of a member of the U.S. Armed Forces who is entitled to pay tuition and fees at the rate provided for Mississippi residents under another provision of this section while enrolled in a degree or certificate program is entitled to pay tuition and fees at the rate provided for Mississippi residents in any subsequent term or semester while the person is continuously enrolled in the same degree or certificate program. A student may withdraw or may choose not to re-enroll for no more than one (1) semester or term while pursuing a degree or certificate without losing resident status only if that student provides sufficient documentation by a physician that the student has a medical condition that requires withdrawal or non-enrollment. For purposes of this section, a person is not required to enroll in a summer term to remain continuously enrolled in a degree or certificate program. The person’s eligibility to pay tuition and fees at the rate provided for Mississippi residents under this section does not terminate because the person is no longer a member of the U.S. Armed Forces or the child or spouse of a member of the Armed Forces of the United States.

CERTIFICATION OF RESIDENCE OF MILITARY PERSONNEL — A military person on active duty stationed in Mississippi who wishes to avail himself/herself or his/her dependents to be classified as residents for the purpose of attendance at the University of Mississippi Medical Center must submit a certificate from his/her military organization showing the name of the military member; the name of the dependent, if for a dependent; the name of the organization of assignment and its address (may be in the letterhead); that the military member will be on active duty stationed in Mississippi on the date of registration at the Medical Center; that the military member is not on transfer orders; and the signature of the commanding officer, the adjutant or the personnel officer of the unit of assignment with signer’s rank and title. A military certificate must be presented to the Office of Student Records and Registrar each semester or tri-semester at (or within 10 days prior to) registration each semester for the provisions of said section to be effective.

The Medical Center complies with section 702 of the Choice Act in determination of tuition for selected veterans and their dependents.

SUPPORT SERVICES

The University of Mississippi Medical Center offers a comprehensive program of student support services through the Division of Academic Affairs, the Office of the Chief Student Affairs Officer, the individual schools, the Office of Academic Support, Office of Student Financial Aid, the Office of Student Accounting, the Office of Student Records and Registrar; the Student and Employee Health Service and the University Police. The Medical Center believes these services are an important adjunct to the total educational program and essential to the continuing fulfillment of the institution’s purpose.

ACADEMIC ADVISEMENT — Faculty advisors are an important resource for students. Faculty advisers meet with students in the School of Dentistry, School of Graduate Studies in the Health Sciences, School of Health Related Professions, School of Medicine, School of Nursing, School of Pharmacy, and School of Population Health.

ACADEMIC AFFAIRS — The Division of Academic Affairs promotes the pursuit of excellence in education delivery to students in all academic programs, supports the faculty who provide instruction, and provides leadership to and coordination among services for faculty and students. The Division of Academic Affairs provides expertise and services to faculty and students related to adult education, teaching, learning, professionalism and interprofessional training. Services are provided by the following offices: Academic Development; Academic Effectiveness; Academic Support; Center for Bioethics and Medical Humanities; Community Education; Community Engagement and Service Learning; Continuing Health Professional Education; E-Learning; Health Careers Opportunity; Institutional Research; Media Production and Photography; Simulation-Based Education; Rowland Medical Library; and Student Records and Registrar.

ACADEMIC SUPPORT — The Office of Academic Support provides the following University of Mississippi Medical Center support services.

Academic Consulting Services. Academic Consulting Services are available to students, residents and fellows at the University of Mississippi Medical Center. Academic consultants meet individually with learners and provide assistance with developing the skills and behaviors that are essential to academic success and professional development (e.g., time management, study skills, and testing strategies). To make an appointment, complete the Request Academic Consulting online form. http://www.umc.edu/academic_consulting/

Academic Success Kiosk. The Academic Success Kiosk (ASK) is an online, self-paced resource available to students at the University of Mississippi Medical Center. ASK addresses time management, study skills, and professionalism. To register, complete the Register for ASK online form. http://www.umc.edu/ASK/

University Tutoring Services. University Tutoring Services is a peer tutoring program available to students experiencing academic difficulty who are currently enrolled in the University of Mississippi Medical Center. Supportive instruction is provided by peers with similar educational backgrounds. To request tutoring, complete the Request Tutoring online form. http://www.umc.edu/University_Tutoring/

Writing Support Services. Writing Support Services are available to students at the University of Mississippi Medical Center. Writing coaches are available to assist students with assigned coursework and papers. The goal is to add value to the educational experience through writing critique and support. To request writing support, complete the Request Writing Support online form. http://www.umc.edu/writing_services/
Academic Accommodations. The Office of Academic Support manages academic accommodations at the University of Mississippi Medical Center. Students in the School of Pharmacy should apply for academic accommodations through the University of Mississippi, Oxford Campus. UMMC policy provides for reasonable academic accommodations to be made for students with verified disabilities on an individualized and flexible basis as specified under Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990 (ADA). For more information, individuals should review the Office of Academic Support webpage or contact the office directly. To request academic accommodations, complete the Request for Academic Accommodations form available on the webpage. [link]

Office of Academic Support
University of Mississippi Medical Center
Verner Holmes Learning Resource Center, U155-A
Phone: 601-815-5064 • Fax: 601-815-5828
[link]

BOOKSTORE — Located in the Norman C. Nelson Student Union building, the Bookstore provides Medical Center students with a selection of textbooks, medical instruments, school supplies, insignia items, computer supplies, and gifts. Additional information is available [online] and on Facebook.

FINANCIAL AID — The University of Mississippi Medical Center subscribes to the principle that the amount of financial aid granted to a student should be based upon financial need. Therefore, students wishing to apply for financial aid must complete the FAFSA (Free Application for Federal Student Aid) [online] (using the Medical Center’s Federal School Code number 004688), apply for a Personal Identification Number (PIN) [online], and complete loan counseling [online]. For detailed information regarding the Office of Student Financial Aid’s various programs, procedures, and policies, please visit their website.

FOOD SERVICES — Students may find a variety of food service options within the Medical Center, including the University Hospital Cafeteria, Winfred L. Wiser Hospital Dining Room, Methodist Rehabilitation Center Cafeteria, Norman C. Nelson Student Union Commons, Chick Fil A, McDonalds and Subway.

POSTAL SERVICES — A contract station of the U.S. Post Office is located on campus and offers most standard services.

SECURITY — The UMMC Campus Police provides service and protection to the Medical Center's students, faculty, staff, properties and campus. The publication, Guidelines for Campus Security, lists the services provided by UMMC police as they strive to ensure a high quality of student-faculty life by promoting a tranquil, safe atmosphere conducive to the objectives of the Medical Center.

STUDENT HEALTH
The Student and Employee Health Service provides ambulatory medical care to students from 8 a.m.-4 p.m. weekdays and on a walk-in basis during standard sick-call hours. Under the direction of a board-certified physician, a nurse practitioner and nurses work with patients and collaborate with other providers to provide personalized and timely care to UMMC students. All staff of UMMC’s Student and Employee Health Service have no role in any student’s academic assessment or evaluation and/or decisions in advancement and/or graduation. The only exceptions are for the release of information in accordance with the lawful requirements of Mississippi and the United States. Emergency service is provided in the University Hospital emergency department at nights and on weekends. The Student and Employee Health Service does not provide medical care for dependents of students nor can it reimburse students for treatment received elsewhere. In order to maintain student confidentiality, the Medical Center contracts for mental health services with off-site providers at nearby health care locations. Information on these providers can be obtained on the Employee and Student Health website.

DRUG POLICY — Pursuant to the Anti-Drug Abuse Act passed in October 1988 and the Drug-Free Schools and Communities Act Amendments of 1989 (Public Law 101-226), the Medical Center is committed to maintaining a drug-free work place and to prevent the illicit use of drugs and the abuse of alcohol by students and employees. All students are to abide with this policy. The institution has educational resources available for students regarding the dangers of alcohol and illicit drug abuse through Employee and Student Health Services. Policies for a Drug Free Campus is available on the Campus Police website.

Policy:
1. You are prohibited from being under the influence of alcohol or illegal drugs while on campus, in other training sites, such as affiliated hospitals and clinics, and in extramural settings for elective courses.
2. The possession, transfer, purchase or sale of illegal drugs is a violation of the law and is strictly prohibited; such action will be reported to law enforcement officials and to licensing agencies when appropriate.
3. The use, sale or possession of an illegal drug in your capacity as a student is cause for your dismissal from school.
4. Any student who commits an unlawful act on or off the Medical Center or whose conduct discredits the Medical Center in any way will be subject to disciplinary action, up to and including dismissal.
5. No alcoholic beverage may be brought or consumed on the Medical Center premises.
6. Prescription drugs may be brought and used by you on the Medical Center premises only in the manner, combination and quantity prescribed, as long as your ability to perform as a student is not affected.
7. Any student who’s on- or off-duty abuse of alcohol, illegal drugs or improper use of prescription drugs interferes in any way with his/her performance as a student will be referred to Student and Employee Health Services for evaluation and/or testing.

HEALTH INSURANCE — Hospitalization insurance is mandatory for students attending the University of Mississippi Medical Center. Students may enroll in the group plan offered by the Medical Center or must demonstrate comparable coverage under another provider. Students not enrolled in the Medical Center’s student group health insurance plan will be required to complete
Questions about the policy should be directed without specific written consent of the patient or legal guardian except as required by law. Every effort will be made to preserve confidentiality infected students who are required to receive such immunizations should consult the Student and Employee Health Service or the Student and Employee Health Service. Students who become HIV-positive during the course of their enrollment may get vaccinations. However, because of potentially serious consequences for HIV-infected persons receiving live virus vaccines, HIV-infected students may have their educational program modified by their school to limit any potential risk of disease transmission. Restrictions on any clinical assignments and/or off-campus clinical rotations or externships will be made on a case-by-case basis.

The school will make every reasonable accommodation to enable a student who is HIV-positive to successfully complete the requirements of his/her educational program. The school also will make available career counseling should the student wish to review his/her educational objectives in light of the realities of HIV infection. HIV-infected students may have their educational program modified by their school to limit any potential risk of disease transmission. Restrictions on any clinical assignments and/or off-campus clinical rotations or externships will be made on a case-by-case basis.

Immunizations — Students who have HIV infection are not exempted from Medical Center requirements for non-live virus vaccinations. However, because of potentially serious consequences for HIV-infected persons receiving live virus vaccines, HIV-infected students who are required to receive such immunizations should consult the Student and Employee Health Service or the Hinds County Department of Health for current recommendations.

Testing and Care — Students who wish to get HIV antibody testing will be referred to the Hinds County Department of Health or the Student and Employee Health Service. Students who become HIV-positive during the course of their enrollment may get appropriate medical care, consultation and counseling through the Student and Employee Health Service.

Confidentiality — Medical information will not be released to any person, group, agency, insurer, employer or institution without specific written consent of the patient or legal guardian except as required by law. Every effort will be made to preserve
the confidentiality of the medical record of a student who is HIV-positive. Knowledge of a student’s HIV status will be limited to those with an absolute necessity to know.

**Public Health Reporting Requirement** — The Medical Center complies with all public health reporting requirements of the Mississippi State Department of Public Health and the Centers for Disease Control. Students who are known to be HIV-positive are reported to the State Department of Health.

**Personnel** — Since many people with HIV infections are not identified in advance, universal precautions, as defined by the Centers for Disease Control and by OSHA, guide Medical Center procedures for the handling of blood and body fluids of any student, employee or patient. Questions regarding these safety guidelines should be directed to the director of Student and Employee Health Services or to the dean of the school in which the student is enrolled.

**Universal Precautions** — Manuals and procedures in use at the Medical Center cover the precautions which should be taken when handling infectious materials.

All Medical Center personnel, including students, will use disposable, one-use needles and other equipment if the skin or mucous membranes of patients, employees or students will be punctured. Extreme caution should be exercised when handling sharp objects, particularly in disposing of needles. All used needles should be placed in a puncture-resistant container designated for this purpose. Needles should never be bent or recapped after use. Blood-soiled articles should be placed in puncture-proof bags and labeled prominently before being sent for reprocessing or disposal in accordance with Medical Center infection control guidelines. Students who have questions about universal precautions or other Medical Center infection control guidelines should see the infection control website.

**Teaching Laboratories** — Laboratory courses requiring exposure to blood, such as courses in which blood is obtained by finger-prick for typing or examination, must use disposable equipment. No lancets or other blood-letting devices should be reused or shared.

**Behavior Risk** — Medical Center students who are HIV-positive and are aware of their condition and engage in behavior which threatens the safety and welfare of other students, patients or Medical Center personnel may be subject to disciplinary action.

**Applicability of Other Medical Center AIDS Policies** — More specific written guidelines and procedures are the responsibility of the individual schools and may be developed, as needed, by the deans and department heads. All unit policies must comply with those for the institution as a whole.

**STUDENT GOVERNMENT**

The Associated Student Body (ASB) is the student government organization of the University of Mississippi Medical Center. Comprised of elected representatives and designated officers from the Schools of Dentistry, Graduate Studies in the Health Sciences, Health Related Professions, Medicine, Nursing, Pharmacy, and Population Health the ASB meets with and provides information and opinions of student concern to the Medical Center administration and faculty. ASB also develops activities relating to academic programs and sponsors extracurricular activities including intramural sports and publication of the campus yearbook (Medic) and the student newspaper (Murmur).

**STUDENT PROFESSIONAL ORGANIZATIONS**

There are active professional organizations for students enrolled in the various academic programs at the Medical Center. Information on these organizations may be obtained from each school’s Office of Student Affairs.

**STUDENTS’ RIGHTS AND RESPONSIBILITIES**

**SCHOLARSHIP AND PROMOTION** — Promotion of students is dependent upon the satisfactory completion of each year’s work. Promotions within the academic divisions of the University of Mississippi Medical Center are considered on the basis of recommendations by individual instructors, on departmental evaluations and on the student’s total record. The faculty of each of the academic programs has the obligation and right to determine methods for evaluating a student’s performance and to evaluate each student individually in compliance with applicable Medical Center, school and departmental regulations.

Regulations for all of the programs have their basis in the Medical Center’s vision to be a great academic health sciences center dedicated to improving lives. Information about the scholarship and promotion policies may be found in each school’s section in this Bulletin or student handbooks. Inherent in these policies is the right of students to use the institutional student appeals process to seek redress of decisions involving academic status, disciplinary matters and other areas of student life.

Students dismissed for academic reasons or subjected to disciplinary action may appeal the decision as stated in the letter of notification from the academic program in which the student is enrolled. The Institutional Executive Officer has delegated full authority regarding student appeals to the various academic deans; therefore, the decision of the dean for the program in which the student is enrolled is final. However, if a student provides compelling evidence of incorrect application of the school-specific appeal process, a procedural appeal may be considered at the institutional level.

Students who wish to appeal decisions, in such matters as student financial aid, should contact the appropriate office. The student will be notified in writing about the appropriate appeals process.

In all cases of student appeals, students are free to present pertinent information and material, to have an attorney present or to bring faculty and other appropriate spokespersons to the appeal hearing. The faculty and administration reserve the right to make changes in curricula regulations when such changes are determined to be in the best interest of the student, the school and the institution.
NON-ACADEMIC DISCIPLINARY ACTION — All students enrolled in any educational program at the University of Mississippi Medical Center are expected to conduct themselves in an honest and ethical manner appropriate to a professional student whether on or off campus. Examples of unprofessional conduct include, but are not limited to: dishonesty, cheating, falsifying documents, accessing or divulging protected health information, violating the Medical Center Information Policy, and knowingly violating any other Medical Center policy. Any student who does not meet the standards of professional conduct as defined in his/her school’s Student Handbook may be subject to disciplinary action up to and including dismissal from the institution. Students have the right to appeal any adverse disciplinary action as outlined in their school’s student handbook.

STUDENT COMPLAINTS — Students seeking to resolve an academic or misconduct complaint will seek resolution through the school’s published administrative channels, entering at the appropriate level and proceeding in the order stated. All decisions by the school’s dean or executive faculty concerning academic matters are final. Procedural appeals may be filed to the associate vice chancellor for academic affairs. Information on academic conduct complaints are published in the bulletin and also included in the individual school’s handbook. Information about student complaints may be found on the Student Comments and Complaints website. The Student Complaints policy is available in the UMMC Document Center.

A student seeking to resolve a non-academic or non-misconduct complaint will seek resolution through the appropriate office on campus designated to address the particular student concern. Issues involving such matters as sexual harassment, discrimination, disability, employment or mistreatment fall under the institutional policies that are handled by specific offices, such as the Office of Human Resources or the Equal Employment Opportunity Office. The Sexual Misconduct, Sexual Assault and Sexual Harassment Policy and Procedure (Title IX) for Students and Employees policy is available in the UMMC Document Center.

RELIGIOUS DIVERSITY — The Medical Center embraces religious diversity for individuals of all faiths. It is the intent of the institution to make every effort to reasonably accommodate individuals based on their religious beliefs. Observation of religious holidays in all faiths will be supported except when detrimental to patient care or established policies. Conflicts between religious obligations and patient care obligations are handled much as they would be in clinical practice. That is, patient care responsibilities take precedence unless coverage has been previously arranged.

In an effort to respect students’ religious customs, academic departments will attempt to adjust schedules to allow the observance of these holidays. Any observance of religious holidays will not be a negative factor in the grading of a student’s performance. In the event the conflict is with an essential experience (e.g., board exams), then these essential experiences will take precedence. It is the student’s responsibility to inform the appropriate person in the department prior to or at the initial clinical rotation orientation of his/her request for accommodation so that patient care and on-call responsibilities can be met in full. It is also the student’s responsibility to obtain coverage so that patient care and on-call coverage are not compromised. In the event students cannot obtain coverage, they are expected to meet their responsibilities by taking call regardless of the schedule conflict.

Conflicts with religious observances and daily patient care or educational activities will be resolved by the department on a case-by-case basis. These arrangements must be made in advance and must be satisfactory to the department.

Questions and requests for additional information should be directed to either the associate vice chancellor for academic affairs, student affairs officers or the director of pastoral services.

FEDERAL FAMILY EDUCATIONAL RIGHTS AND PRIVACY ACT OF 1974

Student Access to Records — Each year, the Medical Center informs entering students of their rights of access to their official records as stated in the law. By written request to the Office of Student Records and Registrar, students who are or who have been in attendance may review recorded information maintained by the institution for use in making decisions about students.

Recorded information includes grades, copies of correspondence sent to the students by the educational programs and other institutional offices, and completion of licensure applications. The recorded information may also include an electronically stored transcript of courses and grades and a folder containing application materials and supporting documents, such as transcripts from previous schools and supplementary material submitted with the application.

Confidential letters or statements of recommendation to which students have waived access rights are not available for inspection. As defined by the law, students do not have access to medical, psychiatric or comparable records if these are used exclusively for treatment purposes. However, students may designate an appropriate professional to examine these records. Students do not have the right to see parents’ financial records submitted to the institution. Students do not have access to instructional, supervisory and administrative personnel records which are not accessible or revealed to any other individual; campus security records which are used exclusively for law enforcement purposes, and which are not disclosed to individuals other than law enforcement officials; and employment records except when such employment requires that the person be a student.

Release of Information — The institution is prohibited from releasing educational information or personally identifiable information other than directory information about the students without their written consent except to specified agencies and persons such as school officials and certain federal or state offices as defined in the law. A description of directory information can be found in the Notification of Directory Information Under FERPA policy located in the UMMC Document Center.

Under the law, students may not see confidential letters or statements of recommendations written prior to January 1, 1975, and may, but are not required to, waive the right of access to future confidential letters of recommendations. The institution secures from students their instructions regarding their access rights to confidential letters or statements of recommendation.
written on their behalf while enrolled at the Medical Center. These signed statements are permanently filed in the students' folders. Any questions concerning student access to records should be directed to the Registrar.

**Accuracy of Educational Records** — The Family Educational Rights and Privacy Act of 1974, allows students to challenge the contents of their educational records on the basis of accuracy. Students who request that information be amended or deleted from their records on the basis of incorrect information should first submit their request to the official primarily responsible for the information. If the matter is not resolved to their satisfaction, students may request a formal hearing before an appropriate institutional body or consult Section 99.36 of the law’s regulations for additional grievance procedures. The Office of Student Records and Registrar will furnish a copy of the Family Educational Rights and Privacy Act, 1974, upon request. Notification of rights guaranteed under PL 93-380 and policies and procedures pertaining to educational records is provided to all students through this Bulletin section, by a memorandum distributed at the time of registration, and in the orientation sessions for the school year.

**Equal Employment Opportunity Statement** — The University of Mississippi Medical Center complies with all applicable laws regarding affirmative action and equal opportunity in all its activities and programs and does not discriminate against anyone protected by law because of age, color, disability, national origin, race, religion, sex, sexual orientation and gender identity or expression, handicap or status as a veteran or disabled veteran.
By CONSTITUTIONAL AMENDMENT, the governance of The University of Mississippi and the other public institutions of higher learning in the state of Mississippi is vested in a Board of Trustees appointed by the governor with the advice and consent of the Senate. After January 1, 2004, as vacancies occur, the 12-member Board of Trustees of State Institutions of Higher Learning shall be appointed from each of the three Mississippi Supreme Court districts, until there are four members from each Supreme Court district.

The terms are staggered so that all members appointed after 2012 will have a term of nine years. The Board of Trustees selects one of its members as president of the board. The board maintains offices at 3825 Ridgewood Road, Jackson, MS 39211.

Members whose terms expire May 7, 2027:

Dr. Steven Cunningham, Hattiesburg, Southern Supreme Court District
Jeanne Luckey, Ocean Springs, Southern Supreme Court District
Bruce Martin, Meridian, Central Supreme Court District
Powell “Gee” Ogletree, Jr., Jackson, Central Supreme Court District

Members whose terms expire May 7, 2024:

Tom Duff, Hattiesburg, Southern Supreme Court District
Dr. Alfred E. McNair, Ocean Springs, Southern Supreme Court District
Chip Morgan, Stoneville, Central Supreme Court District
Dr. J. Walt Starr, Columbus, Northern Supreme Court District

Members whose terms expire May 7, 2021:

Ann Lamar, Senatobia, Northern Supreme Court District
Dr. Ford Dye III, Oxford, Northern Supreme Court District
Shane Hooper, Tupelo, Northern Supreme Court District
Hal Parker, Bolton, Central Supreme Court District

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Hal Parker, President
Dr. Ford Dye III, Vice President
Dr. Alfred Rankins, Jr., Commissioner of Higher Education
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Thomas H. Fortner, MBA, Chief Institutional Advancement Officer
Paula M. Henderson, MBA, Chief Human Resources Officer
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Charles O’Mara, MD, Associate Vice Chancellor for Clinical Affairs
Brian Rutledge, PhD, Chief of Staff, Office of the Vice Chancellor
Nelson Weichold, MHA, Chief Financial Officer, Chief Accounting Officer, Comptroller
Richard Summers, MD, Associate Vice Chancellor for Research
Juanyce Taylor, PhD, Chief Diversity and Inclusion Officer
Jonathan Wilson, PhD, Chief Administrative Officer

ACADEMIC OFFICERS
Jessica H. Bailey, PhD, Dean of the School of Health Related Professions
Bettina M. Beech, DrPH, MPH, Dean, School of Population Health
David Felton, DMD, Dean of the School of Dentistry
Joey Granger, PhD, Dean of the School of Graduate Studies in the Health Sciences
Mary Stewart, PhD, Dean of the School of Nursing
Loretta Jackson-Williams, MD, Vice Dean for Medical Education, School of Medicine
Leigh Ann Ross, PharmD, Associate Dean for Clinical Affairs, Department of Pharmacy Practice
RESIDENCIES
Postgraduate training for physicians is offered at the University of Mississippi Medical Center in the disciplines listed below. Application should be made to the appropriate department.

MEDICAL SPECIALTIES
Anesthesiology  Infectious Diseases  Pediatrics
Cardiothoracic Anesthesiology  Nephrology  Pediatric Cardiology
Pain Management  Pulmonary/Critical Care  Pediatric Critical Care
Pediatric Anesthesiology  Rheumatology  Pediatric Emergency Medicine
Dermatology  Medical Genetics and Genomics  Pediatric Hematology/Oncology
Dermatopathology  Neurology  Pediatric Neurology
Micrographic Surgery & Plastic Surgery
Dermatologic Oncology  Neuro-Critical Care  Preventive Medicine
Emergency Medicine  Neurophysiology  Psychiatry
Emergency Medical Services  Neuromuscular Medicine  Sleep Medicine
Sports Medicine  Neurophysiology  Radiation Oncology
Family Medicine  Vascular Neurology  Radiology
Medicine  Neurosurgery  Neuroradiology
Internal Medicine  Obstetrics and Gynecology  Surgery (General)
Medicine/Pediatrics  Maternal-Fetal Medicine  Pediatric Surgery
Allergy/Immunology  Ophthalmology  Surgical Critical Care
Adult Congenital Heart Disease  Orthopedic Surgery  Thoracic Surgery
Cardiovascular Diseases  Hand Surgery  Urology
Interventional Cardiology  Otolaryngology  Vascular Surgery
Endocrinology  Pathology (Anatomic/Clinical)  
Endocrinology  
Gastroenterology  
Geriatrics  
Hematology/Oncology  
Hospice & Palliative Care  

PSYCHOLOGY
A residency in health service psychology, approved by the American Psychological Association, is offered. The program is one year in duration starting July 1. Visit the Psychology Internship Training Program website at www.umc.edu/psychology-internship for applications, information and program details.

DENTISTRY
The School of Dentistry offers a one-year general practice residency, a one-year advanced education in general dentistry residency program, a two-year pediatric dentistry residency and a four-year oral-maxillofacial surgery residency program. For information on these programs, visit the School of Dentistry website at www.umc.edu/sod.

SCHOOL OF HEALTH RELATED PROFESSIONS
The Department of Physical Therapy offers three residency programs, one in Neurologic Physical Therapy, one in Sports Physical Therapy, and one in Pediatric Physical Therapy.

- The Neurologic Physical Therapy residency program is a cooperative effort between the University of Mississippi Medical Center, the School of Health Related Professions, Methodist Rehabilitation Center, and St. Dominic Outpatient Rehabilitation Services. This program is 12 months in duration, beginning in September and ending the following August. The neurologic residency program is accredited by the American Board of Physical Therapy Residency and Fellowship Education as a post-professional residency program for physical therapists in neurologic physical therapy. The program prepares the resident to take the Neurologic Specialty Examination offered by the American Board of Physical Therapy Specialties. The resident is a full-time employee of UMMC and receives a competitive salary with a full benefits package. Contact and application information is available on the Neurologic Physical Therapy website.

- The Sports Physical Therapy residency program is a cooperative effort between the University of Mississippi Medical Center, the School of Health Related Professions, University Hospitals and Clinics, University of Mississippi (Oxford Campus), New Orleans Louisiana Saints, and local Mississippi high schools and colleges. This program is 14 months in duration, beginning in late June and ending in late August the following year. The sports residency program is accredited by the American Board of Physical Therapy Residency and Fellowship Education as a post-professional residency program for physical therapists in sports physical therapy. The program prepares the resident to take the Sports Specialty Examination offered by the American Board of Physical Therapy Specialties. The resident is a full-time employee of UMMC and receives a competitive salary and a full benefits package. Contact and application information is available on the Sports Physical Therapy website.
The American Board of Physical Therapy Residency and Fellowship Education has granted the Pediatric Physical Therapy residency program candidacy status. Candidate status signifies satisfactory progress toward accreditation. Achieving candidacy status is not an indication that ABPTRFE will grant initial accreditation. Participants who graduate from a program in candidacy status are not deemed to have completed an accredited program. The residency is a cooperative effort between the University of Mississippi Medical Center, the School of Health Related Professions, St. Dominic Outpatient Rehabilitation Services, Hinds County Schools, Rehabilitation Consultants, and A Focused Brain. This program is 12 months in duration, beginning in late August and ending the following August. The program prepares the resident to take the Pediatric Specialty Examination offered by the American Board of Physical Therapy Specialties pursuant to the granting of initial accreditation by the ABPTRFE. The resident is a full-time employee of UMMC and receives a competitive salary with a full benefits package. Contact and application information is available on the Pediatric Physical Therapy Residency website.

The Division of Orthotics and Prosthetics offers two residency programs, one in Orthotics and one in Prosthetics.

The Orthotic and Prosthetic residency programs are each 12 months in duration and typically begin in July and ends the following year. The Orthotic and Prosthetic residency program is a cooperative effort between the University of Mississippi Medical Center and the School of Health Related Professions. There are four phases of the residency: Clinical Observation & Technical Assistance Phase; Clinical Assistance Phase; Direct Supervision Phase; and Indirect Supervision Phase. The program is accredited by the National Commission on Orthotic and Prosthetic Education (NCOPE). The program prepares the resident to take the American Board of Certification Examinations. The resident is a full-time UMMC employee and receives a salary and benefits package. Contact and application information is available on the Orthotics and Prosthetics website.
# ACADEMIC YEAR 2019-2020

## M1 and M2 Semester Academic Calendar

### Fall Semester

<table>
<thead>
<tr>
<th>Month</th>
<th>Day</th>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>August</td>
<td>7</td>
<td>Wednesday</td>
<td>Orientation, CiM, and registration (M1 Class only)</td>
</tr>
<tr>
<td></td>
<td>8</td>
<td>Wednesday</td>
<td>White Coat Ceremony (M1 Class only)</td>
</tr>
<tr>
<td></td>
<td>12</td>
<td>Monday</td>
<td>Classes begin (M1 and M2 Classes)</td>
</tr>
<tr>
<td></td>
<td>29</td>
<td>Thursday</td>
<td>Last day to withdraw from school or from a course without receiving a withdrawal grade and to receive a tuition refund</td>
</tr>
<tr>
<td>September</td>
<td>2</td>
<td>Monday</td>
<td>Labor Day Holiday observed</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>Tuesday</td>
<td>Classes resume</td>
</tr>
<tr>
<td>November</td>
<td>27</td>
<td>Wednesday</td>
<td>Thanksgiving Holiday begins at 5:00 p.m.</td>
</tr>
<tr>
<td>December</td>
<td>2</td>
<td>Monday</td>
<td>Classes resume</td>
</tr>
<tr>
<td></td>
<td>19</td>
<td>Thursday</td>
<td>Christmas Holiday begins at 12:00 noon (M1 and M2 Classes)</td>
</tr>
<tr>
<td></td>
<td>14</td>
<td>Saturday</td>
<td>End of Fall Semester</td>
</tr>
</tbody>
</table>

### Spring Semester

<table>
<thead>
<tr>
<th>Month</th>
<th>Day</th>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>January</td>
<td>6</td>
<td>Monday</td>
<td>Classes Begin</td>
</tr>
<tr>
<td></td>
<td>20</td>
<td>Monday</td>
<td>Martin Luther King’s Birthday Holiday observed</td>
</tr>
<tr>
<td></td>
<td>21</td>
<td>Tuesday</td>
<td>Classes resume</td>
</tr>
<tr>
<td></td>
<td>23</td>
<td>Thursday</td>
<td>Last day to withdraw from a course or from school without receiving a withdrawal grade and to receive a tuition refund</td>
</tr>
<tr>
<td>February</td>
<td>5</td>
<td>Wednesday</td>
<td>Student Financial Wellness Seminar (12:00-1:30)</td>
</tr>
<tr>
<td>March</td>
<td>11</td>
<td>Wednesday</td>
<td>Spring Holiday begins at 5:00 p.m.</td>
</tr>
<tr>
<td></td>
<td>16</td>
<td>Monday</td>
<td>Classes resume</td>
</tr>
<tr>
<td>April</td>
<td>13</td>
<td>Monday</td>
<td>Registration begins for 2020-2021 summer term fall semester</td>
</tr>
<tr>
<td></td>
<td>15</td>
<td>Friday</td>
<td>Match Day (M4 Class, M1-M3 Presidents &amp; Vice-Presidents)</td>
</tr>
<tr>
<td></td>
<td>4/20-6/7</td>
<td>Mon-Fri</td>
<td>Study Days/USMLE Step 1 (M2 Class only)</td>
</tr>
<tr>
<td>May</td>
<td>1</td>
<td>Friday</td>
<td>Honors Day</td>
</tr>
<tr>
<td></td>
<td>22</td>
<td>Friday</td>
<td>Commencement</td>
</tr>
</tbody>
</table>

## Junior Medical Academic Calendar

**June 12, 2019 - June 1, 2020**

<table>
<thead>
<tr>
<th>Month</th>
<th>Day</th>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>June</td>
<td>10-23</td>
<td>Mon-Fri</td>
<td>Boot Camp</td>
</tr>
<tr>
<td></td>
<td>24</td>
<td>Monday</td>
<td>Clerkships begin</td>
</tr>
<tr>
<td>July</td>
<td>4</td>
<td>Thursday</td>
<td>Independence Day Holiday</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>Friday</td>
<td>Clerkships resume at 8:00 a.m.</td>
</tr>
<tr>
<td>August</td>
<td>29</td>
<td>Thursday</td>
<td>Last day to withdraw from a course or from school without receiving a withdrawal grade and to receive a tuition refund</td>
</tr>
<tr>
<td>September</td>
<td>2</td>
<td>Monday</td>
<td>Labor Day Holiday observed</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>Tuesday</td>
<td>Clerkships resume at 8:00 a.m.</td>
</tr>
<tr>
<td>November</td>
<td>27</td>
<td>Wednesday</td>
<td>Thanksgiving Holiday begins at 5:00 p.m.</td>
</tr>
<tr>
<td>December</td>
<td>2</td>
<td>Monday</td>
<td>Clerkships resume at 8:00 a.m.</td>
</tr>
<tr>
<td></td>
<td>23</td>
<td>Monday</td>
<td>Christmas and New Year’s Holidays begin at 5:00 p.m.</td>
</tr>
</tbody>
</table>
January 2  Thursday  Clerkships resume at 8:00 a.m.
15  Wednesday  Last day for M3 elective changes
20  Monday  Martin Luther King’s Birthday Holiday observed
21  Tuesday  Clerkships resume at 8:00 a.m.
23  Thursday  Last day to withdraw from a course or from school without receiving a withdrawal grade and to receive a tuition refund

February 7  Friday  M3 Class Meeting
5  Wednesday  Student Financial Wellness Seminar (TBA)

May 3  Friday  Honors Day
4-15  Mon-Fri  Clinical Skills Assessment
22  Friday  Commencement
25  Monday  Memorial Day Holiday observed
26  Tuesday  Clerkships resume at 8:00 a.m.
31  Friday  Last day of clinical rotations

Note:
1) Clinical activities of students may vary and may not conform to this schedule.
2) The required junior medical Clinical Skills Assessment will be scheduled between May 4-15, 2020. Each student will test for one day in this time period. The student will be notified of details regarding scheduling of this required activity.
3) *Dates for the Clinical Skills Assessment are subject to change.

SENIOR MEDICAL ACADEMIC CALENDAR
July 1, 2019 – May 22, 2020

SUMMER SEMESTER

<table>
<thead>
<tr>
<th>July</th>
<th>Monday</th>
<th>Beginning of Senior Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Thursday</td>
<td>Independence Day Holiday</td>
</tr>
</tbody>
</table>

FALL SEMESTER

<table>
<thead>
<tr>
<th>September 2</th>
<th>Monday</th>
<th>Labor Day Holiday observed</th>
</tr>
</thead>
<tbody>
<tr>
<td>November 28-29</td>
<td>Thurs-Fri</td>
<td>Thanksgiving Holidays</td>
</tr>
<tr>
<td>December 24-25</td>
<td>Thurs-Fri</td>
<td>Christmas Holidays</td>
</tr>
</tbody>
</table>

SPRING SEMESTER

<table>
<thead>
<tr>
<th>January 1</th>
<th>Wednesday</th>
<th>New Year’s Day Holiday</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>Friday</td>
<td>M4 Class Meeting</td>
</tr>
<tr>
<td>20</td>
<td>Monday</td>
<td>Martin Luther King’s Birthday Holiday observed</td>
</tr>
<tr>
<td>February 5</td>
<td>Wednesday</td>
<td>Student Financial Wellness Seminar (12:00-1:30)</td>
</tr>
<tr>
<td>March 20</td>
<td>Friday</td>
<td>Match Day</td>
</tr>
<tr>
<td>May 1</td>
<td>Friday</td>
<td>Honors Day</td>
</tr>
<tr>
<td>21</td>
<td>Thursday</td>
<td>Long Coat Ceremony</td>
</tr>
<tr>
<td>22</td>
<td>Friday</td>
<td>Commencement</td>
</tr>
</tbody>
</table>

Note: 1) Monday, March 16, 2020 Preliminary for SOAP for students who did not match in ERAS
THE UNIVERSITY OF MISSISSIPPI MEDICAL CENTER

SCHOOL OF MEDICINE

LouAnn Woodward, MD, Dean
Loretta Jackson-Williams, MD, PhD, Vice Dean for Medical Education
David Norris, MD, Assistant Dean for Academic Affairs
Sajani Tipnis, MD, Assistant Dean for Curriculum
Jerry Clark, MBA, PhD, Associate Dean for Student Affairs
R. Stephen Manuel, PhD, Associate Dean for Admissions
Patrick Smith, PhD, Associate Dean for Faculty Affairs
Sharon P. Douglas, MD, Associate Dean for Education for VA Affairs
Jimmy Stewart, MD, Associate Dean for Graduate Medical Education
Arthur Calimaran, MD, Assistant Dean for Graduate Medical Education
John ‘Brad’ Ingram, MD, Assistant Dean for Graduate Medical Education
Joseph M. Majure, MD, Assistant Dean for Graduate Medical Education

HISTORY
A special act of the Board of Trustees created the School of Medicine in 1903. Except for the 1909-1910 session when clinical training was provided at the Charity Hospital in Vicksburg, it operated continuously as a two-year school on the Oxford campus for more than half a century. In the summer of 1955, the school was moved to the state capital at Jackson and expanded to include the third and fourth years. The first class was graduated in June 1957. The School of Medicine is accredited by the Liaison Committee on Medical Education http://www.lcme.org/

MISSION
The University of Mississippi School of Medicine is committed to training skilled and compassionate physicians to provide high-quality and equitable health care particularly to the state’s residents, including diverse and underserved populations. The school prepares learners to provide excellent care through programs of innovative education, state-of-the-art research and comprehensive clinical practice.

Vision Statement
A healthier Mississippi and beyond through education, patient care and discovery.

EDUCATIONAL PROGRAM OBJECTIVES
The educational program of the School of Medicine is designed to achieve the multiple goals of dissemination of knowledge through teaching, application of knowledge through clinical practice, and creation of new knowledge through scientific research. The specific educational program objectives set forth below reflect the essential requirements for physicians to act in an ethical and altruistic fashion while providing competent medical care and fulfilling their obligations to their patients.

I. Graduates must demonstrate sufficient knowledge of the structure and function of the human body to recognize alterations from the normal. They must recognize the various causes of such abnormalities and their pathogenesis. At the completion of the medical school curriculum, students must be able to demonstrate:
   • Knowledge of the normal structure and function of the human body and each of its major organ systems.
   • Knowledge of the molecular, biochemical and cellular mechanisms which help maintain the body’s homeostasis.
   • Knowledge of the various causes (genetic, developmental, metabolic, toxic, microbiologic, autoimmune, neoplastic, degenerative, and traumatic) of diseases and the ways in which they impact on the body (pathogenesis).
   • Knowledge of the altered structure and function (pathology and pathophysiology) of the body and its major organ systems that are seen in various diseases and conditions.
   • An understanding of the power of the scientific method in establishing the causation of disease and efficacy of traditional and nontraditional therapies.

II. Graduates must utilize the necessary diagnostic and interventional skills to accurately evaluate, diagnose and plan treatment appropriate for each patient. At the completion of the medical school curriculum, students must be able to demonstrate:
   • Competence in obtaining an accurate medical history that covers all essential aspects of the patient’s history, including issues related to age, gender, ethnic, and socioeconomic status.
   • Competence in performing both a complete and an organ system specific examination, including one for mental status.
   • Competence in performing routine technical procedures including, at a minimum, venipuncture, inserting an intravenous catheter, airway management, inserting a nasogastric tube, inserting a Foley catheter, and suturing simple lacerations.
   • Competence in interpreting results of commonly used diagnostic tests and procedures, i.e., laboratory, roentgenographic, electrocardiographic.
   • Knowledge of the most frequent manifestations of common disorders.
   • Ability to reason deductively in solving clinical problems.
   • Ability to construct appropriate diagnostic and therapeutic plans/strategies for patients with common conditions, both acute and chronic, including medical, surgical, and psychiatric conditions, and those requiring short- and long-term rehabilitation.
   • Ability to recognize patients with immediately life-threatening conditions, i.e., infectious, cardiac, pulmonary, allergic, neurologic or psychiatric diseases regardless of etiology, and to institute appropriate initial therapy.
   • Ability to recognize and outline initial management for patients with conditions requiring critical care.
   • Knowledge about how to relieve pain and ameliorate suffering of patients.
   • Ability to communicate effectively, both orally and in writing, with patients, patients’ families.

Approved by the Executive Faculty Committee, April 28, 2011; Updated by the Executive Faculty Committee, August 20, 2018
III. Graduates must demonstrate those characteristics, attitudes and values that are needed to provide ethical and beneficent medical care for all patients. At the completion of the medical school curriculum, students must be able to demonstrate:

- Knowledge of theories and principles that govern ethical decision making, and of the major ethical questions in medicine, particularly those at the beginning and end of life and those that surface from the rapid expansion of technology.
- Honesty and integrity in all interactions with patients, families, colleagues, and others with whom physicians must interact in their professional lives.
- A commitment to advocate the interests of one’s patients over one’s own interests at all times.
- An understanding of the threats to medical professionalism posed by the conflicts of interest inherent in various financial and organizational arrangements for the practice of medicine.
- Capacity to recognize and accept limitations in one’s knowledge and clinical skills, and a commitment to continuously improve one’s knowledge and abilities.

IV. Graduates must employ systematic approaches for promoting, maintaining and improving the health of individuals and population. At the completion of the medical school curriculum, students must be able to demonstrate:

- Knowledge of the important non-biological determinants of poor health and of the economic, psychological, social and cultural factors that contribute to the development and/or continuation of maladies.
- Knowledge of the epidemiology of common maladies within a defined population and the systematic approaches useful in reducing the incidence and prevalence of those maladies.
- The ability to identify factors that place individuals at risk for disease or injury, to select appropriate tests for detecting patients at risk for specific diseases or in the early stage of disease, and to determine strategies for responding appropriately.
- The ability to retrieve from electronic databases and other resources, manage, and utilize biomedical information for solving problems and making decisions that are relevant to the care of individuals and populations.
- Knowledge of various approaches to the organization, financing, and delivery of health care.
- A commitment to provide care to patients who are unable to pay and to advocate for access to health care for members of traditionally underserved populations.

V. Graduates must demonstrate the ability to engage in an interprofessional team in a manner that optimizes safe, effective patient- and population-centered care. At the completion of the medical school curriculum, students must be able to demonstrate:

- Ability to establish and maintain a climate of mutual respect, dignity, diversity, ethical integrity, and trust among health professionals.
- Ability to communicate effectively, both orally and in writing, colleagues, and health care team members with whom physicians must exchange information in carrying out their responsibilities.
- Compassionate and nonjudgmental treatment of all patients, and respect for the privacy and dignity of all patients.
- An understanding of, and respect for, the roles of other health care professionals, and of the need to collaborate and work with others in caring for individual patients and in promoting the health of defined populations.

VI. Graduates must demonstrate the qualities required to sustain lifelong personal and professional growth. At the completion of the medical school curriculum, students must be able to demonstrate:

- Commitment to engage in lifelong learning to stay abreast of relevant scientific advances.
- The ability to use self-awareness of knowledge, skills, and emotional limitations to engage in appropriate help-seeking behaviors.
- The ability to provide leadership skills that enhance team functioning and the learning environment.

Adapted from Learning Objectives for Medical Student Education, Guidelines for Medical Schools, AAMC, 1998. Revised by the School of Medicine Curriculum Committee, July, 2009; Updated by the School of Medicine Curriculum Committee, 2011; Updated by the School of Medicine Curriculum Committee, January, 2018.

A COVENANT FOR MEDICAL EDUCATION

THE TEACHER-STUDENT RELATIONSHIP

Preparation for a career in medicine requires the acquisition of a large base of knowledge. It also demands the virtues that form the basis of the doctor-patient relationship and sustain the profession of medicine as a moral enterprise. This covenant serves as both a commitment and a reminder to teachers and students that their conduct in fulfilling their mutual obligations is the medium through which the profession instills its ethical values.

PRECEPTS

Medical educators have a duty to convey the knowledge and skills required to deliver the profession’s contemporary standard of care, to instill the values and attitudes required to preserve the medical profession’s social contract across the generations.

The learning environments conducive to conveying professional values must be grounded in integrity. Students learn enduring lessons of professionalism by observing and emulating role models who epitomize authentic professional values and attitudes.

Fundamental to the ethic of medicine is respect for every individual. Mutual respect between learners, as novice members of the medical profession, and their teachers, as experienced and esteemed professionals, is essential for nurturing that ethic. Given the inherently hierarchical nature of the teacher-student relationship, teachers have a special obligation to ensure that students are always treated with respect.

COMMITMENTS OF FACULTY

- We pledge our utmost efforts to ensure that all components of the educational program for medical students are of the highest quality.
- As mentors for our student colleagues, we pledge that we will maintain high professional standards in all of our interactions with patients, colleagues, and staff.
- We pledge that we will respect all students as individuals, without regard to gender, race, national origin, religion, age, or sexual orientation; we will not tolerate anyone who manifests disrespect or who expresses biased attitudes toward any student.
- We pledge that students will have sufficient time to fulfill personal and family obligations, to enjoy recreational activities, and to obtain adequate rest; we will monitor time required for “call” on clinical rotations.
- In nurturing both the intellectual and the personal development of students, we pledge to celebrate expressions of exemplary professional attitudes and behaviors, as well as achievement of academic excellence.
- We pledge that we will not tolerate any abuse or exploitation of students.
- We pledge that we will encourage any student who experiences mistreatment or who witnesses unprofessional behavior to report the facts immediately to appropriate faculty or staff; and we pledge that we will treat all such reports as confidential and will not tolerate reprisals or retaliations of any kind.
COMMITMENTS OF STUDENTS

- We pledge our utmost efforts to acquire the knowledge, skills, attitudes, and behaviors required to fulfill all educational objectives established by the faculty.
- We pledge that we will cherish the professional virtues of honesty, compassion, integrity, fidelity, and dependability.
- We pledge to respect all faculty members and all students as individuals, without regard to gender, race, national origin, religion, age, or sexual orientation.
- As physicians in training, we pledge that we will embrace the highest standards of the medical profession and conduct ourselves accordingly in all of our interactions with patients, colleagues, and staff. We pledge to respect all individuals without regard to gender, race, national origin, religion, age, or sexual orientation.
- In fulfilling our own obligations as professionals, we also pledge to assist our fellow students in meeting their professional obligations.

MEDICAL STUDENT PROFESSIONALISM CODE

As a student of Medicine, I am now a member of the medical community, and as a member, I accept responsibility for my conduct and expect the highest standards of myself. I will also support others in upholding these standards. I understand that the behavior and attitudes of the individual medical student reflect on our classmates, our school, our families, our communities, and our profession. I recognize that it is an honor and a privilege to be a part of the medical profession. As a medical student in lecture, lab, small group, an administrator’s office, support staff’s office, clinic, or the hospital, whether patients are present or not, I will act in a professional manner.

I pledge to uphold the following tenets of professionalism:

Honesty and Integrity

- I will demonstrate truthfulness and fidelity in academic and clinical activities, including examinations, evaluation, and any other representation of my work.
- I will not participate in or be a party to unfair advancement of academic standing.
- I will be truthful in all interactions with patients, peers, and faculty.
- I will be honest in the collection, interpretation, and reporting of data pertinent to academic work or patient care.
- I will adhere to the highest standard of integrity in professional relationships, including those with industry representatives.

Respect for Others

- I will demonstrate the highest standards of ethical and professional behavior in the academic and clinical setting.
- I will not discriminate against patients or their families based on race, ethnicity, religion, age, gender, sexual orientation, disability, diagnosis, socioeconomic status, or ability to pay.
- I will treat my classmates, staff, those of various medical disciplines, and all health care team members with respect.
- I will display and expect non-discriminatory behavior toward and from my supervisors, my peers, and staff with whom I work.
- I will respect that faculty have devoted their time and experience to teaching medical students in lectures, labs, small groups, simulations, clinics, and hospitals.
- I will show respect in all oral, written, and e-mail communications, including patient presentations, clinical documentation, course evaluations, and challenges to grades or test questions.
- I will protect patient confidentiality, discussing information with no one who does not have legitimate need to know.
- I will uphold the dignity of our patients.
- I will show respect for others by dressing appropriately, including wearing a clean white coat and appropriate identification during all anticipated patient or simulated patient contact. The Professional Appearance Policy for University Hospitals and Clinics can be found in the Student Handbook.

Reliability and Responsibility

- I will maintain patient well-being as my main focus and primary responsibility.
- I will fulfill responsibilities assigned to me with careful consideration of consequences to both patients and colleagues, recognizing that my failure to contribute fully increases the workload of others and may compromise the well-being of our patients.
- I will be punctual.
- I will educate myself about the ethical standards of my profession and the legal standards that may apply to my patients.
- I will acknowledge my strengths as well as my limitations, offering assistance when I am able and seeking assistance when necessary.
- I will not be under the influence of alcohol or other drugs while performing academic or clinical responsibilities.

Commitment to Self-Improvement

- I will continue to strive for knowledge, skills, competence, and best practices.
- I will prepare to the best of my ability for class, labs, small groups, clinic, and rounds.
- I will commit to participate through attendance in class, labs, small groups, and clinical settings.
- I will demonstrate willingness to share in the learning process with peers, faculty, and staff to promote the student-teacher relationship and to assist others in meeting professional obligations.
- I will seek assistance from colleagues or professionals for any problems that adversely affect my education, quality of patient care, or service to society.
- I will willingly assess my progress and identify areas for improvement and issues for continued learning.
- I will incorporate feedback into self-improvement.
- I will effectively use technology to manage information for patient care and self-improvement.
- I will continue to strive to become an honest, responsible, and compassionate member of the medical profession, with service to and well-being of the patient as my guide.
POLICY ON PROFESSIONAL BEHAVIOR

Students enrolled in the School of Medicine must develop the professional behaviors expected of a physician. Students will be evaluated in the areas of attentiveness, maturity, cooperation, responsibility, personal appearance, respect (for authority, peers, patients and other members of the health care team), communication, judgment, ethics, honesty, morality, as well as other characteristics of professionalism important for a career in medicine.

Each day, a medical student will encounter a number of people who will observe professional or unprofessional behaviors. These people may report compliments or concerns related to the professional behavior of a student through verbal, written, or other reporting mechanisms. Examples of report sources include: faculty members, residents, nurses, other health care providers, other medical center employees, medical school peers, patients, or patient’s family members. Reports of exemplary professional or unprofessional behaviors or concerns should be made to the Associate Dean for Student Affairs or the Vice Dean for Medical Education and can be completed using the electronic student evaluation system.

When a student receives a report of a concern related to unprofessional behavior, the Associate Dean for Student Affairs or for Vice Dean for Medical Education will meet with the student to discuss the incident.

Following the initial meeting with the Associate Dean for Student Affairs or Vice Dean for Medical Education, the following actions will be taken:

1. If the incident is felt to be minor:
   - The initial interview and counseling session, as well as further monitoring of a student’s performance in the area of concern may suffice.
   - Other Associate Deans in the School of Medicine may be asked to participate in counseling and meeting with the students. The counseling session will be documented in the student’s file in the office of the Associate Dean for Student Affairs or Vice Dean for Medical Education, but the report will not carry forth to future evaluations if the behavior does not recur and if there are no other reports of unprofessional behavior.
   - If the reported incident, upon investigation, is found to be frivolous and not valid, this fact will be clearly documented in the student’s file.

   2. If the incident is of serious concern or if there has been a pattern (greater than two) of minor incidents, the Associate Dean for Student Affairs or Vice Dean for Medical Education, or other Associate Deans in the School of Medicine will interview and counsel the student as above and may:
      • Discuss the incident with the Dean’s Council and recommend that the student be placed on leave of absence.
      • Discuss the incident with the Dean’s Council and recommend that the student be placed on probation for unprofessional behavior.
      • Discuss the incident with the Dean’s Council and recommend that the student repeat the course.
      • Discuss the incident with the Dean’s Council and recommend the student repeat the academic year.
      • Discuss the incident with the Dean’s Council and recommend the student be dismissed from the School of Medicine.

These recommendations will be presented to the Dean of the School of Medicine for approval.

The Mechanism for Appeal is outlined in the Student Handbook.

A student who returns after a suspension, dismissal, or withdrawal for unprofessional behavior will automatically be on academic probation for at least one academic semester.

A student dismissed from the School of Medicine for unprofessional behavior may appeal for re-admission to advanced standing.

PROGRAM

The School of Medicine offers a course of study leading to the degree of Doctor of Medicine. The four-year course leading to the degree of Doctor of Medicine is accredited by the Liaison Committee on Medical Education (LCME).

DOCTOR OF MEDICINE DEGREE

The degree of Doctor of Medicine is conferred upon candidates of good moral character who have studied in a LCME-accredited medical school at least four academic sessions, of which the last two sessions must be spent in the regular four-year course of this school; who have properly fulfilled all academic requirements of the medical curriculum; and who have discharged all financial obligations to this school. The diploma is awarded summa cum laude to the graduate who ranks first in the class in academic achievement, magna cum laude to the graduates who rank second, third, and fourth, and cum laude to the graduates who rank fifth through tenth.

THE CURRICULUM IN MEDICINE

The purpose of the medical curriculum is to give students with high academic promise the opportunity to develop the knowledge, clinical skills, attitudes, and behaviors of excellent physicians. The fundamentals of medicine are taught by a distinguished faculty in a caring environment.

The curriculum in medicine consists of four academic sessions. During the two preclinical years, students learn the sciences basic to the study of medicine and participate in laboratory exercises, small-group discussion, computer-assisted learning, independent study, and patient simulation. Sophomore students must complete Step 1 of the United States Medical Licensing Examination (USMLE) to be eligible for promotion to the junior year. Students may begin the junior (M3) year on a contingent basis pending receipt of the results of their initial USMLE Step 1.

The third year involves full-time clinical study as students rotate through the major clinical disciplines and selected electives. Students also participate in the team care of patients in the University Hospitals and Clinics, Veterans Affairs Medical Center, and various community settings. Advanced Cardiac Life Support and the required technical skills must be completed in the third year. The student must demonstrate skills in specified technical procedures and complete the documentation by the end of the third year.

POLICY ON ACADEMIC STATUS

PROMOTIONS COMMITTEE

The Promotions Committee shall be the primary body to act upon matters of student academic evaluation for promotion, recommendation for graduation, withdrawal, and dismissal. The committee shall consist of faculty members in appropriate teaching departments in the School of Medicine. The Chairman of the Promotions Committee shall be appointed or designated by the dean. The Promotions Committee shall be
responsible for decisions regarding promotion and academic status in each year and for recommendation for graduation to receive the MD degree. These recommendations shall be sent to the Dean and shall be presented to the Executive Faculty of the School of Medicine for review prior to final implementation or notification of the student.

**GRADING**

Each department directing a course or clinical block shall specify the requirements of that course or block, and the standards by which students of that course or block are evaluated, and shall submit electronically for each student a numerical percentage grade for that course, with 70.0 as the minimum passing grade.

Each department shall submit electronically grades in completed courses within 30 days of the final examination. When national testing examinations are to be used in the compilation of final grades, student grades must be submitted within 30 days of receipt of the results of such examinations. To promote this all Medical Student Clinical Period Performance Evaluations (MSCPE) should be submitted in electronic evaluation system in time to allow grade calculation. In general all should be complete within 3 weeks of the final examination.

A grade of incomplete will be given when, at the end of a regular course period, additional work is required, due to non-completion of a portion of the course requirements, (i.e., lost time or missed examination because of illness or other extenuating circumstances). A grade of incomplete may be removed by completing missed work, or by successful completion of examinations, whichever is appropriate. A grade of incomplete must be removed within twelve months.

A grade below 70.0 is a failing grade, given when a student demonstrates deficiency in required performance, and will require significant make-up work or reexamination, or repeating the course.

If a student is required to repeat a portion of a course including examination(s), an entire course, or an entire year of study, the initial grade and the subsequent grade are both recorded on permanent records of that student, with the initial grade used to compute class academic rank and grade point average (GPA).

At the end of each academic year, a weighted average will be computed to determine a class ranking which may provide a means to determine honors, awards, and scholarships specifying an academic rating as a stipulation, or which may be used in transfers to other schools.

Student performance at UMMC is evaluated according to academic criteria, not on the basis of opinions or conduct in matters unrelated to academic standards. A course director (defined as one who has responsibility for a class or directed individual study) is given the authority over all matters affecting the academic conduct of that instructional unit, including assignment of grades. The course director shall be presumed to have assigned the proper grade until it is proven otherwise. The burden of proof to the contrary rests with the student. Students shall have protection against prejudiced or capricious academic evaluation. It is expected that the method of grading by instructors be made clear to students and that instructors be required to justify disputed grades. All records on which grades are based are expected to be retained on file for a minimum of six months following scheduled completion of any instructional unit. Disputes associated with the assignment of grades must be filed with the instructor’s chair/department head and the School of Medicine in writing within 10 working days of the receipt/posting of the grade. The chair/department head will have 10 working days to respond to the student’s dispute. If the student still feels the matter has not been resolved appropriately, a written appeal shall be made to the dean (See MECHANISM FOR APPEAL).

A course director may change a reported grade only if the original grade was incorrectly assigned due to clerical or computational error, or if a student meets the requirements for the removal of an “I” grade.

**PROMOTION**

To be eligible for promotion, a student must achieve a grade of not less than 70.0 in each course, have no incomplete grade, and have a weighted average of 75.0 or higher. Sophomore students must also pass Step 1 of the United States Medical Licensing Examination (USMLE) to be eligible for promotion to the junior year. Senior students must also have passed USMLE Step 2 (clinical knowledge and clinical skills) to be eligible for graduation.

At the end of the year, a student who has no failing grades, but has a weighted average below 75.0, will be required to satisfactorily complete remedial work prior to promotion or graduation; in such a case, remedial work may include the possibility that an entire academic year be repeated.

A student must satisfactorily complete all requirements before being promoted to the next higher academic year and before beginning courses in the next higher academic year. An exception to this may temporarily be made when grades are not immediately available as in the case of delayed national test results. Under no circumstances will a student with known and unremediated academic deficiencies be allowed to begin courses in the next higher academic year.

Students with failing grades in one or more courses shall be placed on academic probation, and if not dismissed, will be required to remove probationary status by reexamination, by repeating a course, or by repeating the year, as required by the Promotions Committee, Executive Faculty and Dean. The Promotions Committee shall take into account a student’s overall performance and extenuating circumstances before reaching a final decision in this regard.

Students with incomplete grades in one or more courses must satisfactorily complete these courses as required by course directors prior to promotion to the next academic year. A grade of incomplete must be removed within twelve months.

Students may be required by the Promotions Committee to do remedial work in a course and/or to take a repeat examination(s). Failure upon reexamination in any course requires that student must either repeat the entire course, the entire year, or be dismissed as recommended by the Promotions Committee and the Executive Faculty.

Students who are required to repeat an entire year, shall register for the actual credit hour value of that year, and shall pay the usual fees of a full-time student for the period of time specified.

Sophomore students, satisfactorily completing all course work for the second (M2) year, may begin the junior (M3) year on a contingent basis, pending receipt of the results of their initial USMLE Step 1. Students who fail Step 1 may continue with the junior year, completing the rotation that is in progress if the student is in passing status. At the end of said rotation, such students will be placed in Independent Study for a period not to exceed 10 total weeks. Students who receive a passing score on USMLE Step 1 during this period qualify for promotion and may resume their junior (M3) year on the next available block. A passing score on the repeated attempt must be received before a student can resume their junior (M3) year and begin clinical work. No junior (M3) medical student will be allowed to spend more than 10 total weeks in Independent Study without being required to repeat the junior (M3) year.
Students who fail to receive a passing USMLE Step 1 score and miss more than 10 total weeks of the junior (M3) year will be placed on leave and be required to repeat the junior (M3) year in its entirety. To be eligible for a repeated attempt of the junior (M3) year, students must take USMLE Step 1 by April 1, allowing them to restart the junior (M3) year from its beginning with the next class. Repeating students will also be required to complete a 30-day clinical refresher course held during the month of May. Students who fail to follow this process will be dismissed from the School of Medicine.

Senior students, satisfactorily completing all course work for graduation but failing to receive a passing score on USMLE Step 2, will be given one year beyond the original expected date of graduation to pass Step 2 and to receive their degree. Students failing to pass Step 2 within that year are no longer eligible for the MD degree without additional course work at this school. Such additional course work shall consist of a remedial third (M3) year of medical school, which must be taken and passed in its entirety with all examinations. Any failed course or National Board examination in the remedial year may not be repeated, and such a failure will result in the student’s dismissal from medical school. Following satisfactory completion of the entire remedial year, students again become eligible for the MD degree and have one additional year to pass the USMLE Step 2. Thereafter, students are no longer eligible for the MD degree and will be dismissed from the School of Medicine.

LEAVE OF ABSENCE
Leave of absence from medical school may be granted by the dean or his/her administrative designee under the following conditions:

1. For students in good academic standing to pursue training as a medical scientist (i.e., to pursue research experience or to complete a Master’s or PhD degree).
2. Leave of absence for students with academic, personal, financial, or medical problems may be granted in special circumstances.

If the leave of absence is granted during the academic year for the remainder of that academic year with the potential of returning to repeat the entire academic year, final grades in courses which have been completed will be recorded in the Office of Student Records and Registrar. Grades in courses in progress shall be reported to the Office of Student Records and Registrar as “withdrawn.”

WITHDRAWAL
A student with academic, personal or health problems precluding satisfactory performance or continued enrollment which require more than one academic semester of leave, may be allowed to withdraw.

At the time of withdrawal, final grades in courses which have been completed will be recorded in the Office of Student Records and Registrar. Grades in progress shall be returned to the Office of Student Records and Registrar with a determination of “withdrawn.”

Any withdrawal by a student shall be presented to the appropriate Promotions Committee, which shall determine conditions under which a student may be readmitted, if at all, and shall make such recommendations to the dean and Executive Faculty. The student shall be informed of readmission eligibility status and requirements.

Students who voluntarily withdraw may not be readmitted except as a beginning first-year student (i.e., no advanced standing) if over two years have elapsed since withdrawal. If two years or less have elapsed since withdrawal, a student may be admitted to advanced standing but must repeat entirely any course/block not previously completed. Alternatively, depending on academic standing and time elapsed, a student may be required to repeat the entire academic year from which he/she withdrew.

In the event of withdrawal prior to the end of the first semester of the first year, the student will not be eligible for readmission, except that he/she may apply for admission to the first year class as any other new student.

A student who withdraws and has been declared eligible for readmission must apply for readmission by petitioning the dean, stating the reasons for his/her withdrawal and why he/she now believes he/she is able to pursue academic studies successfully. This petition shall become a part of the student’s permanent record.

DISMISSAL
A student dismissed from the School of Medicine shall not be eligible for readmission in advanced standing. Such students shall not be precluded from applying for readmission to the first-year class as any other new candidate. Dismissal from the School of Medicine may be for:

1. Academic failure. Included are: (a) students who have academic deficiency in the current school year; (b) students who have a repeat failing grade in any repeated course or block or who failed any course or block in a repeated year; (c) other failure as determined by the Promotions Committee.
2. Health reasons. In this category are students who by reason of health, including behavioral and psychiatric disorders, are precluded from satisfactory academic performance or satisfactory performance as a physician in the practice of medicine.
3. Conviction of a felony.
4. Conduct deemed to be other than honorable or ethical (i.e., cheating on examination, taking credit for work not one’s own, etc.)
5. Any student who commits an unlawful act on or off the Medical Center or whose conduct discredits the Medical Center in any way will be subject to disciplinary action, up to, and including, dismissal.

MECHANISM FOR APPEAL
The Executive Faculty shall act as an appeal body for all academic and/or unprofessional behavior matters that concern grades, promotion, conditions imposed by suspension, dismissal or withdrawal. Students shall be notified of adverse academic decisions such as requirements for remedial work, conditions upon withdrawal, or dismissal. Each student shall be notified of his or her right to appear before the Executive Faculty to appeal such decisions. Any request for appeal must be by written petition to the dean within 14 days of the recommendation of the sanction. Failure to make a written appeal within this 14-day time period shall constitute a waiver of the right of appeal and shall result in the sanction becoming final as recommended. A member of the faculty also may appeal to the executive faculty on behalf of a student. During an appeal hearing before the executive faculty, the student shall be permitted, at his/her expense, to have an adviser or legal counsel represent him or her at the hearing and through all other stages of the disciplinary process. The role of the counsel shall be limited to an advisory capacity only. He/she will not be permitted to make opening or closing statements/questions, choose witnesses, or make concluding statements on his/her behalf. The student is entitled to present witnesses or other evidence, question opposing witnesses, and make opening and concluding statements on his/her own behalf.

The Executive Faculty shall record all hearings, which record shall be preserved until the time for all avenues of appeal available to the student shall have expired. The Executive Faculty shall have the right to approve the recommended sanction, impose a lower sanction or no sanction, or impose a harsher sanction than recommended. The Executive Faculty shall render a written decision within ten (10) working days of the completion of the hearing, and shall notify the student with a copy of the written decision. All decisions by the Executive Faculty concerning academic matters are final. The student shall have the right to file a procedural appeal in writing to the Associate Vice Chancellor for Academic
A student seeking to become a doctor should visit the Association of American Medical Colleges’ (AAMC) website, "Considering a Medical Career." To seek pre-application counseling will be given a Pre-application Counseling Form on which background information is obtained that will be useful during counseling. E-mail communication with the Admissions Office is encouraged.

ADMISSION TO THE MEDICAL CURRICULUM
Details about the admissions process, including deadlines and links to the application and admission test, can be found at the school’s website; select the “Students” tab. Information will be listed under “Prospective Students.” The authority to select applicants for admission to the School of Medicine is vested in the Admissions Executive Committee. No student may enroll for courses in the School of Medicine, either as a regular full-time student or as a special part-time student, without being admitted by the committee. Correspondence regarding admission (such as requests for counseling and application status updates) should be addressed to: Associate Dean for Medical School Admissions, University of Mississippi Medical Center, 2500 North State Street, Jackson, MS 39216-4505; telephone (601) 984-5010; Fax (601) 984-5008; E-mail AdmitMD@ummc.edu

Letters of evaluation must be submitted directly to the American Medical College Application Service (AMCAS). Official admissions records (such as transcripts) are handled and filed in the Office of Student Records and Registrar and become the property of the School of Medicine. They cannot be returned to the applicant or forwarded to another school or individual. Correspondence regarding official records should be addressed to the Office of Student Records and Registrar, University of Mississippi Medical Center, 2500 North State Street, Jackson, MS 39216-4505, telephone (601) 984-1080.

Selection of applicants is made, without regard to race, creed, sex, color, religion, marital status, sexual orientation, age, national origin, disability or veteran status. Qualified handicapped students will be considered in relation to the technical standards which follow.

TECHNICAL STANDARDS FOR ADMISSION, RETENTION, PROMOTION AND CERTIFICATION FOR THE DEGREE OF DOCTOR OF MEDICINE
Because the MD degree awarded to a senior medical student signifies that the holder is prepared for entry into the practice of medicine within postgraduate training programs, it follows that graduates must have the knowledge and skills to function in a broad variety of clinical situations and to render a wide spectrum of patient care. Successful students should not only demonstrate honesty, integrity, reliability, and responsibility, but also clear respect for others and cultural sensitivity. Students are expected to excel in a rigorous academic environment and clearly demonstrate academic and personal achievement and a commitment to self-improvement and professional behavior. A graduate from the School of Medicine is expected to have a strong sense of commitment to serving his or her community, a desire to high ethical standards, and to be sensitive to individual, cultural, and ethnic differences that exist in society. Students must be able to meet these technical standards with or without reasonable academic accommodations.

Observation: The medical student must be able to observe and participate in demonstrations and experiments in the basic sciences, including, but not limited to, physiologic and pharmacologic demonstrations in animals, microbiologic cultures, and microscopic studies of microorganisms and tissues in normal and pathologic states, and anatomical specimens. The student must be able to observe a patient accurately at a distance and close at hand. Observation necessitates the functional use of the senses of vision, hearing, and somatic sensation. It is enhanced by the functional use of the sense of smell.

Communication: The candidate must be able to demonstrate and use (in English) the knowledge acquired during the medical education process to elicit, convey, clarify and transmit information (both in oral and written form) effectively, accurately, efficiently and sensitively to patients, their families and other members of the health care team. Candidates must be able to communicate with patients in order to elicit information regarding mood, activity and posture and perceive nonverbal communication. Communication and transmission of information includes reading, writing, hearing, and speech. For example, candidates must be able to present legible, accurate and skillful information in oral and written form to a preceptor, professor, teammate, patient, patient’s family, and other members of the health care team. Candidates must also be able to effectively and efficiently participate in fast paced, small group discussions/interactions and in patient care settings where clinical decisions may depend on rapid communication.

Motor Coordination and Sensory Skills: Sufficient motor function, tactile ability and sensory abilities are required to attend and participate effectively in all classroom, laboratory, conferences, clinical settings, and activities that are part of the curriculum. Medical students must have somatic sensation and the functional use of the senses of vision, hearing, and equilibrium. They must have sufficient exteroceptive sense (touch, pain and temperature), sufficient proprioceptive sense (position, pressure, movement, stereognosis and vibratory) and sufficient motor function to perform the activities described in the sections that follow. Students must also be able to consistently, quickly, and accurately integrate all information received by whatever sense(s) and have the intellectual ability to learn, integrate, analyze, and synthesize data, and the appropriate behavioral and social skills for patient interaction.

Students should have sufficient motor function to obtain information from patients by palpation, auscultation, percussion and other diagnostic maneuvers; to do basic laboratory tests; to carry out diagnostic procedures; to read electrocardiograms and radiographs; and to conduct anatomical dissections in the basic sciences and clinical years. A student should be able to execute the motor movements reasonably required to provide general and emergency care to patients. Examples of emergency treatment reasonably required of physicians are cardiopulmonary resuscitation, administration of intravenous medication, application of pressure to stop bleeding, opening of obstructed airways, suturing of simple wounds and performance of simple obstetrical maneuvers. General care would include, but not limited to neurological, gynecological, prostate, pediatric, obstetric examinations (with appropriate instruments), wound repair and the application of pressure to stop bleeding. Such actions require coordination of both gross and fine muscular movements, equilibrium and functional use of the senses of touch and vision.

Intellectual-Conceptual, Integrative, and Quantitative Abilities: A student must demonstrate the ability to integrate, assimilate and memorize large amounts of detailed and complex information and to process that information. Additional abilities include measurement,
calculated, reasoning, analysis, and synthesis. Problem solving, the critical skill demanded of physicians, requires all of these intellectual abilities. In addition, the student must be able to comprehend three dimensional relationships and to understand the spatial relationships of structures.

Behavioral and Social Attributes: The medical education process is both demanding and challenging. A student must possess the emotional health required to fully use his or her intellectual abilities; to exercise good judgment; to promptly complete the responsibilities attendant to the diagnosis and care of patients; and to develop mature, sensitive and appropriate relationships with patients. Students must be able to tolerate physically taxing workloads and to function effectively under stress; independently and competently. They must be flexible and able to adapt to changing environments, and capable of functioning in the face of uncertainties inherent in the clinical problems of many patients. The possession of interpersonal skills is equally important. The candidate should demonstrate compassion, empathy, a caring attitude, tolerance, an acceptance of differences, personal generosity toward others, thoughtfulness and a general concern and respect for other individuals.

All students are expected to act as professionals and to be responsible for themselves and their own behavior and actions. Professional behavior would include such things as completing promptly all assignments and responsibilities attendant to the diagnosis and care of patients, showing up for all required experiences on time and prepared, and completing all assignments on time. Candidates will continually demonstrate integrity, honesty, caring, fairness, respect for others, and self, empathy, maturity, dedication, and the ability to distinguish and practice confidentiality. Working with others in an effective, mature, and sensitive manner with all members of the medical community, health care teams, and medical school community is required. Candidates are expected to make an effort to understand prejudices and preconceptions that might affect the patient, medical community, or collegial relationships, especially in the areas of race and ethnicity, gender, disability, sexual orientation, age, and religious differences.

**ADMISSIONS CRITERIA**

Medical school admissions requirements nationwide have for the most part remained unchanged for decades. While students who have achieved them performed well in medical school, these requirements have often burdened and even discouraged non-science majors from applying to medical school and they impeded creativity in undergraduate premedical education. Furthermore, they fail to convey the need to cover modern topics. After considering the ongoing transformation in medical school admissions, the array of admissions requirements used by medical schools nationwide and the type of applicant this medical school seeks to educate, an Admissions Task Force appointed by the vice dean of the School of Medicine (SOM) concluded that 1) it was in the best interest of this medical school to abandon the current list of prescribed courses; and 2) to afford applicants flexibility in meeting requirements for admission. Recommendations of the Admission Task Force were endorsed by the SOM Admissions Executive Committee and approved by the Council of Deans.

Dates for phasing out current admissions requirements, phasing in new admissions criteria options (detailed in chart) and when Medical College Admissions Test (MCAT®) will be acceptable are summarized in the following table. Further explanation of each admissions criteria option follows. Applicants must indicate on the SOM Secondary Application which criteria they wish to use to qualify for admission and courses taken or planned that fulfill that option.

<table>
<thead>
<tr>
<th>Medical School Entering Class*</th>
<th>MCAT 2015</th>
<th>End-Point Courses</th>
<th>Course-Competency Maps</th>
<th>Novel Curricula</th>
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<td>2019</td>
<td>Yes</td>
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**CURRENT ADMISSIONS REQUIREMENTS WITH ADMISSIONS CRITERIA OPTIONS**

Students, in consultation with a premedical adviser, should develop proficiency in a specific major area of study while in undergraduate school and acquire a background in the humanities and social sciences. Non-science majors with an interest in medicine are encouraged to apply. Course credits are acceptable from only accredited U.S. colleges and universities. The applicant must show credit for at least three years of college work, totaling not fewer than 90 acceptable semester hours. These minimum 90 hours consist of courses required for entrance to this medical school and other courses required by an undergraduate institution for a baccalaureate degree. None of the 90 semester hours of minimum collegiate course work may be met by the following: correspondence courses; courses in physical training, military science, or dogmatic religion.

Strong preference is given to applicants who will have completed all requirements for a baccalaureate degree prior to entering medical school. For those applicants applying with the minimum 90 acceptable semester hours, a maximum of 65 semester hours of credit from an accredited community college may be applied toward the minimum 90 acceptable semester hours required for admission. College graduates may complete additional post-baccalaureate coursework to satisfy prerequisites at any accredited U.S. college or university, regardless of the number of community college credit hours applied toward their completed undergraduate degree.

An applicant must indicate on the SOM Secondary Application which of the following three admissions criteria options they wish to use to qualify for admission and courses taken or planned that fulfill that option.

For all options described below, the admissions committee evaluation of academic performance will not be limited to these courses; an applicant’s entire academic record is subject to evaluation.

**End-Point Courses** - The objective of this option is to describe what courses need to be taken; but, not the path to achieve this end point. Undergraduate institutions will decide acceptable pathways to these end-point courses that may include traditional course requirements, condensed, or novel requirements.

Any applicant selecting this option must document on a transcript that required end-point courses have been taken; well prepared applicants may also indicate which recommended courses have been taken.

Courses taken online or 10 or more years ago may not be used for the End-Point course requirements.
The following courses are required:

- Life Sciences: 2 semesters of any combination of the following:
  - Molecular Biology
  - Anatomy
  - Genetics
  - Immunology
  - Molecular Genetics
  - Pharmacology
- Biology of Cancer
- Histology
- Infectious Diseases
- Neuroanatomy
- Virology

- Biochemistry: 1 semester
- Physics: 2nd semester

Familiarity with the following subjects is recommended: content might be acquired by taking courses by that name, courses with different names but similar content or self-study:

- Algebra
- Psychology
- Statistics
- Sociology

Course-Competency Maps - Applicants eligible for this admissions criteria option are limited to those enrolled at institutions with departments that have constructed course-competency maps that have been submitted to the School of Medicine and approved by the Admissions Committee. The current list includes:

- Millsaps College - Biology, Chemistry & Biochemistry, Physics
- Mississippi College - Biology, Chemistry & Biochemistry, Mathematics
- Mississippi State University - Agricultural & Biological Engineering, Biochemistry & Molecular Biology, Biology, Chemistry, Mathematics, Physics
- University of Mississippi - Biology, Chemistry & Biochemistry, Mathematics, Philosophy & Religion, Physics & Astronomy

The current model for this option is derived from 2010 Howard Hughes Medical Institute - Association of American Medical Colleges report, Scientific Foundations for Future Physicians. These competencies or their source may change.

To qualify for admission, an applicant must complete any combination of courses, whose combined content has been mapped to cover the 37 learning objectives that can provide the following eight entering medical student competencies:

E1 - Apply quantitative reasoning and appropriate mathematics to describe or explain phenomena in the natural world.
E2 - Demonstrate understanding of the process of scientific inquiry and explain how scientific knowledge is discovered and validated.
E3 - Demonstrate knowledge of basic physical principles and their applications to the understanding of living systems.
E4 - Demonstrate knowledge of basic principles of chemistry and some of their applications to the understanding of living systems.
E5 - Demonstrate knowledge of how biomolecules contribute to the structure and function of cells.
E6 - Apply understanding of principles of how molecular and cell assemblies, organs, and organisms develop structure and carry out function.
E7 - Explain how organisms sense and control their internal environment and how they respond to external change.
E8 - Demonstrate an understanding of how the organizing principle of evolution by natural selection explains the diversity of life on earth.

Novel Curricular Tracks - Applicants eligible for this admissions criteria option are limited to those enrolled at institutions that have devised novel premedical curricula that have been submitted to the School of Medicine and approved by the Admissions Executive Committee. Institutions currently developing Novel curricula include Millsaps College and the University of Mississippi.

To qualify for admission, an applicant must complete an approved track of multidisciplinary courses that integrate the learning objectives that can provide entering medical student competencies.

Indication of Courses that Fulfill Admissions Criteria Options - Upon receipt of an AMCAS® application, the medical school admissions office will email an applicant instructions for completing the supplemental application through the AMCAS Applicant Gateway. This supplemental application, among other information, will ask applicants to select the admission criteria option they wish to use to qualify for admission and courses taken or planned that fulfill that option. Options include the following:

- End-point Courses
  - Applicants must select and list the courses taken that fulfill this option in the prerequisites section
  - Applicants will be given the option to list the number and name of courses taken or planned that are recommended under this option

- Course-Competency Maps
  - Applicants must list the number and name of courses planned whose content maps to learning objectives that can provide the desired competencies.
  - This option applies only to students at schools with course-competency maps previously approved by the SOM Admissions Executive Committee.

- Novel Curricula
  - Applicants must list the number and name of courses planned that comprise eligible novel curricula. This option applies only to students at schools with novel curricula previously approved by the SOM admissions committee.

Non-Traditional Applicants - There is no time limit on the validity of a baccalaureate degree; however, the Admissions Executive Committee has concerns when relevant courses have been taken 10 or more years ago. Required courses should be recently completed or current regardless of the option chosen. End-point courses (life sciences, biochemistry or physics) or any course used to meet the course-competency map option that were completed 10 more years prior to applying are not acceptable. Applicants have the choice of either repeating 10 year old courses or completing new coursework to satisfy the selected admissions option.

Conditional Acceptance - Acceptance to this medical school is conditional; the Admissions Executive Committee may rescind an offer of acceptance at any time before matriculation if an applicant fails to maintain expectations upon which the acceptance was based. Examples include, but are not limited to, a significant decline in academic performance, failure to complete prerequisites or other course work and degrees in progress, patterns of unprofessional behavior and incidents discovered in a criminal background check.
RESIDENCY CLASSIFICATION
The Office of Student Records and Registrar is responsible for determining whether or not an applicant meets the requirements for being a legal resident of Mississippi for the purpose of enrollment. When requested, applicants must complete a Request for Review of Residency Classification form and provide copies of a driver’s license, car registration, car tag, voter registration card, proof of in-state banking and proof of a permanent in-state domicile. A copy of the Request for Review of Residency Classification form can be acquired from the School of Medicine webpage or the Office of Student Records and Registrar (601-984-1080).

ADMISSIONS STANDARDS AND LEGAL POLICY
For admission purposes, the School of Medicine at the University of Mississippi Medical Center gives preference to residents of the State of Mississippi, as defined by Miss. Code §§ 37-103-7, 37-103-13 and IHL Policy 610. As such, the School of Medicine currently accepts admission applications only from individuals who are U.S. citizens or lawful permanent residents. The School of Medicine may choose not to accept applications from students who cannot demonstrate residency as defined by Miss. Code § 37-103-7 and 37-103-13. In recent years, it has not been possible to admit nonresidents of the State of Mississippi.

MEDICAL SCHOOL APPLICATION AND ADMISSION TEST
The Association of American Medical Colleges (AAMC) webpage for student services provides valuable information on medical schools and electronic access to the following:

- American Medical College Application Service (AMCAS®) Applications – All applications must be made through AMCAS®, a nonprofit, centralized application processing service for applicants to the first-year entering classes at participating U.S. medical schools. The AMCAS® application is available only online. More information may be obtained by writing to the American Medical College Application Service, 2501 M Street, NW, Libby-26, Washington, DC 20037-1300 or by e-mail: amcas@aamc.org.

- Medical College Admission Test (MCAT®) - All applicants for admission to the School of Medicine must take the MCAT®. The test is computer-based, offered at specific test sites only and offered multiple times each year. By following a well-planned schedule, the premedical student should be ready to take the test no later than the mid-summer of the junior year and release scores to all schools to which they intend to apply. Selection of applicants for the medical school class entering in a given calendar year will be based, in part, on MCAT® scores acquired during the previous three calendar years only. Selection of alternates may include consideration of MCAT® scores acquired in the same calendar year. MCAT® information (including test sites, registration deadlines and testing dates) and registration may be accessed online. This information can also be acquired from most college premedical advisers or writing to the MCAT® Program Office, P.O. Box 4056, Iowa City, Iowa 52243-4046.

- Fee Assistance Program (FAP) - The AAMC FAP is designed to be used in conjunction with registration for the MCAT® and/or for application to medical school through the AMCAS®. The FAP is provided to assist individuals with extreme financial limitations whose inability to pay the full MCAT® registration fee or the AMCAS® application fee would prevent them from taking the examination or applying to medical school. Further information and the FAP application are listed at the website. The supplemental application fee for this medical school will be refunded for applicants who are approved for FAP.

- Nonacademic and Personal Preparation - Applicants are advised that in addition to academic preparation, MCAT® performance, and interviews, the Admissions Executive Committee seeks evidence of: health related experiences, volunteer/community service activities, and leadership as well as other notable time commitments such as employment, athletics, research, hobbies, etc. Experience (volunteer or paid) in a health related environment is strongly encouraged. These activities should be listed and explained by the applicant in the Work/Activities section of the AMCAS® application.

APPLICATION DEADLINES
Applicants are advised that everyone who completes a file by published program deadlines will be considered for admission; however, since those who submit applications and complete files early may have an advantage in the selection process, the following timeline is strongly suggested. During the fall of the junior year, traditional applicants (who plan to enter medical school the August after graduation from a four-year baccalaureate degree-granting program) are recommended to begin the timeline below. Non-traditional applicants should consider a similar timeline beginning about two years before the anticipated fall enrollment in medical school.

- September - Begin preparation for Medical College Admissions Test (MCAT)
- May/June - Take 1st MCAT
- May - Request transcripts and faculty evaluation letters be sent to AMCAS
- June - Complete and submit on-line American Medical College Application Service (AMCAS) application
- Summer - Repeat MCAT, if needed
- September - Interviews begin

The tables that follow summarize dates for submitting required documentation to the Association of American Medical Colleges (AAMC) and the University of Mississippi Medical Center (UMMC). Details for the Early Decision Program (EDP), Regular Decision Program (RDP) and Combined MD/PhD Program follow.

Applicants should submit all documents as early as possible and well ahead of deadlines. Applicants alone are solely responsible for ensuring all required documents reach the appropriate offices by the specified deadlines. An applicant file lacking any item on the specified deadline will be considered incomplete and ineligible for consideration for admission. The Associate Dean for Medical School Admissions may, for good cause shown, grant individual deadline extensions if the applicant can document that circumstances beyond his/her control were encountered that prevented timely arrival of required documentation.

To monitor timely document receipt, an applicant should:

- Contact AAMC to confirm his/her AMCAS® application is complete and transcripts for all college course work have been received.
- Access the School of Medicine's restricted Secondary Application System to confirm that the secondary application, supplemental application fee, transcripts for all course work and required faculty letters of evaluation have been received.
- An applicant’s file for this medical school is not considered complete until all of these items have been received. Due to the volume of material received, anticipate a few days delay between receipt and posting of information to this site.
- For questions pertaining to transcripts, contact the Office of Student Records and Registrar.
- For everything else, contact the Associate Dean for Medical School Admissions.

THE UNIVERSITY OF MISSISSIPPI MEDICAL CENTER
**EARLY DECISION PROGRAM (EDP)**

Students interested in early acceptance may apply for admission under the EDP. Two important aspects of the EDP should be understood: (1) the applicant may apply to only one school of choice until a decision is received and, if accepted, must attend that school; (2) if not accepted under the EDP, the applicant may be reconsidered as a RDP applicant by that school and is automatically eligible to apply to other schools. Since EDP decisions are rendered before most RDP applications are reviewed, only above average applicants are competitive for the EDP. The typical entering class at this medical school has an undergraduate biology, chemistry, physics and mathematics (BCPM) cumulative grade point average (GPA) of 3.6 and MCAT® scores that average 9 in verbal reasoning, physical science and biological science.

**DATES FOR EDP**

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<th>Item</th>
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<td>Transcripts¹</td>
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<td>Letters of Evaluation²</td>
<td>June 1</td>
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<tr>
<td>UMMC</td>
<td>Secondary Application³</td>
<td>June 1</td>
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<td>MCAT Scores</td>
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<td>Notification Date: Not later than October 1</td>
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¹ A complete set of all undergraduate and post-baccalaureate transcripts must be mailed to: American Medical College Application Service, 2501 M Street, NW, Libby-26, Washington, DC 20037-1300; e-mail: amcas@aamc.org

² An additional set of all undergraduate and post-baccalaureate transcripts must be mailed to: Office of Student Records and Registrar, University of Mississippi Medical Center, 2500 North State Street, Jackson, MS 39216-4505; Telephone (601) 984-1080

³ Access to UMMC's web-based Secondary Application System is restricted. A nonrefundable supplemental application fee of $50 for residents and $100 for nonresidents is required.

**REGULAR DECISION PROGRAM (RDP)**

Students may simultaneously apply for admission to multiple medical schools under the RDP. Both AMCAS® and the Medical Center require receipt of specific documents by specified deadlines summarized above. Applicants wishing to apply for the RDP may submit a web-based AMCAS® application and transcripts of all undergraduate and post-baccalaureate work to AAMC. In addition, applicants must submit a web-based Secondary Application to UMMC, transcripts of all undergraduate and post-baccalaureate work to the Office of Student Records and Registrar and three faculty letters of evaluation to the associate dean for medical school admissions. A final decision on RDP applications will be rendered on or before October 1.

**DATES FOR RDP**

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³ Access to UMMC's web-based Secondary Application System is restricted. A nonrefundable supplemental application fee of $50 for residents and $100 for nonresidents is required.

**Additional Information**

Letters of evaluation, must be written by faculty who taught the applicant preferably pre-requisite courses and who can provide information not readily available elsewhere. No specific format is required; however, the Premedical Faculty Appraisal Form may be provided to letter writers to indicate areas of interest to the Admissions Executive Committee. Above all, we seek information on an applicant’s approach to academic studies including how difficulties encountered along the way were dealt with. A minimum of three faculty letters is required; however, one composite evaluation from a pre-professional advisory committee will suffice. Supplemental letters should be kept to a minimum. When appropriate, a supplemental letter from a physician the applicant has shadowed or current employer may be considered by the Admissions Executive Committee; but it does not replace required faculty evaluations. All letters of evaluation must be submitted directly to the American Medical College Application Service (AMCAS).
COMBINED DOCTOR OF MEDICINE (MD)/DOCTOR OF PHILOSOPHY PROGRAM (PhD)

The MD/PhD program is offered to highly qualified students by the School of Medicine in collaboration with the School of Graduate Studies in the Health Sciences. The program is designed primarily to train physician scientists who seek a professional career combining clinical skills and research. For this combined program, the degree of Doctor of Philosophy is offered in the health sciences programs. Information can be found online.

Students interested in pursuing the MD/PhD program must complete all medical school application materials. In addition, applicants must:

- Complete the MD/PhD Motivation and Significant Research essays in their AMCAS application, describing all relevant research experience and research presentations;
- Submit Graduate Record Examination (GRE) scores;
- Submit at least one supplemental faculty letter of evaluation from someone able to evaluate the applicant's research potential;
- Adhere to RDP deadlines.

Applicants to this combined degree program must be sequentially accepted for admission by the Admissions Executive Committees of both the School of Medicine and School of Graduate Studies in the Health Sciences.

The MD/PhD program is a seven-year program. During the first three years, the student is enrolled respectively in the freshman, sophomore, and junior medical courses/clerkships. For the following three years, the student is enrolled in courses required by a relevant graduate program in the biomedical sciences, which are listed under the School of Graduate Studies in the Health Sciences, and performs independent scientific research leading to the successful defense of a PhD dissertation. During the final year, the student is enrolled in senior medical courses.

A limited number of stipends are available for students enrolled in this combined degree program. Competitive scholarships may also be available which offer a waiver of medical and graduate school tuition.

It is also possible for first- or second-year medical students not currently in the MD/PhD program to pursue an MD/PhD degree. Interested students should contact the graduate program director of a specific program about the possibility of pursuing a PhD degree in that program before applying to graduate school.

ADVANCED STANDING TRANSFER

Applications for admission to advanced standing at levels up to the beginning of the junior year in the University of Mississippi School of Medicine are considered by the Admissions Executive Committee. Prior to the Admissions Executive Committee deliberations, the associate deans for admissions, student affairs, and academic affairs consult with the dean of the School of Medicine who determines whether space exists within the pertinent medical student class. This process ensures that adequate resources exist so that the training of currently enrolled students will not be adversely affected.
Advanced standing applicants must be currently enrolled and in good academic standing at an LCME accredited U.S. medical school and strong preference is given to those who fulfill Mississippi residency requirements (see Admissions, Standards and Legal Policy). The applicant will be required to submit evidence of withdrawal in good standing from the LCME accredited medical school previously attended and a validated transcript of the work completed at that school. The applicant’s undergraduate biology, chemistry, physics and mathematics (BCPM) cumulative grade point average (GPA) and Medical College Admission Test (MCAT®) scores must be competitive with those of the class he/she seeks to enter. If the applicant’s previous medical coursework is incompatible with the curriculum or schedules in this school, the applicant may be asked to complete a required course(s) before being accepted to transfer or the applicant may be accepted to a lower level of advanced standing and be required to complete a particular course(s) before proceeding with the next academic year. No student will be admitted to advanced standing if there is a condition or failure in any subject or if the applicant is not in good standing at the medical school from which he/she wishes to transfer. For a student applying for transfer for the junior year, receipt of the student’s official transcript from the National Board of Medical Examiners demonstrating a passing score on United States Medical Licensing Examination Step 1 is a requirement for admission to, and for initiating, the junior year in this school.

A prospective applicant for transfer should email or write the Associate Dean for Admissions, University of Mississippi Medical Center, 2500 North State Street, Jackson, MS 39216-4505, or visit online for information concerning applications. Completed application must be returned to this address by March 31.

APPLICANT EVALUATIONS AND DECISIONS

In 2010, leadership of the Association of American Medical Colleges challenged medical schools to transform the admission process in several ways. For example, they encouraged schools to employ a holistic admissions review that affords each applicant balanced consideration of life experiences, personal attributes, and academic metrics, and to select not only those who can succeed but those who can contribute to the diversity of a medical school that can serve as a driver of educational excellence. To meet this challenge, the University of Mississippi’s School of Medicine (SOM) employs the following steps for evaluating applicants and the information they submit in American Medical College Application Service (AMCAS®) and SOM Secondary applications. This process is aligned with the mission and diversity interests of this medical school.

Mississippi Residency

For admission purposes, the School of Medicine (SOM) at the University of Mississippi Medical Center, as a practice, does not admit nonresidents of the State of Mississippi, as defined by Miss. Code §§ 37-103-7, 37-103-13 and IHL Policy 610; see Admissions Standards and Legal Policy. As such, the SOM currently accepts admission applications only from individuals who are U.S. citizens or lawful permanent residents.

Residency determination is not based solely on information provided in an AMCAS® application; it is based on information provided in the UMMC Secondary Application and, when requested, a Request for Review of Residency Classification form and supporting documentation. Questions regarding residency classification should be addressed to the Office of Student Records and Registrar.

Life Experiences

The admissions committee values applicant experiences in the following areas:

- Health care - Shadowing (individual physicians or hospital-clinic programs), premedical organizations, health-related courses or clinical training, employment or volunteering at a health care facility including nursing homes, medical research involving contact with patients or patient records, work with primary health care provider, work with medically underserved populations or rural medicine programs, or participation in health care pipeline programs

- Volunteer/community service - Social and other campus, community and faith-based organizations, campus ambassador/recruiter, disaster relief, mentoring/tutoring/coaching or other organizations

- Leadership/responsibility - Elected office, supervisor or other role with responsibility in social or other campus, governmental or military organizations, mentoring/tutoring/coaching

- Research - Employment or volunteer work in a basic science or clinical laboratory

- Employment - Any part- or full-time employment concurrent with or independent of enrollment in school

- Other significant time commitments - Participation in collegiate, semi- or professional level athletics (including cheerleading) or artistic endeavors (theater, band, orchestra) or other major time commitments beyond those already listed

File Review Committee (FRC)

Three members of a FRC, whose access to an American Medical College Application Service (AMCAS®) application is limited to Work/Activities and Essay sections only, read and score activities in each area of interest. Scores are based on the number of activities, the length of time devoted to each activity, the quality, or lack thereof, of the description of the activity.

Experience scores are used to screen applicants for interviews, render the Admissions Executive Committee decisions and post-application counseling for unsuccessful applicants.

Personal Attributes

The Admissions Executive Committee values applicants who possess the following personal attributes:

- Written communication skills - Clear and well organized presentation of ideas, such as an applicant’s motivation for a career in medicine and observations, personal growth, and value of acquired experiences

- Initiative - Motivation to seek, participate in or initiate activities independent of groups, and leadership role in sustaining a group or founding a new group.

- Interacting with people - Written evidence of empathy, compassion, and altruism for diverse people

- Motivation for medicine - Extent of interest expressed both in writing and participation in health-related activities

- Workload - Year-by-year evaluation of credit hours taken and time committed to employment and extracurricular activities

- Desire to learn - Academic achievement beyond the minimum prerequisites or degree requirements including single/multiple majors/minors/degrees, and honors college enrollment

The attributes are scored by the same three File Review Committee (FRC) members who score the applicant’s experiences. FRC members have limited access to the American Medical College Application Service (AMCAS®) application Work/Activities and Essay sections only. Scores are based on reading these sections of the application and evaluating what the applicant has done to illustrate initiative, interaction with diverse people, and motivation for medicine as well as the clarity with which this has been conveyed in the written application.
Attribute scores are used to screen applicants for interviews, render the Admissions Executive Committee decisions, and post-application counseling for unsuccessful applicants.

**Academic Metrics**

Grade Point Averages (GPAs) and Medical College Admissions Test (MCAT®) scores comprise the academic metrics considered for admission. For information regarding when and how they are applied in the admissions process, see Interviews and the Admissions Executive Committee Deliberations.

- **GPAs** - The scholastic record in courses preparatory for the medical school curriculum is important. This is summarized as the applicant’s cumulative undergraduate grade point average (GPA). Due to variations in grading schemes between schools, only GPAs calculated in the American Medical College Application Service (AMCAS®) application will be considered.

  It is recommended that students receive a grade in all courses that satisfy the admission criteria option selected by the applicant to qualify for admission (see Admissions Criteria), avoiding courses with pass-fail grades. Academic averages are calculated on a 4.0 scale. If a course is repeated, all grades are used in calculating the average.

  The admissions criteria option selected in the SOM Secondary Application determines which GPA will be primarily considered in evaluating whether or not the applicant qualifies for admission; however, grades in all academic course work may be considered during admission committee deliberations.

- **MCAT® Scores** - An equally important metric is scores reported for the applicant’s performance on the MCAT®. Applicants must take the MCAT® and release score reports to this medical school. Selection of applicants for the medical school class entering in a given calendar year will be based, in part, on MCAT® scores acquired during the previous four calendar years only.

  The minimum MCAT® sum (add scores for all sections on any one exam) required for automatic file review and consideration for interviews is 493, provided that no one section score is less than 121. The highest MCAT® sum on any single examination will be considered for applicants who report scores for more than one MCAT®. For applicants whose MCAT® score is close to but below this threshold, a file review will be conducted that includes GPAs, life experiences and personal attributes to determine if, on a case-by-case basis, the Admissions Executive Committee finds a compelling reason to invite the applicant to interview.

**Interviews**

Applicants should not present themselves for interviews until requested to do so by the associate dean for medical school admissions.

**Selection for Interviews**

Criteria for selecting interviewees are established by the SOM Admissions Executive Committee. Selection for interviews is based on a balance between life experiences, personal attributes (those evaluated by reading the AMCAS® application) and metrics. Criteria may vary slightly from year to year depending on the number of applications received and the quality of the applicant pool.

**Multiple Mini Interviews (MMIs)**

The MMI consists of a circuit of eight to ten interview “stations”, each of which provides a ten minute scenario-based encounter. Each station has a trained rater who is a member of the Interview Subcommittee; therefore, each applicant will be evaluated by approximately eight to ten different raters. The station scenarios do not test or assess scientific or clinical knowledge; instead, they focus on personal competencies such as oral communication skills, service orientation, respect for others including compassion and empathy, critical thinking and decision making, teamwork, awareness of ethics, maturity, coping skills, and opinions on health care issues.

Additional information will be provided to applicants when they are invited to interview and during the admissions interview day program.

**Scheduling Interviews**

Applicants whom the Admissions Executive Committee selects are notified to contact the Admissions Office to schedule their interview date. Interviews are generally held two days each month from August through December.

**Interview Day Program**

All MMI participants must sign a School of Medicine Participant Agreement and Statement of Confidentiality. Applicants will be provided a copy to read and sign during the Registration and Welcome (see below).

The following example schedule is for illustrative purposes only. While times beyond registration may vary, it is imperative that applicants plan to arrive well ahead of time to ensure participation in the complete program.

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>7:45 am</td>
<td>Registration and Welcome</td>
</tr>
<tr>
<td>8:30 am</td>
<td>Circuit 1 - MMIs</td>
</tr>
<tr>
<td>10:30 am</td>
<td>Circuit 1 - Admissions Program</td>
</tr>
<tr>
<td>1:30 pm</td>
<td>Tour of UMMC (wear comfortable shoes)</td>
</tr>
</tbody>
</table>

**Faculty Letters of Evaluation**

Evaluations must be written by either faculty who taught the applicant, preferably courses used to satisfy admissions criteria, or faculty who supervised the applicant conducting research outside the classroom. A minimum of three faculty evaluation letters or one composite is required. Composite letters must contain the names of faculty who participated in the evaluation of the applicant.
All letters must be printed on institutional letterhead, signed by the author(s) and state the course(s) in which he/she taught the applicant.

Letter Content
This medical school seeks information on unique contributions that an applicant might provide to a medical school class and the presence, or absence, of any of the following core, entry-level competencies for entering medical students. Authors are encouraged to consult AAMC Guidelines for Writing a Letter of Evaluation for a Medical School Applicant for details.

Thinking & Reasoning Competencies
- Critical Thinking
- Quantitative Reasoning
- Scientific Inquiry
- Written Communication

Science Competencies
- Living Systems
- Human Behavior

Interpersonal Competencies
- Service Orientation
- Social Skills
- Cultural Competence
- Teamwork
- Oral Communication

Intrapersonal Competencies
- Ethical Responsibility to Self and Others
- Reliability and Dependability
- Resilience and Adaptability
- Capacity for Improvement

Supplemental letters should be kept to a minimum. When appropriate, a supplemental letter from a physician the applicant has shadowed or current employer may be considered by the Admissions Executive Committee, but it does not replace required faculty evaluations.

Letter Submission
Instructions for submitting letters are provided to applicants in the American Medical College Application Service (AMCAS®) application. In all cases, applicants must provide authors a letter request form generated from the applicant’s AMCAS® application. Letters sent directly to this medical school will not be accepted.

Letters of evaluation can be submitted online as a PDF file to the appropriate site:
- AMCAS® Letter Writer Application - This application enables letter writers to upload documents securely to AMCAS® rather than send letters via the mail. If you are interested in this option, and can upload a PDF version of your letter, make note of the requesting applicant’s AAMC ID and AMCAS® Letter ID included in the letter request form.

Mail hard copy to AMCAS® for scanning into PDF file. If you select this option, attach the letter request form to your letter(s) and mail to:
Attn: AMCAS Letters
American Medical College Application Services
P.O. Box 18958
Washington, DC 20036
AMCAS® will acknowledge receipt of your letter; this office will not. AMCAS® will load PDF files into applications and distribute your letter electronically to all medical schools indicated by the applicant in his/her AMCAS® application.
Applicants who reapply must submit new evaluation letters with each application.

Admissions Committee Deliberations
The authority to select applicants for admission to the School of Medicine (SOM) is vested in the Admissions Executive Committee. This committee is chaired by the associate dean for medical school admissions and composed of members of the basic science and clinical faculty and community representatives appointed by the dean of the school of medicine. No student may enroll for courses in the SOM, either as a regular full-time student or as a special part-time student, without being admitted by the committee.

The medical school Admissions Executive Committee reviews the entire file for every interviewed applicant. Committee deliberations include a discussion of: where an applicant was raised and educated noting financial, educational, and socioeconomic advantages and disadvantages; an applicant’s life experiences and personal attributes including scores assigned by the File Review Subcommittee; personal attributes reflected in the written application, performance on multiple mini interviews rated by members of the Interview Subcommittee and faculty evaluations; and academic metrics including trends in GPAs and MCAT® scores. Attention is given to applicants who in the opinion of the Admissions Executive Committee best fulfill the mission and diversity interests of the SOM.

Selection of applicants is made on a competitive basis, without regard to race, color, religion, national origin, age, disability, marital status, gender, sexual orientation or veteran status. Qualified handicapped students will be considered in relation to the technical standards.

Decisions Rendered
Admissions decisions are made on a rolling basis; therefore, the sooner an applicant applies, the earlier his/her file will be reviewed and considered for interviews. If files are complete, applicants are discussed within two to three weeks of interviews and one of three decisions rendered: 1) acceptance; 2) decision postponed; or 3) no position available for this year.
Applicants to the Early Decision Program will be notified as soon as a decision has been rendered; applicants to the Regular Decision and Combined MD/PhD programs will be notified starting October 16 and thereafter as soon as a decision has been rendered. All applicants receive a final disposition of their application not later than March 15. Final notification will be one of the following: 1) acceptance; 2) placement on the alternate list; or 3) no position available for this year.
Alternates will be used to fill any vacancies that may occur if accepted applicants choose not to attend. Any applicant who does not gain acceptance is invited to schedule an appointment after February 15th for post-application counseling on how to improve the competitiveness of their application should the applicant choose to subsequently reapply.

Conditional Acceptance

Acceptance to this medical school is conditional. The Admissions Executive Committee may rescind an offer of acceptance at any time before matriculation if an applicant fails to maintain expectations upon which the acceptance was based. Examples include, but are not limited to, a significant decline in academic performance, failure to complete prerequisites or other course work and degrees in progress, patterns of unprofessional behavior and incidents discovered in a criminal background check.

Criminal Background Checks (CBCs)

Any preadmission agreement executed by the health care program with a student shall be void if there is a disqualifying incident or pattern of unprofessional behavior in the CBC prior to enrollment. Since clinical rotations are an integral part of the education of medical students at University of Mississippi Medical Center (UMMC), all applicants accepted to the School of Medicine (SOM) must undergo the CBCs described below.

- **AAMC-Facilitated CBC** - All successful applicants to the SOM undergo a centralized Association of American Medical Colleges (AAMC)-facilitated CBC.
- **Fingerprint-Based CBC** - Effective July 1, 2004, Section 37-29-232 of the Mississippi Code requires that students enrolled in a health care professional academic program undergo fingerprinting and a CBC before any clinical rotation in a licensed health care facility may occur.
- **AAMC-Facilitated CBC** - Independent of the AAMC-facilitated CBC, all accepted applicants must call the SOM admissions office to schedule an appointment with UMMC Human Resources sometime between December 1 and June 1 prior to enrollment so that a set of digital fingerprints and photograph can be acquired. Fingerprints will be submitted to the Mississippi Public Safety Commission and Department of Justice Federal Bureau of Investigation for a criminal background check. If any potentially disqualifying event is reported, Human Resources will mail to the medical school applicant a letter (such as Determination of Non-Suitability for Employment in a Health Care Facility) indicating that a potentially disqualifying event(s) has been reported and a copy of the criminal history report record. Copies will be sent to the associate dean for medical school admissions. Currently, there is no charge to the applicant for this service.

The steps involved in evaluating a criminal background history are described in the SOM Procedures for Criminal Background Checks.

- **Subsequent Convictions** - Applicants are responsible for notifying the associate dean for medical school admissions if any further criminal action occurs subsequent to submitting an AMCAS® application or the conduct of CBCs described above. This includes the following: if you are convicted of, or plead guilty or no contest to, any misdemeanor or felony crime(s) after the date of your submission of the medical school application and prior to your medical school matriculation. Your communication must be in writing, and must occur within 30 days of the occurrence of the criminal action.

Other Nonacademic and Personal Attributes

In addition to interviews, evidence for these attributes is acquired from "work/activities" listed on an applicant’s AMCAS® application.

Examples of what the Admissions Executive Committee seeks include evidence of: exposure to clinical medicine (volunteer work or employment at a hospital, clinic, nursing home or hospice, shadowing physicians, participating in medical missions); interaction with diverse people; volunteer service; community activities; leadership; academic pursuits beyond the classroom (such as research); cultural interests and other activities that require commitment of time outside the classroom (employment, athletics, artistic performance). Applicants who acquire such experience while maintaining high academic performance and time management skills possess qualities that can contribute to success in medical school.

RESPONSE TO LETTER OF ACCEPTANCE

Upon notification of acceptance, an applicant will be provided online access to Information and Instructions, Statement of Acceptance, Criminal Background Check, Technical Standards, Academic Accommodations, and White Coat Ceremony forms that must be read, completed, and submitted electronically within 15 days after the date of notification that the applicant has been accepted. Failure to do so within the specified period may automatically void the offer of acceptance.

- **Statement of Acceptance** - A form for applicants to indicate their intention to attend this medical school.
- **Criminal Background Check Form** - A description of CBC policies and procedures for this medical school that includes an applicant’s responsibility to report, to the Associate Dean for Admissions, any incident that occurs subsequent to a CBC check.
- **Technical Standards** - A description of Technical Standards applicants are expected to meet for admission, retention, promotion, and certification as an MD.
- **Academic Accommodations Form** - A description of Academic Accommodations policies and procedures can be found online.
- **White Coat Ceremony Form** - A form that enables an accepted applicant to verify the listing of his/her name and specify the size of the coat that he/she will receive at a ceremony held during orientation.

The medical school Admissions Executive Committee may rescind an offer of acceptance at any time before matriculation if an applicant fails to maintain expectations upon which the acceptance was based. Examples include, but are not limited to, a significant decline in academic performance, failure to complete prerequisites or other course work and degrees in progress, patterns of unprofessional behavior, and incidents in a criminal background check.

VISITING STUDENTS

For medical students at University of Mississippi School of Medicine who wish to take senior electives at other medical schools - The Visiting Student Application Service (VSAS) is the AAMC application designed to make it easier for medical students to apply for senior electives at other U.S. medical schools. Information regarding the VSAS process can be found online. Each medical school must issue a student authorization before he/she may log into VSAS. You will be notified of these authorizations by e-mail.

THE UNIVERSITY OF MISSISSIPPI MEDICAL CENTER
If you are applying to a medical school that does not use VSAS, please use the Extramural Electives Compendium (EEC) for visiting student application information or the individual medical school website.

**For medical students at other schools who wish to take senior electives at the University of Mississippi School of Medicine** - Senior medical students who are enrolled in good standing in an LCME-accredited school, or an American Osteopathic Association (AOA)-accredited school, in the U.S. or Canada and who are formally approved by their parent school can be offered a senior elective in the School of Medicine. The Office of Student Affairs and Registrar’s Office verifies the credentials of visiting senior medical students, formally registers them, and maintains a roster of these students.

The University of Mississippi School of Medicine participates in the American Association of Medical College’s (AAMC) Visiting Student Application Service (VSAS). Verification of credentials for prospective visiting students is part of the application process for the extramural block. Visiting students from other schools for clinical clerkships and electives must possess qualifications equivalent to students in this medical school. Approval by the chairman of the appropriate department and by the dean of the parent LCME-accredited or AOA-accredited school, as well as verification of: professional liability insurance coverage, individual health insurance, HIPAA certification, OSHA certification, criminal background check, BLS/ACLS training, and immunization compliance for the visiting student is required. The registrar, in consultation with the associate dean for student affairs, screens a applications to ascertain that applicants are enrolled in good standing in LCME- or AOA-accredited U.S./Canadian medical schools, that applicants are (or will be) senior medical students, and that applicants have been granted approval by their school. Final acceptance of the applicant, on a space available basis, for a senior block in our program is vested in the department.

Evaluations of these students are provided to their parent schools by the respective departments offering the electives. Health services are available to visiting students through Student-Employee Health and University Hospital. The liability insurance policy for our students provides coverage for visiting senior medical students; however, if visiting students have liability insurance coverage in effect through their parent schools, our student policy then provides only secondary coverage for them.

Prospective visiting students should visit the AAMC’s Visiting Student Application Service (www.aamc.org/vsas VSAS Application) or write the Office of Student Records and Registrar, University of Mississippi Medical Center, 2500 North State Street, Jackson, MS 39216-4505, for information and application.

**ACCEPTED APPLICANTS**

For useful information, accepted applicants are encouraged to consult the web pages of [Student Affairs](http://www.studentaffairs.umn.edu) and [Office of Medical Education](http://www.med.umn.edu). 

**Contact Information** - Accepted applicants must keep all contact information (especially e-mail address, preferred mailing address and telephone numbers) updated in the AMCAS® application until arrival for orientation. Updates must also be provided to the Office of Student Records and Registrar.

**Start Date** - There is a mandatory orientation and registration for the entering class held in the fall. The Associate Dean for Student Affairs will mail further details during the summer. For questions, call (601) 984-5012.

**TUITION AND REQUIRED FEES**

Medical school tuition for residents of Mississippi and non-residents is shown below. The tuition assessment includes required registration, laboratory and library usage fees. Medical school tuition is assessed in accordance with financial aid disbursement regulations. Health insurance is mandatory. A group plan is available for UMMC students. Participation in a group disability insurance plan is mandatory for all medical students. A nonrefundable supplemental application fee of $50 is required.

Tuition for the 2019-2020 year will be $31,197 for Mississippi residents, and $73,460 for non-residents. A disability insurance fee of $55 per year is assessed with the first tuition assessment. Tuition and fees are subject to change.

Students registered in the combined MD/PhD program will pay graduate tuition for graduate hours and medical tuition for terms they are enrolled as a medical student. Current medical school tuition information can found on the student accounting website under “Doctor of Medicine.”

**SCHOOL OF MEDICINE STUDENT HANDBOOK**

The purpose of the School of Medicine Student Handbook is to provide students with specific information concerning school policies, regulations and services. As a student at the University of Mississippi School of Medicine, you have a responsibility to read and become familiar with the contents of this handbook and all other such publications distributed by the institution. All members of the Medical Center community endeavor to create and maintain an environment that is safe, friendly, and conducive to learning. Students are provided with a physical copy of the handbook during M1 orientation. This publication is subject to change. The most up-to-date edition can always be found on the School of Medicine’s website.

**REQUIRED LAPTOPS**

Entering medical students are required to have a laptop computer that meets the annually revised UMMC Minimal Laptop Specifications that are posted on the School of Medicine website. Funds are budgeted in the student financial aid package to cover the cost of a laptop computer. Students should purchase a laptop meeting or exceeding the UMMC Minimal Specifications from regular retail channels. Laptops from any IBM-PC or Apple compatible manufacturer should be acceptable. Students will be personally responsible for maintenance/repair of their laptop. All students are required to maintain up to date virus and spyware detection software to allow access to the UMMC public wireless network. Students should acquire their laptop prior to the first week of August. Students will need to bring their functional laptop to a computer orientation seminar to be held on the last day of registration/orientation before classes.

**TEXTBOOKS AND SPECIAL EQUIPMENT**

Students must provide their own required textbooks and special equipment, including stethoscopes and dissecting instruments, as specified throughout the course of study. These items are normally available through the Medical Center Bookstore.

**FINANCIAL AID**

The website for the Office of Student Financial Aid is designed to serve students in all schools at this medical center; however, the information presented below is particularly useful for medical students. Consult Student Financial Aid for general information and access the Incoming Student link and Frequently Asked Questions.

About 90% of first year students at the University of Mississippi School of Medicine receive some form of merit/need based financial aid. Financial aid sources are diverse and include private donations, institutional accounts, state, and federal governmental programs. The most authoritative and up-to-date information is available at the Student Financial Services website. Questions beyond what is provided here should be directed to Student Financial Aid or (601) 984-1117.

Timeliness for making financial aid awards, mailing statements, posting credits and issuing award checks are approximate; variations may occur due to specific program requirements that this institution cannot control. For example, policies governing military scholarships require the
institution to invoice the student for tuition/fees before funds will be provided to credit the account. It is important for students to become familiar with policies governing their specific awards.

Every attempt is made to provide incoming students accurate figures for the cost of attendance and financial aid awards in advance of enrollment; however, these figures are not fully under institutional control. For example, increases in tuition and fees mandated by the Mississippi State Institutions of Higher Learning and increases in medical insurance premiums charged by insurance carriers may not be imposed until the summer before enrollment. Some forms of financial aid may be able to accommodate these increases while others may not.

STATE SCHOLARSHIP AND LOAN PROGRAMS

State Funded Financial Assistance - Under the governance of the Board of Trustees of State Institutions of Higher Learning, the Mississippi Office of Student Financial Aid is responsible for the administration of all state-funded financial aid programs, including grants, scholarships, and loans. These funds provide assistance to Mississippi residents in pursuit of their educational and professional goals. Several programs are designated to provide financial assistance to medical students.

State Medical Education Loan/Scholarship - (Family Medicine, Internal Medicine, Obstetrics/Gynecology, Pediatrics) Accepted applicants and matriculated medical students are eligible to apply. Online applications must be submitted to the Mississippi Office of Student Financial Aid before March 31. Applicants accepted to medical school after this deadline (for example, from the alternate list) may still qualify for funds if an online application is submitted before the above deadline. All of these programs incur service obligations in State of Mississippi Shortage Areas. The list of counties that qualify is extensive, but subject to change on an annual basis. For further information, contact Mississippi Office of Student Financial Aid, 3825 Ridgewood Road, Jackson, MS 39211-6453, (601) 432-6997 or (800) 327-2980.

FEDERAL SCHOLARSHIP AND LOAN PROGRAMS

The Direct Unsubsidized Loan - This loan is available to students regardless of income or need. With an unsubsidized loan, you are responsible for all interest that accrues during in-school, grace, and deferment periods. You may choose to pay the interest portion only while in school, which would keep your loan balance at principal. If you choose to defer such payments, the interest will be capitalized, resulting in an increase in both total debt and the amount of monthly payments. Loans are usually issued for a single academic year, and both eligibility and amount are recalculated annually throughout your academic career.

Your Direct Loan eligibility is determined by the Financial Aid Office and is based on information you provided in the Free Application for Federal Student Aid (FAFSA). Federal criteria include:

- Enrollment in an eligible school at least half-time in a degree program
- U.S. citizenship, permanent residency, or eligible noncitizen status
- Satisfactory academic progress (as determined by the Office of Financial Aid)
- No unresolved defaults or overpayments owed on Title IV educational loans and grants
- Satisfaction of all Selective Service Act requirements

Federal Scholarships/Loans for Disadvantaged Students - The University of Mississippi School of Medicine annually applies to the U.S. Department of Health and Human Services (HHS) Bureau of Health Profession’s (BHP) for funds to assist needy students finance their medical school education. The amount of funds awarded to the institution varies each year based on: availability; the proportion of graduated students going into primary care; the proportion of underrepresented minority students; and the proportion of graduated students going into medically underserved communities.

Permitting funding, you are eligible to apply for Scholarships for Disadvantaged Students (SDS) and Loans for Disadvantage Students (LDS) funds if you:

a) have been accepted to or are currently enrolled in this medical school;

b) are a citizen, national, or a lawful permanent resident of the United States or the District of Columbia, the Commonwealths of Puerto Rico or the Marianas Islands, the Virgin Islands, Guam, the American Samoa, the Trust Territory of the Pacific Islands, the Republic of Palau, the Republic of the Marshall Islands and the Federated State of Micronesia; and

c) are from an environmentally or economically disadvantaged background.

Participating medical schools are responsible for selecting SDS and LDS recipients, making reasonable determinations of financial need, and providing funds that do not exceed the cost of attendance (tuition, reasonable educational expenses and reasonable living expenses).

EXTERNAL SOURCES OF FUNDS

- American Medical Association (AMA) Fund - The AMA Foundation created several scholarship opportunities designed to help students face the financial challenge of paying for a medical school education. Additional information is available online which provides a comprehensive list of AMA financial aid resources, including information about medical education financing and student debt, as well as information on a variety of scholarships and service opportunities.

- The Physicians of Tomorrow Scholarship (formerly known as The National Scholarship) - This $10,000 scholarship was created in 2004 by the AMA Foundation as part of its ongoing effort to provide financial assistance to medical students facing a spiraling debt load. In its first year, one scholarship was awarded; since then, the Foundation has expanded the program and more scholarships have been added. The Physicians of Tomorrow Scholarship provides the highest level of tuition assistance available from the Foundation to a deserving student enrolled in an accredited United States medical school, based on financial need or academic excellence. All nominees must be rising seniors (M3 students). UMMC may nominate one student. Deadlines: UMMC May 1, AMA May 29

- Minority Scholars Award - Ten $10,000 scholarships are available to students underrepresented in the medical profession. Eligible students of minority background include African American/Black, Native American, Native Hawaiian, Alaska Native and Hispanic/Latino. The selection of awards is based on a combination of financial need, academic excellence and promise for the future. Nominees must be rising-second or rising-third-year medical students. Each medical school dean may nominate two candidates for this scholarship. Deadlines: UMMC March 15 AMA April 15.

Questions about these scholarship opportunities should be directed to Dina Lindenberg, Program Officer, (312) 464-4193.

Application materials are available from the Associate Dean for Medical School Admissions.

The American Medical Association-Educational Research Foundation loan program is a source for loans to medical students, interns, and residents. Students are eligible to apply for loans upon the successful completion of two or more quarters of medical school.
Greenwood Leflore Hospital Educational Reimbursement Agreement - This program will provide the cost of medical school attendance for an African American medical student at least 21 years old who upon completion of his/her educational and residency requirements will serve as a licensed physician employed by the hospital in Greenwood, MS, or as a member of hospital’s active medical staff in private practice in the hospital’s service area as a participating provider in Medicare, Medicaid, and similar programs for a period of five years (60 consecutive months). Reimbursement for educational expenses previously paid is available.

Additional information and a copy of the agreement are available from the Associate Dean for Medical School Admissions.

Mississippi Rural Physicians Scholarship Program - In 2007, the Mississippi Legislature created the Mississippi Rural Physicians Scholarship Program, creating a unique longitudinal program that identifies rural college students who aspire to return to their roots to practice medicine. Academic enrichment, faculty and physician mentoring plus solid medical school financial support through the Mississippi Rural Physicians Scholarship Program will enable capable young Mississippians to address the challenge of Mississippi’s health care crisis. Additional information is available online and Mississippi Rural Physicians Scholarship Program, University of Mississippi School of Medicine, 2500 North State Street Jackson, MS 39216-4505, 601.815.9022.

The Armed Services Health Professions Scholarship Program through the Army, Navy, Air Force and the USPHS offers Health Professions Scholarships to students interested in serving in the military. Students are required to serve a year as a commissioned officer for each year of participation in the program, with a two-year minimum. These scholarships provide tuition, other academic fees, required books, required equipment, and a monthly living stipend.

**UMMC INSTITUTIONAL SCHOLARSHIPS**

(Scholarships awarded on merit, no application necessary)

James T. Baird Memorial Scholarship Fund was established in 2000 through a gift to the Medical Center. At least one scholarship is available each year in the School of Medicine. All recipients must be in good academic standing, and preference is given to those students who intend to practice in smaller Mississippi towns and communities.

Thomas M. Blake Dean's Merit Scholarship was established in 2003 to recognize a medical student who demonstrates an ability and willingness to accept responsibility, exercise initiative, and utilize innovative approaches.

Frank Bradley Baker Memorial Scholarship is a scholarship endowment sponsored by the Class of 1965 of the School of Medicine to honor and memorialize their deceased classmate, Frank Bradley Baker. This scholarship is administered by the School of Medicine Loan and Scholarship Committee according to the criteria developed by the Class of 1965. It is awarded to the sophomore with the highest academic average for the preclinical years.

Maribel Barber Scholarship in Medicine was established in 1972 through a bequest to the University of Mississippi for outstanding medical students who are legal residents of Mississippi. Four-year scholarships are awarded. Recipients are selected for their scholastic promise and leadership qualities. To retain the award in succeeding years, the recipient must maintain satisfactory academic progress during formal preparation for a career in medicine.

Bryan Barksdale, MD, School of Medicine Scholarship, made possible by the Barksdale Foundation Account, is awarded to a first-year medical student who is a Mississippi resident. The Barksdale Foundation Account provides scholarships to promote excellence among School of Medicine students and to achieve educational benefits to students derived from a diverse student population. Recipients are selected by the School of Medicine Scholarship and Awards Committee. Selection is based on prior academic achievement, the student's potential for success in medicine, and accepted institutional financial aid guidelines. The scholarship is renewable each year as long as the recipient remains in good academic standing. Recipients must commit to reside and practice medicine in Mississippi for a period of five years.

Max, Doris and Jewel Blackmon Trust Fund Scholarship provides scholarships for outstanding medical students enrolled in this School of Medicine who have been selected by the Scholarship and Awards committee on the basis of academic potential or financial need. The scholarship may be renewed annually if the student remains in good scholastic standing. Preference is given to students who intend to practice in Mississippi.

A. Wallace Conerly MD Scholarship, which honors Dr. Conerly's service as Vice Chancellor for Health Affairs and Dean of the School of Medicine from 1994-2003, provides both medical and graduate tuition for outstanding MD/PhD students.

John C. and Nina S. Culley Memorial Scholarship was established in 1968 through a $50,000 bequest from Dr. John Culley to the University of Mississippi. When earnings permit, the scholarship is awarded to the top premedical student at the University of Mississippi who applies to the University of Mississippi School of Medicine by November 1 of the year preceding admission.

Hattiesburg Physicians’ Scholarship was established in 1983 by the Board of Directors of the Hattiesburg Community Blood Center, Inc. Award recipients must be sophomores or juniors in the upper one-third of their class. Preference is given to medical students from the Hattiesburg area.

Robert M. Hearin Support Foundation Minority Scholarship is available to three minority students in the School of Medicine M1 class every year who, in the opinion of the Admissions Executive Committee, are most likely to provide health care to underserved Mississippians.

Robert M. Hearin Support Foundation Scholarships, established by the Robert M. Hearin Support Foundation, are awarded to outstanding students selected on the basis of their premedical record and financial need.

F.A. Hunt Scholarship was established through a bequest from Fannie Gordon Hunt to honor her husband. It is awarded annually on the basis of academic excellence.

Dr. M. Winter Jackson Medical Scholarship is awarded to a third-year student on the basis of academic standing, potential for growth and development in the chosen field and need. In the first year the scholarship is awarded, a fourth-year recipient also will be chosen. In subsequent years, the third-year student selected to receive the scholarship also will receive it in the fourth year of medical school if he/she continues to meet the criteria.

Dr. and Mrs. Henry O. Leonard Scholarship Fund was established in June 1988, by Helen G. Snider in memory of her aunt and uncle. Dr. Leonard was in general practice in Coffeeville for many years. Juniors in good academic standing with proven financial need are eligible for the Leonard Scholarship. Recipients must plan to go into the practice of family medicine and must commit to practice in state for a period of five years following graduation and residency training.

John F. Lucas Sr., MD, Scholarship was established by family and friends of Dr. Lucas, an obstetrician-gynecologist in Greenwood for more than 48 years. Incoming freshmen from LeFlore, Sunflower, Washington, Bolivar, Humphreys and Yazoo counties are eligible. Selection is based on financial need.

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THE UNIVERSITY OF MISSISSIPPI MEDICAL CENTER
James A. McDevitt, MD, Medical Scholarships, established through a bequest from Alma Valentine McDevitt in memory of her husband, are awarded to worthy and deserving medical students. The scholarships are renewable for each year of medical school provided the recipient maintains good academic standing.

Fred McDonnell, MD, School of Medicine Scholarship, made possible by the Barksdale Foundation Account, is awarded to a first-year medical student who is a Mississippi resident. The Barksdale Foundation provides scholarships to promote excellence among School of Medicine students and to achieve educational benefits to students derived from a diverse student population. Recipients are selected by the School of Medicine Scholarship and Awards Committee. Selection is based on prior academic achievement, the student’s potential for success in medicine, and accepted institutional financial aid guidelines. The scholarship is renewable each year as long as the recipient remains in good academic standing. Recipients must commit to reside and practice medicine in Mississippi for a period of five years.

Medical Alumni Scholarship is awarded to a rising M3 who is in the top half of his or her class, has no other M3 scholarship, and intends to practice in Mississippi after completing all training.

Miller-Pittman Medical Scholarship was established through a bequest from the late Mary Eugenia Miller. The scholarship is designed to assist “deserving medical students enrolled in the School of Medicine.”

Mississippi Medical and Surgical Association Scholarship Fund is applied toward tuition. Preference is given to an incoming M1 who is an African American or represents another minority group.

Don Mitchell, MD, School of Medicine Scholarship, made possible by the Barksdale Foundation Account, is awarded to a first-year medical student who is a Mississippi resident. The Barksdale Foundation provides scholarships to promote excellence among School of Medicine students and to achieve educational benefits to students derived from a diverse student population. Recipients are selected by the School of Medicine Scholarship and Awards Committee. Selection is based on prior academic achievement, the student’s potential for success in medicine, and accepted institutional financial aid guidelines. The scholarship is renewable each year as long as the recipient remains in good academic standing. Recipients must commit to reside and practice medicine in Mississippi for a period of five years.

Nina Bess Goss-Moffitt, MD, Scholarship, established by Dr. Ellis M. Moffitt in 1999 in memory of his wife, Dr. Nina Bess Goss-Moffitt, who was a longtime member of the Medical Center Department of Psychiatry and Human Behavior faculty. The scholarship is awarded on the basis of need and potential for successful completion of the four-year curriculum. Recipients will receive the Goss-Moffitt scholarship each year in medical school if they remain in good academic standing.

Norman C. Nelson, MD, Scholarships, established as the Dean’s Scholarships in 1988, were designated in the name of Dr. Norman C. Nelson in 1994, in honor of his 21-year tenure as Vice Chancellor for Health Affairs and Dean of the School of Medicine. Nelson Scholarships are awarded to superior students who have exceptional academic potential. The scholarship is renewable each year if the recipient remains in good academic standing.

Orr-Russwurm Memorial Scholarship Fund provides financial support to a student in any medical center school planning a full or part-time career in Christian missionary work.

William K. Purks, MD, Scholarship, established by the Vicksburg Hospital Medical Foundation in 1990, is awarded to a freshman medical student selected on the basis of outstanding academic achievement, character, and potential in the field of medicine. This scholarship may be renewed for each year of medical school.

Regions Bank Scholarship, established in 1986, goes to a senior in recognition of outstanding academic achievement and promise in the field of medicine.

Ottlie Schilling Memorial Scholarship Fund was established in 1984 through a gift to the Medical Center from the Schilling Trust. Miss Schilling, a native of Port Gibson, was a noted concert singer. At least one scholarship is available each year in the School of Medicine. All recipients must be in good academic standing, and preference is given to those students who intend to practice in smaller Mississippi towns and communities.

Robert E. and Margaret Shands Memorial Fund was established in 1963 by Mrs. Robert E. Shands in memory of her husband, Dr. Shands, a medical certificate alumnus of the University of Mississippi School of Medicine, who had served as president of the Medical Alumni Chapter. This scholarship fund exists to provide financial assistance to students of medicine. The Shands children redesignated the scholarship as a memorial to both their parents in 2000.

E.H. Summers Foundation Scholarships were established in 1977 by Mrs. E.H. Summers of Eupora, MS, to provide scholarship assistance for students from Webster, Montgomery, Attala, Carroll and Choctaw counties who are enrolled at the University of Mississippi Medical Center.

Trustmark National Bank Scholarship, established in 1988, is awarded to a junior medical student in recognition of scholastic excellence.

Helen Reeves Turner, MD, PhD Scholarship was established in 2013 and is awarded each year to a deserving student from one of the Medical Center Schools. The recipient of this award, selected by the dean or his/her designee, exemplifies Dr. Turner’s outstanding attributes of leadership, education and service.

Pearl L. and Otis Walters Scholarship was established by a bequest from the Walters to the University of Mississippi Foundation.

John Houston Wear Foundation Scholarships were established by the Wear Foundation to aid worthy students. These scholarships are awarded for academic excellence.

L.D. Webb, MD, Memorial Scholarship was established with a bequest from Dr. Webb in 1990. A two-year alumnus of the Ole Miss School of Medicine who earned his MD at the University of Tennessee, Dr. Webb was in family practice in Calhoun City for more than 35 years. First-year students who demonstrate financial need and academic promise are eligible for this scholarship renewable for each year of enrollment if the student remains in good academic standing. Preference is given to students from northeast Mississippi.

Dr. Bill Weatherford Memorial Scholarship, which is awarded annually, was established in 1984. The recipient must be a Jackson County resident with demonstrated financial need.

Lettie Pate Whitehead Scholarship was established by the Lettie Pate Whitehead Foundation. These awards are available to female medical students who show evidence of financial need.

Hazel Wilmington Medical Scholarship, established in 1992, is awarded to a freshman medical student based on demonstrated financial need and overall promise in the field of medicine. The award is renewable each year if the recipient maintains good academic standing.

Meyer & Genegieve Falk Scholarship, established in 2012, is awarded to deserving, and studious student. Enrolled students who have the academic capacity and desire to minister to the medical needs of others as determined by scholarship committee.

Dorothy Palmer Landrum & C. Thomas Hill, Jr. M.D. Scholarship, established in 2008, is awarded as an academic scholarship under guidelines of the Department of Financial Aid. Recipients will be selected by the scholarship selection committee.
Drs. Edward E. Smith & Margie Lancaster Smith Scholarship, established in 2013, is awarded to a MS resident and ranked high academically in the incoming class.

**UMMC INSTITUTIONAL LOAN FUNDS**

- **Idalou Bagley Memorial Cancer Educational Loan Fund** was established by Clara Bagley in memory of her sister, Idalou Bagley. Recipients should be in their fourth year of medical school and display an interest in cancer research or cancer diagnosis and treatment.

- **Googe Memorial Medical Loan Fund** was established in 1979 by family of the late Dr. and Mrs. George W. Googe of Rienzi. Dr. Googe practiced medicine in Northeast Mississippi for more than 50 years. Students who have successfully completed at least two quarters in medical school may apply. Applicants must show evidence of financial need and be in good academic standing. Preference is given to applicants from Alcorn and Prentiss counties.


- **Kellogg Loan Fund** was established in 1942 by the W.K. Kellogg Foundation as a loan fund of $10,000 for the purpose of providing loans for assistance to medical students.

- **Levine Loan Fund**, established by the late Dr. Julius Levine, is available to junior and senior medical students who are native Mississsippians and who show evidence of financial need.

- **George C. and Laura B. McKinstry Scholarship/Loan Fund** was established in 1973 by Dr. McKinstry in memory of his father and mother to provide low-interest loans to needy students in the School of Medicine and the Graduate Programs.

- **G.D. Shands Memorial Loan Fund** was established in 1943 by Dr. and Mrs. Paul Hill Saunders in memory of Mrs. Saunders’ father, Lt. Gov. Garvin D. Shands, who for many years was Dean of the University of Mississippi School of Law. This fund exists for the benefit of medical students.

- **R.J. Nichols Loan Fund** was established in memory of Dr. R.J. Nichols to provide loans to medical students who demonstrate financial need and academic promise.

- **J.K. Oates Loan Fund** was established in 1957 in honor of Dr. J.K. Oates to provide loans to worthy medical students.

**HONOR SOCIETIES**

- **Alpha Omega Alpha** – a national honorary medical society installed on the Medical Center campus in 1958. Undergraduate membership is based entirely on scholarship, personal honesty, and leadership potential. Alumni membership is granted for distinctive achievement in the art and practice of scientific medicine and honorary membership is granted to eminent leaders in medicine and allied sciences.

- **Phi Kappa Phi** – a national honorary scholastic fraternity installed on the Oxford campus in 1959. It is open to those medical, dental, graduate, nursing and health related students who qualify.

- **Gold Humanism Honor Society** - a national honorary society installed on the Medical Center campus in 2005. This society honors senior medical students, residents, role-model physician teachers, and other exemplars recognized for demonstrated excellence in clinical care, leadership, compassion and dedication to service. Members are selected by a peer nomination and faculty nomination process.

**PROFESSIONAL ORGANIZATIONS**

- **American Medical Association-Medical Student and Student National Medical Association** - Active chapters provide students with the opportunity to participate in a variety of programs.

- **University Medical Society** - Through the this society, a component society of the Mississippi State Medical Association, official voting delegates participate in the House of Delegates of the Mississippi State Medical Association.

- **Organization of Student Representatives of the Association of American Medical Colleges** - Medical students also participate as voting delegates for this organization.

**AUXILLARY ORGANIZATION**

- **Medical Student Family Alliance (MSFA)** - This organization is for spouses, significant others and families of medical students to promote closer friendships through informational programs, service projects, and social events to help prepare them for their roles in the health care community.

**THE MEDICAL ALUMNI GUARDIAN SOCIETY**

The society is a special organization sponsored by the medical alumni to encourage extraordinary giving by alumni, friends, and faculty of the School of Medicine. The gifts, representing either current or deferred contributions, may be restricted or undesignated. The membership holds the responsibility of insuring that available funds are distributed to the School of Medicine as well as serving as trustee for specially designated charitable programs.

**AWARDS AND PRIZES**

- **Alford Memorial Award**, established by the Class of 1967 in memory of Raymond Alford, consists of a plaque on which is engraved the name of the medical student who achieves the highest academic record during the freshman year.

- **Chris Allenburger Memorial Award**, established in 1986 by Dr. and Mrs. Gray Hilsman, is a cash prize awarded to a senior medical student or a resident who best displays clinical skills indicative of the courage, dedication, empathy, and love shown by Chris Allenburger.

- **Alpha Omega Alpha Student Scientific Award**, given by the Mississippi chapter, consists of a certificate and cash prize awarded annually to a medical student for the best original paper.

- **American Medical Association Scholars Fund Award**, is made possible by gifts to the foundation from state physicians and the Mississippi State Medical Association Alliance. The award is presented to a student for superior academic performance to offset tuition expenses.

- **American Society of Clinical Pathologists Award**, is given to a capable sophomore medical student who shows special promise for a career in pathology. The award includes a book provided by the American Society of Clinical Pathologists and a certificate from the Department of Pathology.

- **Blair E. Batson Award for Excellence in Pediatrics**, recognizes a senior whose clinical performance and devotion to pediatrics are judged superior in the class by the pediatric faculty. It is given to honor Dr. Blair E. Batson, first chairman of the Department of Pediatrics.
Thomas M. (Peter) Blake, MD Award, established in 2001 by the Department of Medicine in memory of Dr. Peter Blake who served as the course director for Physical Diagnosis from 1955-90. This award consists of an engraved plaque, cash and a textbook on advanced physical diagnosis and is presented to a medical student in recognition of academic excellence in the Introduction to Clinical Medicine course, and a pursuit of knowledge, professionalism, and reliance on self rather than others in the ultimate achievement of his/her own goals.

Thomas J. Brooks Jr. Award in Preventive Medicine, established to honor the first chairman of the Department of Preventive Medicine and sponsored by the department and Connaught Laboratories, Inc., is awarded annually to a junior who has demonstrated excellence in the course composing the preventive medicine block the previous academic year.

Margie Bulhoff Award, established in 2001 by the Office of Alumni Affairs in honor of Margie Bulhoff, a long-time Department of Pathology employee and friend to generations of medical students. This $1,000 scholarship goes to a second-year medical student in good standing who successfully balances the demands of the educational program with family, community, philanthropy, and intramural activities. The Bulhoff Award is presented on Honors Day.

GIBA Award, is presented to a sophomore medical student selected by the class members in recognition of outstanding community service.

Clinical Skills Assessment Award, recognizes a senior student for outstanding performance on the end of third-year Clinical Skills Assessment Exam. The exam is designed to teach and evaluate students’ clinical skills including verbal and written communication, history, and physical examination, differential diagnosis, and professionalism.

Dr. Wally Conerly Community Service Award, is presented to a third- and/or a fourth-year medical student who most exemplifies Dr. Conerly’s outstanding attributes of leadership and community outreach and service. The award is sponsored by the Mississippi State Medical Association.

Virginia Covington and Kay Fulton Award, was established by the Class of 2006 and consists of a cash prize and certificate given to a medical student participating in a medical mission trip. The recipient should be viewed as a role model and demonstrate a compassion for others.

Dean’s Awards, are presented annually to selected students with outstanding academic records from the M1, M2, and M3 years. These awards currently are $1,000 for each of the recipients. Awards are subject to renewal provided the recipient maintains academic standing in the upper one-third of the class.

Charles L. Dodgen Memorial Award, is given to a third-quarter freshman in memory of Dr. Charles Dodgen, who served on the UMMC Biochemistry faculty from 1958 to 1980. At the time of his death, he was chairman of the Admissions Committee. Recipients of this award are chosen on the basis of overall performance and professional potential.

Daryl Douglas Memorial Award, established by the Class of 1978 in memory of Daryl Douglas, a classmate, consists of a plaque on which are engraved the names of sophomore students who most consistently demonstrate readiness to serve and assist their classmates in the pursuit of medical knowledge and skills.

Medical Student Service Award in Emergency Medicine, is presented to a senior medical student interested in emergency medicine for recognition of outstanding care to patients in a manner that exemplifies professionalism and a humanistic approach to patients, their families, and fellow health care workers.

Excellence in Emergency Medicine Award, is presented to a senior medical student who has demonstrated outstanding proficiency in emergency medicine.

Carl Gustav Evers Award, was established in 1993 by the Mississippi State Medical Association Foundation in memory of Dr. Evers, who was professor of pathology and Associate Dean for Academic Affairs in the School of Medicine at the time of his death in November 1992. This award is given to a senior medical student who has demonstrated qualities of scholarship, peer to peer support, and exceptional leadership in student activities of the American Medical Association and the Mississippi State Medical Association.

Leonard W. Fabian Award, established in 1992 by the Department of Anesthesiology to honor its first chairman, consists of a certificate and a gift from the department. It is presented to a senior medical student in recognition of outstanding achievements in anesthesiology.

Family Medicine Award, sponsored by the Department of Family Medicine and the Mississippi Academy of Family Physicians, goes to a senior who demonstrates excellence in family medicine. It includes a cash prize, textbook and inscription of the student’s name on a plaque.

William B. Gallagher Award, established in 1969 in memory of Dr. William B. Gallagher, is a cash prize given to the senior considered most outstanding in obstetrics-gynecology.

Ernest W. Goodpasture Award, is given to the sophomore pathology student with the highest grade in pathology. The tangible components of this award are a cash prize and a certificate, both from the Department of Pathology.

James E. Griffith Pulmonary Award, is sponsored by the American Lung Association and is in memory of Dr. James E. Griffith. It is given yearly to a fourth-year medical student who shows interest in pulmonary medicine.

William Forrest Hutchison Memorial Award, was established in 1996 in memory of Dr. William Forrest Hutchison by his family. Dr. Hutchison was a member of the School of Medicine faculty from 1955 until 1990. The award is given to a sophomore in the top 25 percent of the class who demonstrates excellence in and a commitment to community service.

Donald T. Imrie Award, established by the Department of Orthopaedic Surgery to Honor Dr. Imrie, is a book prize and certificate to a senior for outstanding performance in orthopaedics.

Waller S. Leathers Award, is a medal given on Commencement Day to the graduating senior with the highest academic average for the four years in medical school. The medal is awarded in memory of the first dean of the School of Medicine, Waller S. Leathers, M.D.

Lippincott, Williams and Wilkins Book Awards, are for academic excellence in the anatomical sciences. One award is given to the medical student with the highest academic standing in gross anatomy and neurobiology and the second to the highest ranking student in medical histology.

Blanche Lockhard Scholarship Endowment in Medicine, provides an annual award toward tuition for a deserving female medical student. Dr. Lockhard was an obstetrician-gynecologist and a longtime member of the School of Medicine’s clinical faculty.

Robert A. Mahaffey Jr. Memorial Award, established in 1976 in memory of graduate student, Robert A. Mahaffey Jr., includes a cash prize, certificate, and plaque. The award goes to a PhD candidate chosen for exceptional research potential by the graduate faculty in pathology.

McGraw-Hill, Merck and Lange Book Awards, consist of medical books presented to senior, junior, sophomore and freshman students in recognition of scholastic excellence.
J.P. "Jake" Mills Award in Obstetrics and Gynecology, was established in 2000 in memory of J.P. "Jake" Mills of Tupelo, who served on the Board of Trustees of Institutions of Higher Learning from January 1992, until his death April 17, 1999. Students eligible for this award are seniors who have matched for residency training in obstetrics and gynecology. Preference is given to those students who plan to practice in Mississippi.

Mississippi Eye, Ear, Nose, Throat Society Awards, are given to two senior medical students for excellence in otolaryngology and ophthalmology. The awards consist of plaques on which the names of recipients are inscribed.

Mississippi Psychiatric Association Outstanding Senior Award, is a certificate awarded to the senior with the most outstanding clinical and academic record in psychiatry.

Neuroscience Research Award, sponsored by the Mississippi Chapter, Society for Neuroscience, consists of a cash prize and certificate, and recognizes meritorious research in the neurosciences.

Department of Ophthalmology Award, is a cash prize and award given to a senior medical student for excellence in the field of ophthalmology.

Department of Otolaryngology and Communicative Sciences Award, is a book award and certificate given to a senior medical student for excellence in the field of otolaryngology.

David S. Pankratz Scholarship, awarded in memory of the first dean of the four-year School of Medicine and first director of the Medical Center, is a cash prize given to a sophomore student in recognition of outstanding academic achievements in the freshman medical year.

Department of Pathology Prize, consists of a cash prize presented to the sophomore student or students with superior scholastic performance in pathology.

Powell Award for Excellence in Family Medicine, is sponsored by the Mississippi Academy of Family Physicians. A cash prize and textbook are presented to the senior student demonstrating excellence in family medicine. The recipient’s name is engraved on a plaque.

Brenda Joy Nicholson Pritchard Scholarship Fund, was established in 1999 with a bequest from the estate of Sarah Margaret Ridegell Nicholson and named for her daughter, a graduate of University Medical Center School of Medicine and Pathology Residency. This scholarship is given to a deserving medical student ranked in the top half of the class with financial need.

Professor of the Year Awards, were established by the University of Mississippi Medical Alumni Chapter and consist of a cash prize in recognition of teaching excellence. The clinical professor is selected by the senior class and the preclinical professor by the sophomore class.

Joey Purvis Memorial Fund Award, honors Joey Purvis, a member of the Class of 2002, who was killed in an automobile accident while in route to Pennsylvania State University Medical Center to interview for an ob-gyn residency position. This award goes to a medical student who best exemplifies Joey’s caring concern for patients and fellow students.

Rear Admiral Dennis Wright Military Medical Student Award, honors Rear Admiral Dennis Wright, a 1968 graduate of the School of Medicine, and is presented to a medical student enrolled in a military program, in recognition of outstanding achievement in medical course work.

Rice-Holland Memorial Award, established in memory of Dr. James C. Rice and Dr. William C. Holland, former chairmen of the Department of Pharmacology and Toxicology, consists of a cash prize awarded to an outstanding medical student in pharmacology.

Curtis Delgadillo Roberts MD, Scholarship in Medicine, honors the memory of a longtime Brandon family physician who died in 1989. The scholarship is awarded on the basis of exceptional merit and/or exceptional need and potential for successful completion of the four-year curriculum. Preference is given to Rankin County residents.

Stanley C. Russell Award, was established by Dr. Russell’s family in 2001 in celebration of his 70th birthday. Eligible students are seniors who plan to go into a residency in family medicine. Selection is based on academic excellence, character, bedside manner, and commitment to practice in a rural area of Mississippi. The Russell Award is presented on Honors Day.

W.B. Saunders Medical Physiology Award, consists of a book award and framed certificate presented to the medical or graduate student with superior scholastic performance in the medical physiology course.

Sigma Xi Student Research Awards, consist of a certificate and a cash prize awarded annually to a medical student and a graduate student for the best original research work.

Robert D. Sloan Award, honors the first chairman of the Department of Radiology. It includes a textbook and plaque and goes to the senior considered most outstanding in radiology.

Mark T. Smith Memorial Award, was established by the Class of 2000 in memory of Mark Thompson Smith, a classmate, to a medical student with a true caring Christian spirit and attitude towards classmates, instructors, and patients; with intellectual curiosity in the field of medicine, and enthusiasm for life with a heartfelt smile even when confronted with a challenge.

J. Robert Snively Award, established in memory of Dr. J. Robert Snively, first chairman of the Department of Medicine, consists of a plaque and cash awarded to a senior medical student for outstanding scholastic achievement in internal medicine.

Department of Surgery Prize, is awarded to the senior medical student for outstanding performance in surgery during the clinical years.

Virginia Stansel Tolbert Award, sponsored by the Mississippi State Medical Association, is a cash prize and plaque given to a medical student who has demonstrated superior scholarship and leadership in campus activities. Additionally, the recipient must exhibit interest in issues which affect the profession and willingness to devote time and effort to those matters.

Helen R. Turner Academic Medicine Award, established in 2012 by the University of Mississippi School of Medicine, honors Dr. Helen Turner and her contributions to academic medicine, which have laid a foundation for success to benefit the next generation of health care professionals, their future patients, and the communities in which they will serve. This award is presented to a fourth year medical student selected on the basis of demonstrated promise in the field of academic medicine.

Jimmy Waites, MD, Student of the Year Award, sponsored by the Mississippi Physicians Care Network and the Medical Alumni Chapter, consists of a cash prize and plaque designation. The award honors the memory of Dr. Waites who was a longtime family physician in Laurel and a member of the School of Medicine’s second graduating class. The award is presented to a graduating senior medical student selected by the senior class in recognition of those qualities most desired in a physician - which Dr. Waites so exemplified.
## DISTRIBUTION OF INSTRUCTION BY SEMESTER HOURS

### MEDICAL YEAR 1

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<th>Course Code</th>
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<td>ANAT 611</td>
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<td>ANAT 613</td>
<td>Medical Histology and Cell Biology</td>
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<td>PHYSIO 611</td>
<td>Medical Physiology</td>
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<td>PATH 621</td>
<td>General and Systemic Pathology</td>
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<td>Obstetrics and Gynecology</td>
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<td>PED 631</td>
<td>Junior Pediatrics</td>
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<td>PSYCH 631</td>
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<td>SURG 631</td>
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<td>CONJ 637</td>
<td>M3 Boot Camp</td>
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<td><strong>TOTAL SEMESTER HOURS (52 weeks)</strong></td>
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### MEDICAL YEAR 4

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<tr>
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<td>Procedural Rotation</td>
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<td>Ambulatory Rotation</td>
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<tr>
<td>Sub-Internship</td>
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<td>M4 Boot Camp</td>
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<td>Elective 14 weeks total (2 week-5hrs and 4 week-10hrs)</td>
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<td><strong>BASE TOTAL SEMESTER HOURS (46 weeks)</strong></td>
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### M4 Schedule Checklist:

#### SUB- Internship Rotation (Choose One)

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<tr>
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<td>General Medicine Clerkship</td>
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<tr>
<td>PED 652 A</td>
<td>Pediatric Externship</td>
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<tr>
<td>PED 672 A</td>
<td>Pediatric Hospitalist Service</td>
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<td>FM 656 A</td>
<td>Family Medicine In Patient Service</td>
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<td>ANES 651 A</td>
<td>Clinical Anesthesiology</td>
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<tr>
<td>ANES 653 A</td>
<td>Anesthesia and Peri-Operative Medicine</td>
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<tr>
<td>CONJ 658 A</td>
<td>Oral-Maxillofacial Surgery</td>
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<tr>
<td>EM 680 A</td>
<td>Emergency Medicine</td>
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<tr>
<td>Peds 665 A</td>
<td>Pediatric Emergency Medicine</td>
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<td>Peds 674 A</td>
<td>Pediatric Palliative Care</td>
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<td>MED 659 A</td>
<td>Pulmonary Diseases/Critical Care Medicine</td>
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<tr>
<td>NS 655 A</td>
<td>Neurosurgery</td>
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<td>OB/GYN 656 A</td>
<td>Operative Gynecology</td>
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<tr>
<td>OB/GYN 663 A</td>
<td>Fundamentals of Gynecologic and Minimally Invasive Surgery</td>
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<td>ORTHO 657 A</td>
<td>Orthopedic Surgery</td>
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<tr>
<td>OPHTH 659 A</td>
<td>Ophthalmology I</td>
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<tr>
<td>OPHTH 660 A</td>
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<td>OTO 661 A</td>
<td>Otolaryngology Surgical</td>
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<td>RADIO 657 A</td>
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<td>SURG 655 A</td>
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#### Critical Care Rotation (Choose One)

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<td>NEUR 658 A</td>
<td>Neuroscience Critical Care</td>
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<tr>
<td>PED 653 A</td>
<td>Neonatal Medicine</td>
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<tr>
<td>PED 668 A</td>
<td>Pediatric ICU</td>
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<tr>
<td>SURG 654 A</td>
<td>Surgical ICU</td>
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#### Ambulatory Core (Choose One)

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<tr>
<td>SURG 666 A &amp; B</td>
<td>Outpatient Surgery Clinics</td>
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<td>EM 680 A</td>
<td>Emergency Medicine</td>
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<tr>
<td>FM 651 A &amp; B</td>
<td>Family Medicine Preceptorship</td>
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<td>FM 652 A</td>
<td>Family Medicine Clerkship</td>
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<td>Ambulatory Medicine</td>
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<td>MED 673 A</td>
<td>Rural Internal Medicine Practice</td>
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<td>OB 659 A</td>
<td>Clinic Ob/Gyn Ambulatory Care</td>
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<td>Pediatric Ambulatory Care</td>
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<td>CONJ 670 A</td>
<td>Transition to Residency (Bootcamp)</td>
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THE UNIVERSITY OF MISSISSIPPI MEDICAL CENTER
Electives 14 Weeks (4 Week Option A; 2 Week Option B). See E*Value for 2 Week option

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<td>Review of Human Anatomy</td>
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<td>Review of Human Neurobiology</td>
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<td>ANAT 653 A</td>
<td>Review of Histology w/ Clin. Correlations</td>
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</table>
MED 674 A  Hospital Medicine  RADONC 651 A & B  Senior Radiation Oncology
MED 675 A  Interventional Cardiology  SURG 652 A & B  General Surgery
NEUR 651 A & B  Clinical Neurology  SURG 653 A & B  Cardiothoracic Surgery
NEUR 652 A & B  Clinical Neurology Acting Internship  SURG 654 A & B  Surgical Critical Care
NEUR 658 A  Neuroscience Critical Care  SURG 655 A & B  Pediatric Surgery
NS 655 A & B  Neurosurgery  SURG 656 A & B  Vascular Surgery
OBGYN 653 A  High Risk Obstetrics  SURG 657 A & B  Trauma Surgery
OBGYN 655 A  Labor and Delivery  SURG 658 A & B  Urology
OBGYN 656 A & B  Operative Gynecology  SURG 659 A  Surgical Research
OBGYN 658 A  Gynecologic Oncology  SURG 660 A & B  Plastic and Reconstructive Surgical Clinical
OBGYN 659 A  Ob/Gyn Ambulatory Care  SURG 665 A & B  Breast Surgery
OBGYN 661 A & B  Ob/Gyn Research  SURG 666 A & B  Outpatient Surgery Clinic
OBGYN 663 A  Ob/Gyn Fundamentals of Gyn. & Minimally Invasive Surgery  SURG 668 A & B  Transplant Surgery

**Required Rotations: MUST BE 4 WEEKS IN LENGTH** (4 week courses are designated A courses)

**Electives.** You are required to take at least 14 weeks of electives with at least 4 weeks at UMMC. You will be able to choose from 100+ courses to satisfy this requirement. The Bulletin lists these courses. You can find the Bulletin under The Office of Medical Education website.

**Unscheduled Time.** Once you have met the above requirements and scheduled all of the electives you want to take, you may then enter preferences for unscheduled time. Nonscheduled time up to 12 weeks.

**Note:** If you are taking one extramural course (an away rotation with another institution), choose the 851 course. If you are taking two or three extramural courses in the same area, choose both 851 and 852 and 853 (ex: SURG 851 and SURG 852). These courses must also be verified and handled through VSAS. **TO DO AN EXTRAMURAL YOU MUST COMPLETE THE VSAS PROCESS.**

Also, you cannot take the same course twice. The courses listed above that are not taken to satisfy one of your core requirements can be taken as an elective.

Arrangements for extramural courses to be taken for credit shall be made in advance by the student with the appropriate department, the associate dean for student affairs and the registrar.

Students will be certified for graduation only after all requirements for graduation are completed. These requirements include passing the USMLE Step 2 Clinical Knowledge and Clinical Skills Exams.

Medical students are not required to participate in any procedure or service for which they have religious objection. Students must attend all required educational sessions whether or not they have religious objection to the material discussed and are responsible for the educational content of the session. In addition, students may not refuse to provide care to a patient based on religion, gender, sexual orientation, race, patient diagnosis, or any other patient personal characteristic. It is required that students communicate with the course or clerkship director at the beginning of the course or clerkship when they are aware that procedures to which they object may occur.

**DEPARTMENTS OF INSTRUCTION**

**ANESTHESIOLOGY**

Douglas R. Bacon, MD, MA, Professor and Chair

**CELL AND MOLECULAR BIOLOGY**

Jane Reckelhoff, PhD, Professor and Chair

**DERMATOLOGY**

Robert T. Brodell, MD, Professor and Chair

**EMERGENCY MEDICINE**

Alan Jones, MD, Professor and Chair

**FAMILY MEDICINE**

Shannon Pittman, MD, Professor and Chair

**MEDICINE**

Javed Butler, MBBS, MPH, MBA Professor and Chair

**MICROBIOLOGY AND IMMUNOLOGY**

Larry S. McDaniel, PhD, Professor and Chair

THE UNIVERSITY OF MISSISSIPPI MEDICAL CENTER
NEUROBIOLOGY AND ANATOMICAL SCIENCES
Allan Sinning, PhD, Professor and Interim Chair

NEUROLOGY
Scott Stringer, MD, Professor and Interim Chair

NEUROSURGERY
H. Louis Harkey III, MD, Professor and Chair

OBSTETRICS AND GYNECOLOGY
Jermaine Gray, MD, JD, Professor and Interim Chair

OPHTHALMOLOGY
Kimberly Crowder, MD, Professor and Chair

ORTHOPEDIC SURGERY AND REHABILITATION
George V. Russell, MD, Professor and Chair

OTOLARYNGOLOGY AND COMMUNICATIVE SCIENCES
Scott P. Stringer, MD, MS, Professor and Chair

PATHOLOGY
Timothy Allen, MD, Professor and Chair

PEDIATRICS
Mary B. Taylor, MD, Professor and Chair

PHARMACOLOGY AND TOXICOLOGY
Richard J. Roman, PhD, Professor and Chair

PHYSIOLOGY AND BIOPHYSICS
John E. Hall, PhD, Arthur C. Guyton Professor and Chair

PREVENTIVE MEDICINE
Joshua Mann, MD, MPH, Professor and Chair

PSYCHIATRY AND HUMAN BEHAVIOR
Scott Rodgers, MD, Professor and Chair

RADIATION ONCOLOGY
Srinivasan Vijayakumar, MBBS, DMRT, DABR, FACR, Professor and Chair, Director, UMMC Cancer Institute

RADIOLOGY
Timothy C. McGowan, MD, Professor and Chair

SURGERY
Christopher D. Anderson, MD, Chair and Associate Professor

COURSES OF INSTRUCTION

Year 1

ANAT 611. Medical Gross and Developmental Biology. A study of the human body using dissection with an emphasis on clinical applications for normal anatomy and the study of development from conception to birth with an emphasis on congenital defects to understand normal development. A combination of didactic lectures, small group active learning sessions and laboratories. Traditional Lecture/Lab (15 hours)

ANAT 613. Medical Histology and Cell Biology. A study of the structure and function of cells, tissues and organs. Traditional Lecture/Lab (7 hours)

ANAT 616. Medical Developmental Anatomy. A study of human development utilizing congenital defects as a basis for understanding normal development from conception to birth. Traditional Lecture (2 hours)

BIOCH 610. Biochemistry. Comprehensive course in human biochemistry including protein and nucleic acid structure, enzyme function and regulation, cellular membranes, molecular genetics and protein synthesis, signal transduction and hormonal control mechanisms, vitamins, the metabolism of carbohydrates, fats and protein, cellular bioenergetics and the synthesis of lipids, carbohydrates, proteins and nucleic acids. Traditional Lecture (10 hours)

CONJ 611. Medical Neuroscience and Behavior I. This course provides an introduction to the anatomical, physiological, and behavioral basis of the human nervous system with an emphasis on clinical presentation. A variety of teaching modalities are used including didactic learning sessions, team-based learning, active learning groups, laboratories, and clinical experiences. Traditional Lecture (12 hours)

CONJ 612. Introduction to the Medical Profession I. This course is designed to develop skills that medical students must master to practice high-quality, cost-effective, and patient-centered medicine in the modern world in which knowledge is progressing exponentially and in which technology has permeated our society. Physicians in the 21st century must possess the ability to constantly seek, evaluate, analyze, and assimilate new knowledge; to communicate efficiently and effectively with patients; to collect and document historical and physical information from their patients; to work in collaborative teams with members of other healthcare disciplines; to improve the health and well-being of their communities; and to meet the societal expectations of behavior for medical professionals. To meet these needs, Introduction to the Medical Profession 1 combines aspects of biostatistics, evidence-based medicine, community and population health, and patient care skills taught in a progressive manner to facilitate the development of these critical skills. Traditional Lecture (12 hours)
PHYSIO 611. Medical Physiology. Study of the functions of the body with special emphasis on the relationships of the different organs to each other. This course is given in the winter and spring semesters of the first year. Traditional Lecture (12 hours)

YEARS 2

CONJ 622. Intro to the Medical Profession II. This second year course is designed to build upon the concepts learned in Intro to the Medical Profession I (IMP1) and to further develop the skills needed to practice medicine in the 21st century. Members of all clinical departments participate in this course designed as further introduction to clinical medicine, bridging the gap between the basic sciences and clinical application. This course will help students improve communication and the ability to work on a healthcare team. It provides an opportunity to develop clinical reasoning skills. Classroom instruction in history taking, physical examination, and clinical reasoning is supplemented by weekly tutorial sessions conducted by members of the faculty. This course also continues to develop the students’ skills in ethics, population health, and health systems science. Traditional Lecture (14 hours)

CONJ 628. Medical Neuroscience and Behavior II. This course provides an introduction to neurology, psychopathology and neuropsychopharmacology. It highlights treatment options with an emphasis on clinical presentation and diagnosis identification. A variety of teaching modalities are used including didactic learning sessions, case-based learning, active learning groups, and clinical experiences with actual or standardized patients. Traditional Lecture (8 hours)

MICRO 611. Medical Microbiology. Students will learn fundamentals of both the function and development of the human immune system and etiology, epidemiology, pathogenesis, laboratory diagnosis, and treatment of microbial agents (bacteria, fungi, parasites, and viruses) causing human disease. Extends through the first, second and third quarters of the second year. Traditional Lecture/Lab (12 hours)

PATH 621. General and Systemic Pathology. Concepts of disease. This course extends over winter and spring semesters of the second year and is designed to give the student a broad conceptual understanding of disease processes as they relate to the ill patient. This course primarily deals with disease processes from the perspective of anatomic and clinical pathology, with pathophysiologic principles emphasized throughout. Students are also introduced to the principles of appropriate utilization of the anatomic and clinical pathology laboratories, as well as to the proper interpretation of laboratory results. Self-study and small group seminar teaching are emphasized as part of the case study approach, along with self study of virtual online gross and microscopic surgical and autopsy material. Traditional Lecture (14 hours)

PHARM 620. Intro to Pharmacology & Therapeutics. Students are introduced to the principles underlying the use of pharmacological agents in medical practice. Concepts related to drug distribution, drug-receptor interaction and drug metabolism are considered. In addition, the mechanism of action, therapeutic effects, adverse side-effects and common clinical applications of various drugs and drug classes are presented through a combination of lectures and clinical correlations. This course is given during the winter and spring semesters. Traditional Lecture (12 hours)

YEAR 3

ANES 630. Survey of Anesthesia. A two week elective course for students with an interest in Anesthesiology. The goals of the course are to introduce M3 students to the daily practice of anesthesiology and to improve the student's understanding of the diagnosis and treatment of pain, including the psychosocial and economic impact of pain on the patient and society. The student will spend time with the practitioners in several subspecialties (pediatrics, chronic pain management, general and obstetrical anesthesia) learning about the specialty and discussing how anesthesia fits into and helps fulfill their life goals. (Four (4) students each rotation unless special permission granted by course director. Available all rotations.) Traditional Clinical Rotation (5 hours)

CONJ 631. Clinical Skills Assessment. Medical students will be evaluated by Clinical Skills Assessment (CSA) during each third year clinical rotation and will have a summative exam at the end of the third year. The exam is conducted in an Objective Structured Clinical Exam (OSCE) format to test and evaluate students’ clinical skills including verbal communication, history and physical examination, diagnosis and management, and written communication. Professionalism is a major component of evaluation. Traditional Clinical Rotation (2 hours)

CONJ 632A. Independent Study. Independent Study (IS) in the SOM is a self-paced course which allows students in the 3rd year curriculum to complete academic requirements or projects for the year without distracting from the clerkship schedule. It allows students to remain in their assigned M3 group with the intent to rejoin the group at the completion of the course. Independent Study is scheduled for 2 weeks in the 3rd year curriculum. This time frame can be extended up to but not to exceed 10 weeks within the 3rd year. Approval for the extension must be given by the Associate Dean for Academic Affairs. Students who request an extension of the time in independent study will be required to submit a plan of study to demonstrate good time management. There will be no grade at completion of this course. Traditional - EL Independent Study (0 hours)

CONJ 632B. Independent Study. Independent Study (IS) in the SOM is a self-paced course which allows students in the 3rd year curriculum to complete academic requirements or projects for the year without distracting from the clerkship schedule. It allows students to remain in their assigned M3 group with the intent to rejoin the group at the completion of the course. Independent Study is scheduled for 2 weeks in the 3rd year curriculum. This time frame can be extended up to but not to exceed 10 weeks within the 3rd year. Approval for the extension must be given by the Associate Dean for Academic Affairs. Students who request an extension of the time in independent study will be required to submit a plan of study to demonstrate good time management. There will be no grade at completion of this course. Traditional - EL Independent Study (5 hours)

CONJ 632C. Independent Study. Independent Study (IS) in the SOM is a self-paced course which allows students in the 3rd year curriculum to complete academic requirements or projects for the year without distracting from the clerkship schedule. It allows students to remain in their assigned M3 group with the intent to rejoin the group at the completion of the course. Independent Study is scheduled for 2 weeks in the 3rd year curriculum. This time frame can be extended up to but not to exceed 10 weeks within the 3rd year. Approval for the extension must be given by the Associate Dean for Academic Affairs. Students who request an extension of the time in independent study will be required to submit a plan of study to demonstrate good time management. There will be no grade at completion of this course. Traditional - EL Independent Study (5 hours)

CONJ 632D. Independent Study. Independent Study (IS) in the SOM is a self-paced course which allows students in the 3rd year curriculum to complete academic requirements or projects for the year without distracting from the clerkship schedule. It allows students to remain in their assigned M3 group with the intent to rejoin the group at the completion of the course. Independent Study is scheduled for 2 weeks in the 3rd year curriculum. This time frame can be extended up to but not to exceed 10 weeks within the 3rd year. Approval for the extension must be given by the Associate Dean for Academic Affairs. Students who request an extension of the time in independent study will be required to submit a plan of study to demonstrate good time management. There will be no grade at completion of this course. Traditional - EL Independent Study (5 hours)

CONJ 632E. Independent Study. Independent Study (IS) in the SOM is a self-paced course which allows students in the 3rd year curriculum to complete academic requirements or projects for the year without distracting from the clerkship schedule. It allows students to remain in their assigned M3 group with the intent to rejoin the group at the completion of the course. Independent Study is scheduled for 2 weeks in the 3rd
year curriculum. This time frame can be extended up to but not to exceed 10 weeks within the 3rd year. Approval for the extension must be given by the Associate Dean for Academic Affairs. Students who request an extension of the time in independent study will be required to submit a plan of study to demonstrate good time management. There will be no grade at completion of this course. Traditional - EL Independent Study (5 hours)

CONJ 633. M3 Medical Student Research Program. A two-week research block required by students who are in the Medical Student Research Program (MSRP). During this rotation, third year medical students will gain experience in designing a research project, conducting experiments, analyzing data, preparing a manuscript for submission, and preparing a poster for presentation. Students in the MSRP will work with their assigned mentor for the duration of the rotation. At the end of the M3 year, all third-year MSRP students are expected to present their research in a poster format at the MSRP Research Day or similar activity. Traditional - EL Laboratory (5 hours)

CONJ 633B. M3 Medical Student Research Program. A two-week research block required by students who are in the Medical Student Research Program (MSRP). During this rotation, third year medical students will gain experience in designing a research project, conducting experiments, analyzing data, preparing a manuscript for submission, and preparing a poster for presentation. Students in the MSRP will work with their assigned mentor for the duration of the rotation. At the end of the M3 year, all third-year MSRP students are expected to present their research in a poster format at the MSRP Research Day or similar activity. Traditional - EL Laboratory (5 hours)

CONJ 634. Evolution in Health and Disease 634. This elective provides 3rd year medical students the opportunity to explore the relevance of concepts and principles from evolutionary biology and human evolution to medical practice and research, and to gain a deeper understanding of health and disease in populations. (Two (2) students each rotation. Available all rotations except the second rotation in May, June and July.)

Traditional Independent Study (5 hours)

CONJ 636. Public Health. This elective provides 3rd year medical students the opportunity to work with the Mississippi State Department of Health (MSDH) to learn the broader scope of public health as it relates to the individual and the community. Activities will include restaurant and wastewater inspections, TB outreach activities to the homeless, and disease intervention investigations. Additional activities such as disease outbreak investigations, disaster preparedness involvement and other public health experiences will be included as opportunities arise. There will also be opportunities for direct patient care in the MSDH clinics. (Two (2) students each rotation. Available all rotations except the second rotation in May, June and July.) Traditional Clinical Rotation (5 hours)

CONJ 637. M3 Boot Camp. This is a two week course required of all rising third year medical students designed to bridge the learning gap during the transition from the classroom setting to the M3 clinical clerkships. Traditional Lecture (15 hours)

DERM 640. Dermatology. During this two week rotation, third year medical students will gain experience in the evaluation and treatment of the 20 most common dermatologic conditions encountered in an academic clinic setting and less common "classic" entities. The student will participate in "team-based" patient care involving dermatology residents, primary care residents, and a full time attending dermatologist. Over the course of two weeks, they will be awarded increasing responsibility for taking histories, describing patients using dermatologic terminology, and synthesizing an initial differential diagnosis and will learn to perform a KOH preparation and scabies preparation. (Two (2) students each rotation. Available all rotations.) Traditional Clinical Rotation (5 hours)

DERM 641. Rural Dermatology. This is a M3 two-week Rural Dermatology (Louisville clinic) rotation where medical students will gain experience in the evaluation and treatment of the 20 most common dermatologic conditions encountered in the rural setting. The medical student will join the full-time dermatologist as well as any currently rotating residents and participate in outpatient dermatology clinics as well as inpatient consultations (at Winston Medical Center in Louisville). Utilizing a team-based approach, the students over the course of a month gain increasing responsibility for taking histories, describing physical findings, and synthesizing a differential diagnosis – and contributing toward the treatment plan at a level appropriate to the student's training level. Students will also have exposure to procedures such as KOH preparation, scabies preparation, local anesthesia, shave and punch biopsies, surgical excisions, and suturing. Nightly reading is expected focused on enhancing the care for patients seen each day. The students will also have opportunities to participate in some teleconferences with the larger dermatology department in Jackson as time permits. Less-structured learning will occur in the clinic and students will be expected to teach patients and other students – as applicable – and to learn themselves as opportunities arise. The primary sites for this rotation will be the UMMC Dermatology satellite clinic in Louisville, MS and the nearby Winston Medical Center hospital and emergency department. Furthermore twice-monthly clinics will be held at the main UMMC Pavilion and/or Grants Ferry locations. Students should expect to make their own arrangements for transportation to and from clinic sites, and for local accommodations if necessary. Rotational positions will be made available on a first-come-first-served basis. Traditional Clinical Rotation (10 hours)

EM 630. Emergency Medicine: Life-Saving Skills. The purpose of this course is to prepare students to master the rapid assessment and management of emergency medical conditions. The first week of the rotation is simulation based. Skill training modules teach adult basic and advanced airway management, arterial and central venous access, lumbar puncture on-line self-directed learning and hands-on instruction using task trainers. Students will also manage patients in life threatening conditions using high fidelity adult simulators. The students with form code teams and develop the cognitive and hands on skill necessary to successfully participate in a team resuscitative effort. Emphasis is placed on urgent patient assessment, situational awareness, application of ACLS protocols, skilled and timely execution of life-saving interventions, usage of equipment (code cart, defibrillator), team work and communication. During the second week of the rotation, students participate in patient care in three to four, 8-hour long shifts in the Emergency Department. Evaluations include pre- and post-tests, check-list of simulated patient management scenarios and assessment of clinical performance during shifts in the Emergency Department. (Six (6) students each rotation. Available all rotations September through May.) Traditional Clinical Rotation (5 hours)

FM 631. Family Medicine Preceptorship. This course is designed to introduce the third-year medical student to the concepts of family medicine. The six-week experience includes a four-week preceptorship working one-on-one with a family physician in private practice within the state. Students are matched with preceptors outside the Jackson metropolitan area and housing can be arranged if needed. During the remaining two weeks, the student will work with Department of Family Medicine faculty and residents at either Mississippi Baptist Medical Center, University Medical Center, Flowood Family Medical Center, or Lakeland Family Medical Center. Traditional Clinical Rotation (16 hours)

FM 632. M3 Elective in Medical Ethics. The two-week elective in Medical Ethics is designed to give the junior medical student an overview of ethical dilemmas that are encountered in ambulatory and inpatient practice. An emphasis is placed on self-study and reflection to allow each student to explore and expand his or her own ethical beliefs. Available for four (4) students per elective cycle. Traditional - EL Thesis (5 hours)

MED 631. Medicine Clerkship. This clerkship includes subject matter basic to the practice of caring for the adult patient in Internal Medicine. Students are assigned to hospital services at The University of Mississippi Medical Center and the Veterans Affairs Medical Center. Students learn to sharpen the assessment skills, record detailed histories, perform physical examinations and participate in clinical evaluation and therapy of patients as an integral member of the treatment team, working closely with the housestaff. Full time and clinical faculty provide instruction on ward rounds seven days a week. Both faculty and housestaff evaluate the student's performance. Students must successfully complete all components in order to receive credit for the clerkship. Traditional Clinical Rotation (20 hours)

THE UNIVERSITY OF MISSISSIPPI MEDICAL CENTER
MED 633. Clinical Endocrinology. This elective is provided for third year students in order to develop a reasonable approach to the broad spectrum of endocrine disorders. (One (1) student each rotation. Available all rotations.) Traditional Clinical Rotation (5 hours)

MED 634. Outpatient Care of the Geriatric Patient. This elective provides third year students with the opportunity to care for geriatric patients. (Two (2) students each rotation. Available all rotations.) Traditional Clinical Rotation (5 hours)

MED 635. Hematology/Oncology. During this elective, students will be exposed to a wide variety of patients with malignancies of solid organs, as well as benign and malignant diseases of the blood. (Three (3) students each rotation. Available all rotations.) Traditional Clinical Rotation (5 hours)

MED 636. Infectious Disease. This elective provides third year students with the opportunity to develop history-taking and physical exam skills pertinent to the evaluation of patients with an infectious disease. (One (1) student each rotation. Available all rotations.) Traditional Clinical Rotation (5 hours)

MED 637. Pulmonary Medicine. This course provides exposure to patients with pulmonary disorders in a combined in/outpatient educational experience. (Two (2) students each rotation. Available all rotations.) Traditional Clinical Rotation (5 hours)

MED 638. Rheumatology. This elective provides third year students with the opportunity to care for patients with rheumatic disorders in the combined in/outpatient setting. (Two (2) students each rotation. Available all rotations.) Traditional Clinical Rotation (5 hours)

MED 640. Ambulatory Internal Medicine Clerkship. The students will be exposed to a variety of pathologic conditions commonly encountered in the outpatient setting. (One (1) student each rotation. Available August through November and January through May.) Traditional Clinical Rotation (5 hours)

MED 641. Cardiology. This M3 elective provides a combined inpatient/outpatient educational experience for junior medical students. Students will see patients with cardiology faculty and assist in obtaining medical histories, performing physical examinations, formulating differential diagnoses, and observing appropriate diagnostic studies and therapeutic plans. Students will also spend time participating in interpretation/observation of selected cardiology imaging studies to include cardiac catheterization and echocardiography and will undergo focused training on electrocardiographic interpretation under the supervision of Cardiology faculty. This elective will provide a basic understanding of the diagnosis, treatment and prevention of common cardiac diseases. Student responsibilities will include approximately 40 hours of participation per week. (Two (2) students each rotation. Available all rotations.) Traditional Clinical Rotation (5 hours)

NEU 633. Clinical Neuroscience Elective. The clinical neuroscience elective is administratively managed by Neurology. During this elective, students will expand their clinical knowledge of neuroanatomical principles discussed during the M1 curriculum and learn how medical problems that affect the nervous system are diagnosed and treated. Students will be assigned to clinics and hospital services at UMMC. They will have a choice of NSICU, general service, neurosurgery, or stroke service. They can choose either one or two of these options during their two week elective. Emphasis will be placed on the neurologic history and clinical examination in patients with acute and chronic neurological diseases. Students will also be required to attend and participate in multidisciplinary conferences. Traditional Clinical Rotation (6 hours)

NEU 633. Clinical Neuroscience Elective. The clinical neuroscience elective is administratively managed by Neurology. During this elective, students will expand their clinical knowledge of neuroanatomical principles discussed during the M1 curriculum and learn how medical problems that affect the nervous system are diagnosed and treated. Students will be assigned to clinics and hospital services at UMMC. They will have a choice of NSICU, general service, neurosurgery, or stroke service. They can choose either one or two of these options during their two week elective. Emphasis will be placed on the neurologic history and clinical examination in patients with acute and chronic neurological diseases. Students will also be required to attend and participate in multidisciplinary conferences. Traditional Clinical Rotation (6 hours)

NEU 634. Neurosurgery 630. The M3 neurosurgery elective is a two-week rotation in Neurosurgery where third year medical students will gain experience in the evaluation and treatment of neurological surgery problems encountered in an academic medical center. The primary goal of this course is to introduce M3 students to the daily practice of neurosurgery. Students will focus on diagnosis and management of common neurosurgical problems, related surgical procedures, and consultation. (One (1) student each rotation. Available all rotations.) Traditional Clinical Rotation (5 hours)

OB/GYN 631. Obstetrics and Gynecology. The third-year clerkship in obstetrics-gynecology is designed to provide a strong clinical base in normal and abnormal obstetrics and gynecology along with exposure to the subspecialties and health maintenance strategies for women. Students rotate in small groups through labor and delivery, the high risk obstetric service, the women’s urgent care center, gynecology, urogynecology and/or gynecologic oncology over a 6 week time frame. Students participate in all aspects of outpatient and inpatient care. They also assist during selected surgical cases. Obstetrical delivery experience is provided with supervision by attending faculty and residents. An interactive didactic lecture series is supplemented by weekly tutorial clinical problem solving sessions with faculty preceptors. Students actively participate in resident and faculty teaching rounds and attend all departmental conferences, including grand rounds and preoperative conference. Traditional Clinical Rotation (16 hours)

OTO 630. Otolaryngology. Students will become familiar with the integration of otolaryngology with other medical and surgical specialties and gain hands-on exposure to the subspecialties of otolaryngology. (Three (3) students each rotation. Available all rotations.) Traditional Clinical Rotation (5 hours)

PATH 630. Pathology: Anatomic Elective. Students will be introduced to surgical pathology, autopsy, cytopathology and subspecialties. (One (1) student each rotation. Available all rotations. MUST BE SCHEDULED IN ADVANCE.) Traditional Clinical Rotation (5 hours)

PATH 631. Pathology: Clinical Elective. The student will develop a working knowledge of how the laboratory functions in providing results and the interpretation of results in clinical practice. (Two (2) students each month. Available all rotations. MUST BE SCHEDULED IN ADVANCE.) Traditional Clinical Rotation (5 hours)

PED 631. Junior Pediatrics. Students work as clerks on inpatient services of the Children’s Hospital and in ambulatory settings. Ward rounds, conferences and lectures are regularly scheduled. Emphasis is placed on developing the skill of each student in history-taking and the physical examination of infants and children, particularly those with disorders that are most commonly seen in this age group. This course is required of all third year students. Traditional Clinical Rotation (16 hours)

PED 632. Child Development & Behavioral Pediatric. This elective is comprised of a two week block of outpatient child development and behavioral pediatrics. It will focus on the pediatrician’s part in a multidisciplinary approach to the evaluation and treatment of children and youth developmental and behavioral disorders including ADHD, learning disabilities, Tourette’s Syndrome, autism spectrum disorders, behavioral disorders, and intellectual disabilities. (One (1) student each rotation. Available all rotations. Traditional Clinical Rotation (5 hours)
PED 633. Pediatric Gastroenterology. This course is an introduction to the evaluation and diagnosis of common pediatric gastrointestinal complaints in the outpatient setting. The primary goal will focus on history taking and physical exam as a means for formulation of a differential diagnosis given a chief complaint. Treatment plans will be formulated with the student to introduce them to nuances of developing patient-specific therapy. (One (1) student each rotation. Available all rotations.) Traditional Clinical Rotation (5 hours)

PED 636. Pediatric Allergy/Immunology. This course is an introduction to common allergic disorders, including allergy rhinitis, asthma, atopic dermatitis, food allergy, and evaluation for possible immune deficiency. Emphasis will be on developing an understanding of the diagnosis and management of the allergic disorders, physical exam skills, and lab testing for common immune defects in the outpatient setting. (One (1) student each rotation. Available all rotations.) Traditional Clinical Rotation (5 hours)

PED 637. Pediatric Neurology. During this two-week clinical rotation, third-year medical students rotate with UMMC child neurologists and are exposed to pediatric patients with epilepsy, headaches, static encephalopathy, tic disorders and neuromuscular disease. Although primarily a clinic rotation, there is potential for inpatient exposure. The process will include participation in history taking and physical exams (with a focus on neurological exam) as well as exposure to neurological procedures, including lumbar puncture, electroencephalography, video electroencephalography, and electromyography/nerve conduction studies. (One (1) student each rotation. Available all rotations.) Traditional Clinical Rotation (5 hours)

PSYCH 631. Junior Clerkship in Psychiatry. The junior clerkship in psychiatry is a four-week rotation during which students spend two weeks on two services, which includes an inpatient service, consult service, and outpatient service. Assignments are divided between University Hospital, the Veteran’s Administration Medical Center and the Jackson Medical Mall. The clerkship offers the opportunity to gain experience in caring for patients with psychiatric illnesses in a multidisciplinary treatment-team approach guided by biopsychosocial principles. Attendings and residents or the department closely supervise students. Faculty provide four hours per week of lectures that focus on evaluation and management of psychiatric disorders. Students are also introduced to psychiatric procedures with the opportunity to observe and participate in ECT. Traditional Clinical Rotation (12 hours)

PSYCH 632. Junior Elective in Psychiatry. This course is for all students, including those targeting radiology as a career as well as those who plan to enter other medical specialties. The two-week course is designed to introduce students to all major imaging modalities and equip students with practical knowledge regarding anatomy, advantages and disadvantages of each imaging modality, safety issues related to medical imaging, and a basic approach to image interpretation. (Six (6) students each rotation. Available all rotations except December.) Traditional Clinical Rotation (5 hours)

PSYCH 633. Pediatric Gastroenterology. This course is an introduction to the evaluation and diagnosis of common pediatric gastrointestinal complaints in the outpatient setting. The primary goal will focus on history taking and physical exam as a means for formulation of a differential diagnosis given a chief complaint. Treatment plans will be formulated with the student to introduce them to nuances of developing patient-specific therapy. (One (1) student each rotation. Available all rotations.) Traditional Clinical Rotation (5 hours)

PSYCH 636. Pediatric Allergy/Immunology. This course is an introduction to common allergic disorders, including allergy rhinitis, asthma, atopic dermatitis, food allergy, and evaluation for possible immune deficiency. Emphasis will be on developing an understanding of the diagnosis and management of the allergic disorders, physical exam skills, and lab testing for common immune defects in the outpatient setting. (One (1) student each rotation. Available all rotations.) Traditional Clinical Rotation (5 hours)

PSYCH 637. Pediatric Neurology. During this two-week clinical rotation, third-year medical students rotate with UMMC child neurologists and are exposed to pediatric patients with epilepsy, headaches, static encephalopathy, tic disorders and neuromuscular disease. Although primarily a clinic rotation, there is potential for inpatient exposure. The process will include participation in history taking and physical exams (with a focus on neurological exam) as well as exposure to neurological procedures, including lumbar puncture, electroencephalography, video electroencephalography, and electromyography/nerve conduction studies. (One (1) student each rotation. Available all rotations.) Traditional Clinical Rotation (5 hours)

PSYCH 638. Psychological Research. This elective is designed for students who have had previous and ongoing research experience with a Department of Surgery faculty member to allow dedicated time to continue their research endeavors. A letter of ongoing research is required from the Department of Surgery faculty member prior to approval into this two-week elective. (Variable number of students each rotation. Available all rotations.) Traditional Clinical Rotation (5 hours)

PSYCH 639. Psychopharmacology. This elective is designed for students who have had previous and ongoing research experience with a Department of Psychiatry faculty member to allow dedicated time to continue their research endeavors. A letter of ongoing research is required from the Department of Psychiatry faculty member prior to approval into this two-week elective. (Variable number of students each rotation. Available all rotations.) Traditional Clinical Rotation (5 hours)

PSYCH 640. Junior Radiation Oncology. This course is designed to introduce the student to basic concepts of radiotherapy, not only for those considering radiation oncology as a career, but also for those who plan to go into a field such as family practice, internal medicine, pediatrics, or surgery, where oncologic patients may be part of their practice. The third-year student will gain more familiarity with the role of radiation therapy in the treatment of cancer patients and gain the experience in the use of radiant energy for treating malignant and nonmalignant disease. Students will participate in evaluation of patients with a variety of physical findings, under direct supervision of several faculty radiation oncologists, and medical residents. Students will follow at least one new patient through simulation, administration of informed consent, patient teaching, treatment planning and implementation. Attendance at tumor conferences will emphasize the importance of a multidisciplinary approach to cancer management. A reading list will be provided. (2 students each rotation. Available October – June.) Traditional Clinical Rotation (4 hours)

SURG 631. Surgery. The basic comprehensive course in surgery includes case studies, conferences, quizzes, ward rounds, outpatient clinic, and operating room time for 8 weeks. Didactic and clinical experiences include material from all surgical specialties. Application of anatomy and physiology to the recognition, evaluation, and operative treatment of common surgical diseases is emphasized along with pre and postoperative care of surgical patients. Students are assigned patient care responsibilities under faculty and housestaff supervision including participation as part of an in-hospital on-call team. Students are required to participate in all aspects of patient care and to attend student centered and Department General case conferences. Traditional Clinical Rotation (20 hours)

SURG 632. University Hospital General Surgery. Students will participate in the diagnosis and treatment of patients with common general surgery problems. Students may be assigned to one of four General Surgery services (Surgery A, Surgery B, Acute Care Surgery, Transplant Surgery, or Veterans Administration), at the discretion of the Course Director, depending upon total number of students enrolled. (Four (4) students each rotation. Available all rotations.) Traditional Clinical Rotation (5 hours)

SURG 633. Veterans Administration General Surgery. Students will participate in the diagnosis and treatment of a broad spectrum of general surgery problems. (Two (2) students each rotation. Available all rotations.) Traditional Clinical Rotation (5 hours)

SURG 634. Cardiothoracic Surgery. This elective is designed for students with interests in adult or pediatric cardiothoracic disease. Students will be able to choose between two weeks on either the Pediatric or Adult Cardiothoracic services. (Two (2) students each rotation. Available all rotations.) Traditional Clinical Rotation (5 hours)

SURG 635. Pediatric Surgery. The student will participate in the surgical management of pediatric patients with a variety of surgical problems. (Two (2) students each rotation. Available all rotations.) Traditional Clinical Rotation (5 hours)

SURG 636. Plastic and Reconstructive Surgery. Students will be introduced to the basics of plastic surgery including skin and tissue grafts, vascularized flaps and free flaps, craniofacial procedures and microsurgery. (One (1) student each rotation. Available all rotations.) Traditional Clinical Rotation (5 hours)

SURG 637. Surgery Critical Care. The student will be an integral part of the team participating in the daily care of trauma and general surgery patients in the surgery intensive care unit. (One (1) student each rotation. Available all rotations.) Traditional Clinical Rotation (5 hours)

SURG 638. Surgical Research. This elective is designed for students who have had previous and ongoing research experience with a Department of Surgery faculty member to allow dedicated time to continue their research endeavors. A letter of ongoing research is required from the Department of Surgery faculty member prior to approval into this two-week elective. (Variable number of students each rotation. Available all rotations.) Traditional Clinical Rotation (5 hours)

SURG 639. Transplant Surgery. Students will be introduced to the basics of transplant surgery, including kidney, pancreas, and liver transplantation, as well as participate in the care of hepatobiliary patients. (One (1) student each rotation. Available all rotations.) Traditional Clinical Rotation (5 hours)
SURG 640. Trauma Surgery. Students will focus on the initial evaluation and management of the trauma patient by becoming a member of the trauma team and responding to trauma activations. Students will have the choice of participating in daytime trauma service, or our "on-call" night float working 5 nights per week for two weeks. (Two (2) students each rotation. Available all rotations.) Traditional Clinical Rotation (5 hours)

SURG 641. Urology. Emphasis is placed on common urologic problems with initial evaluations in the clinic or hospital setting during this elective. Students will participate in preoperative patient care, assist with urologic tests, procedures and surgeries in clinic and in the operating room. (Two (2) students each rotation. Available all rotations.) Emphasis is placed on the common urologic problems with initial evaluations in the clinic or hospital setting. Students will participate in preoperative patient care, assist with urologic tests, procedures and surgeries in clinic and in the operating room. Traditional Clinical Rotation (5 hours)

SURG 642. Vascular Surgery. Students will focus on medical and surgical management of peripheral and central vascular disease in the inpatient and outpatient setting, as well as the operating room. (Two (2) students each rotation. Available all rotations.) Traditional Clinical Rotation (5 hours)

YEAR 4

ANAT 651B. Review of Human Anatomy. Permission of the course director required. (10 students each month. Available blocks, 8-11.) Traditional - EL Laboratory (10 hours)

ANAT 652A. Review of Human Neurobiology. Intensive review of regions and systems with particular emphasis on clinical neurosciences. Permission of the course director required. (10 students each month. Available blocks 1-6 and 8.) Traditional - EL Lecture/Lab (10 hours)

ANAT 653A. Review of Histology w/ Clinical Correlat. Microscopic review of tissues and organ systems emphasizing the integration of principles of histology and pathology with associated clinical cases. Permission of course director required. (Students each month. Available all blocks.) Traditional - EL Lecture/Lab (10 hours)

ANAT 654A. Neurobiology Research. Limited to students who wish to participate in relatively advanced research programs in neurobiology. Permission of the course director required. - EL Laboratory (10 hours)

ANAT 657A. Clinical Anatomy Research/Scholarship. Limited to students who wish to participate in clinical anatomy research/scholarship, including projects in educational scholarship. Permission of the course director required. - Traditional - EL Lecture (10 hours)

ANES 651A. Clinical Anesthesiology. An elective affording an overview of and introduction to anesthesiology. Under direct supervision, students will undertake "hands-on" participation in all parts of anesthesia care with particular emphasis on: preoperative evaluation/preparation, vascular access, airway maintenance (including intubation), physiology and pharmacology of anesthesia care and patient homeostasis (including vasoactive drugs) monitoring, and immediate postoperative management. Attendance is required at all departmental didactic sessions and special student lectures. This course is oriented to the student who is seriously considering Anesthesiology as a specialty. (2 students each block. Available blocks 8-11, unless special permission granted by Course Director.) Traditional - EL Clinical Rotation (10 hours)

ANES 652A. Pain Management. The purpose of this course is for medical students to develop an understanding of the knowledge and skills related to the practice of pain management and to facilitate a greater understanding of the contributions of pain management in the health care system. Students will participate in all aspects of pain management: acute, chronic and cancer pain. Students will learn the concept of pain as a multi-dimensional experience. They will participate in the evaluation and treatment of complex pain patients. This rotation is for any medical student with an interest in chronic pain management regardless of planned specialty. (1 student each block unless special permission is granted by course director. Available blocks 1-12.) Traditional - EL Clinical Rotation (10 hours)

ANES 652B. Pain Management. The purpose of this course is for medical students to develop an understanding of the knowledge and skills related to the practice of pain management and to facilitate a greater understanding of the contributions of pain management in the health care system. Students will participate in all aspects of pain management: acute, chronic and cancer pain. Students will learn the concept of pain as a multi-dimensional experience. They will participate in the evaluation and treatment of complex pain patients. This rotation is for any medical student with an interest in chronic pain management regardless of planned specialty. (1 student each block unless special permission is granted by course director. Available all blocks.) Traditional Clinical Rotation (5 hours)

ANES 653A. Anesthesiology & Peri-Operative Medicine. An elective that will provide a broad overview of all aspects of peri-operative medicine and is equally applicable to the students interested in anesthesiology and those pursuing other specialties. This course is divided in to 4 one-week phases, which include general adult anesthesiology, pediatric anesthesiology, obstetrical anesthesiology, and pain management. Techniques of airway management, invasive line placement, EKG interpretation, general and regional anesthetic techniques, cardiac output measurement, and concepts of pain management will all be extensively reviewed. (5 students each block. Available blocks 5-6 and 8-9, unless special permission granted by Course Director.) Traditional - EL Clinical Rotation (12 hours)

ANES 851. Anesthesia Extramural. Extramural rotations for four weeks or longer can be arranged with the course director or chair's approval for students who are interested in the specialty. (Available for senior medical students only. Available all months.) Traditional - EL Clinical Rotation (10 hours)

ANES 852. Anesthesia Extramural. Extramural rotations for four weeks or longer can be arranged with the course director or chair's approval for students who are interested in the specialty. (Available for senior medical students only. Available all months.) Traditional - EL Clinical Rotation (10 hours)

CON 653A. Bioethics, Persp Curr Iss Med & Soc. The fourth year elective course in bioethics is multifaceted and interactive. It is designed to acquaint students with various philosophical, ethical, and religious systems of thought and explore how they relate to complex ethical issues in the practice of medicine. This will help students develop critical thinking skills that can be used in the clinical setting and in future healthcare policy. This course seeks to develop an integrated or holistic approach to patient care that combines an understanding of the core principles of the belief, faith and spirituality of the patient with sound clinical judgment and ethical decision making in light of advancing medical technology. This is facilitated by providing students with tools and insights to further develop as compassionate healers with a deeper foundation and understanding of the complexities of ethical decision-making. Utilizing an interactive format of lecture, discussion, practical on site experience, and case analysis helps students to integrate this understanding into their own clinical practice. A diverse faculty provides instruction for the course including physicians, theologians, philosophers, chaplains, nurses, attorneys and bioethicists. (14 students each block. Available block 9.) Traditional - EL Clinical Rotation (10 hours)

CON 654A. Primary Sports Medicine. The Primary Care Sports Medicine elective provides a unique experience for interested senior medical students. Students are given the opportunity to work on one with the UMC Sports Medicine Faculty and athletic trainers. Students will attend various primary care orthopedic clinics, training room and selected sporting events. The student will also attend a weekly sports medicine lecture and injury conference that allows the student to interact with the Sports Medicine staff. (1 student per block. Available all blocks.) Traditional Clinical Rotation (10 hours)

CON 654B. Primary Sports Medicine. The Primary Care Sports Medicine elective provides a unique experience for interested senior medical students. Students are given the opportunity to work on one with the UMC Sports Medicine Faculty and athletic trainers. Students will attend...
various primary care orthopedic clinics, training room and selected sporting events. The student will also attend a weekly sports medicine lecture and injury conference that allows the student to interact with the Sports Medicine staff. (2 students per block. Available all blocks.)

**CONJ 665A. Community Service.** This course is intended to promote awareness of the importance of volunteer community service by the physician and to organize and document an extraordinarily high degree of volunteer service by the student. Credit for the course requires a minimum number of documented hours of volunteer service in pre-approved activities and maintenance by the student of a personal journal recording these activities. All students must pre-enroll with approval by course directors and the Community Service Board. (25 students each block. Available blocks 1-12) Traditional Independent Study (10 hours)

**CONJ 658A. Oral-Maxillofacial Surgery.** This rotation will provide a unique educational experience for medical students as they rotate on the Oral and Maxillofacial Surgery Service. Students will be exposed to oral pathology and oral manifestations of systemic diseases. They will see the effects of oral health on the patient’s overall state of health. Students will spend time in both the outpatient clinic setting where ambulatory surgery is performed and the OR where they will assist in the care of patients. They will observe how the oral and maxillofacial surgeon manages complex facial trauma, temporomandibular joint disorders, cosmetic and functional facial deformities, and oral pathology. This elective is recommended for those interested in otolaryngology-head and neck surgery or plastic and reconstructive surgery. (1 student each block. Available blocks 1-12.) Traditional Clinical Rotation (10 hours)

**CONJ 658B. Oral-Maxillofacial Surgery.** This rotation will provide a unique educational experience for medical students as they rotate on the Oral and Maxillofacial Surgery Service. Students will be exposed to oral pathology and oral manifestations of systemic diseases. They will see the effects of oral health on the patient’s overall state of health. Students will spend time in both the outpatient clinic setting where ambulatory surgery is performed and the OR where they will assist in the care of patients. They will observe how the oral and maxillofacial surgeon manages complex facial trauma, temporomandibular joint disorders, cosmetic and functional facial deformities, and oral pathology. This elective is recommended for those interested in otolaryngology-head and neck surgery or plastic and reconstructive surgery. (1 student each block. Available all blocks.) Traditional Clinical Rotation (5 hours)

**CONJ 658C. Oral-Maxillofacial Surgery.** This 4-6 week rotation will provide a unique educational experience for medical students as they rotate on the Oral and Maxillofacial Surgery Service. Students will be exposed to oral pathology and oral manifestations of systemic diseases. They will see the effects of oral health on the patient’s overall state of health. Students will spend time in both the outpatient clinic setting where ambulatory surgery is performed and the OR where they will assist in the care of patients. They will observe how the oral and maxillofacial surgeon manages complex facial trauma, temporomandibular joint disorders, cosmetic and functional facial deformities, and oral pathology. This elective is recommended for those interested in otolaryngology-head and neck surgery or plastic and reconstructive surgery. (1 student each month. Available all months except July.) Traditional - EL Clinical Rotation (10 hours)

**CONJ 659A. M4 to M2 Teaching Track.** This longitudinal elective provides senior medical students interested in academic medicine an opportunity to acquire a better understanding and appreciation of the art of clinical education. The student will gain proficiency in teaching history and physical examinations skills and giving feedback to assigned sophomore ICMB students. Senior medical students taking this course will be better prepared for the teaching responsibilities of residency. A standardized curriculum will consist of didactic and online sessions, assigned reading and online video resources in performance of the physical exam. (This rotation can accommodate 50 students over the course of the year. Students will be able to enroll blocks 1-12, but will mentor their M2’s throughout the year. Teaching responsibilities will be greatest during November through April. A final grade will not be given until May.) Students interested in participating will be required to submit a nomination form signed by any member of the pre-clinical or clinical faculty stating your interest and commitment as a student in teaching. Nomination forms may be obtained from Beth Wilson (mpwilson@umc.edu) in L439, Deborah Newell (dnewell@umc.edu) in the Clinical Assessment Center, or by emailing Dr. David Norris (dnorris@umc.edu). Traditional Clinical Rotation (10 hours)

**CONJ 660A. M4 Medical Student Research Program.** A research block required by students who are in the Medical Student Research Program (MSRP). During this rotation, fourth year medical students will gain experience in designing a research project, conducting experiments, analyzing data, preparing a manuscript for submission, and preparing a platform presentation. Students in the MSRP will work with their assigned mentor for the duration of the rotation. At the end of the M4 year, all fourth-year MSRP students are expected to present their research in an on-campus presentation at the MSRP Research Day or similar activity. (Available blocks 1-12) Traditional Clinical Rotation (10 hours)

**CONJ 660B. Medical Student Research Program (MSRP).** A research block required by students who are in the Medical Student Research Program (MSRP). During this rotation, fourth year medical students will gain experience in designing a research project, conducting experiments, analyzing data, preparing a manuscript for submission, and preparing a platform presentation. Students in the MSRP will work with their assigned mentor for the duration of the rotation. At the end of the M4 year, all fourth-year MSRP students are expected to present their research in a platform presentation at the MSRP Research Day or similar activity. (Available all blocks.) Traditional Clinical Rotation (5 hours)

**CONJ 667A. Dean Fellowship in Healthcare Admin.** This non-clinical elective provides the student a structured, faculty-mentored experience to explore many facets of healthcare leadership including academic medicine, hospital administration and models of healthcare delivery. It draws upon the expertise of leaders for the various department within the University Hospitals’ administrative departments. Prior to acceptance, student must provide a copy of his/her CV to the course director, along with a cover letter explaining his/her interest in doing this elective and what he/she hopes to gain from the experience. (1 student each block. Available blocks January, February and September only.) Traditional Practicum/Internship (10 hours)

**CONJ 669A. Introduction to Clinical Ethics.** This course is designed to expose medical students to the ethical issues found in clinical medicine, as well as to endow them with critique and evaluation skills to recognize ethical dilemmas, work through the problems and attempt to find resolution. (1 student per block. Available block 8.) Traditional Lecture (10 hours)

**CONJ 670A. Transition to Residency.** This 4 week required course for each medical student during the spring of the senior year provides a multidisciplinary, integrated approach to allow the student to experience a smooth transition into residency training. Each student will be required to attend sessions related to general topics for a physician. Each student will also receive training in specific areas as related to the chosen field of focus for residency training. A combination of traditional didactics, podcasted lectures, small group sessions, medical simulations, internet research, and standardized patients will be utilized in this experience. Traditional Lecture/Lab (12 hours)

**DERM 664A. Dermatology.** The student will become familiar with the scope of Dermatology and the integration of Dermatology with other medical and surgical specialties. The student will gain exposure to pediatric, general, and surgical dermatology. The emphasis is on ambulatory components of the specialty and aims to help students gain a basic understanding of the diagnosis and management of common dermatologic
problems. As part of the rotation, students will be expected to submit two short written case reports and attend any conferences offered. (One (1) student each block. Available all blocks.) Traditional - EL Clinical Rotation (10 hours)

**DERM 655A. Dermatology Research.** Individualized programs for four weeks are arranged with the Chairman’s approval for senior students who would like to participate in dermatologic research or other special activities as determined by the Program Director’s office in the Department of Dermatology. This rotation will allow each student to gain experience in research endeavors. (One (1) student each block. Available all blocks.) Traditional Independent Study (10 hours)

**DERM 851. Dermatology Extramural.** Extramural rotations for four weeks or longer can be arranged with the course director or chair’s approval for students who are interested in the specialty. (Available for senior medical students only. Available all months.) Traditional Clinical Rotation (10 hours)

**DERM 852. Dermatology Extramural.** Extramural rotations for four weeks or longer can be arranged with the course director or chair’s approval for students who are interested in the specialty. (Available for senior medical students only. Available all months.) Traditional Clinical Rotation (10 hours)

**EM 680A. Emergency Medicine.** This course is designed to give senior medical students a relevant experience in adult emergency medicine. Students function as an acting intern and work under direct supervision of the emergency medicine attending physicians. They take part in the initial evaluation and subsequent management of patients presenting with emergent and urgent problems of various organ systems. Students are fully supported by emergency medicine residents and attending physicians, but the student is the patient’s primary care giver. Students are expected to formulate thorough differential diagnoses, treatment plans and perform any needed procedures. A series of didactics are presented to the students during the course of the month including small group discussions, lectures and procedural skills practice. Students also learn to manage critically ill patients through the use of a advanced simulation. Final evaluations are based on demonstration of competency in clinical duties, completion of skills and simulation labs, formal case presentation, and performance on written mid-term and post clinical assessments. Opportunities are provided to work with the AirCare flight team while working in the Emergency Department. (Six (6) UMMC students each block in July through October, with preference given to students interested in applying for emergency medicine residencies. Students interested in taking the rotation in July through October please contact the course coordinator. Nine (9) UMMC students in November through May.)

Traditional - EL Clinical Rotation (12 hours)

**EM 680B. Medical Toxicology.** During this rotation senior medical students will serve as a member of the Medical Toxicology consult team at the University of Mississippi Medical Center. The purpose of the rotation is to learn the basics of medical management of the poisoned patient and the acute and chronic effects of toxic exposures. The student will work approximately 4 hours per day at the Mississippi Poison Center (PCC) and spend the remaining time as a member of the Medical Toxicology Consult Service. The student will be responsible for evaluating patients for whom toxicology consults have been requested in the adult or Pediatric Emergency Department or hospital inpatients at the University of Mississippi Medical Center, in conjunction with residents and the Medical Toxicology Facility. The student will also see patients during scheduled outpatient clinic. The student will participate in patient rounds, toxicology conferences, and will meet as scheduled with faculty and residents. (Two (2) students each block. Available August, September, November, January, February, March, and April.)

Traditional - EL Clinical Rotation (12 hours)

**EM 680A. Emergency Medicine Research Elective.** This senior medical student course is a research elective designed to include instruction in research methodology and medical literature. The student may participate in original research under faculty supervision or in on-going research projects with the faculty. There are opportunities for clinical studies as well as transitional bench work. (Two (2) students each block. Available all months.) Traditional - EL Lecture (10 hours)

**EM 680B. Emergency Medicine Research.** This senior medical student course is a research elective designed to include instruction in research methodology and medical literature. The student may participate in original research under faculty supervision or in on-going research projects with the faculty. There are opportunities for clinical studies as well as transitional bench work. (Two (2) students each block. Available all months.)

Traditional - EL Clinical Rotation (5 hours)

**EM 680A. Wilderness and Disaster Medicine.** This course is designed to familiarize the senior medical student with the unique aspects of providing medical care in austere environments. Didactics and practical exercises are specifically geared to provide the student with a fund of knowledge that allows for a logical, controlled, and competent approach to emergencies uniquely encountered in wilderness and disaster scenarios. Completion of specific certification requirements at the beginning of the course will allow students to electively participate in any deployments of the State Medical Assistance Team (SMAT) mobile hospital during the month of instruction and will allow for continued team membership for future deployments. (Six (6) students per block. Available in April only.)

Traditional Clinical Rotation (10 hours)

**EM 851. Emergency Medicine Extramural.** Extramural rotations for four weeks or longer can be arranged with the course director or chair’s approval for students who are interested in the specialty. (Available for senior medical students only. Available all months.)

Traditional - EL Clinical Rotation (10 hours)

**EM 852. Emergency Medicine Extramural.** Extramural rotations for four weeks or longer can be arranged with the course director or chair’s approval for students who are interested in the specialty. (Available for senior medical students only. Available all months.)

Traditional - EL Clinical Rotation (10 hours)

**FM 651A. Family Medicine Preceptorship.** The student spends one month with a preceptor in private practice within the state. Emphasis is placed upon student responsibility for patient care and developing treatment plans. The student is provided with first-hand exposure to clinical, administrative, financial and social aspects of the private practice in Family Medicine. The student is evaluated by the preceptor. Students must register in the departmental office as well as the Registrar’s Office. (Four (4) students each block. Available all blocks.) Traditional - EL Clinical Rotation (5 hours)

**FM 651B. Family Medicine Preceptorship.** The student spends one month with a preceptor in private practice within the state. Emphasis is placed upon student responsibility for patient care and developing treatment plans. The student is provided with first-hand exposure to clinical, administrative, financial and social aspects of the private practice in Family Medicine. The student is evaluated by the preceptor. Students must register in the departmental office as well as the Registrar’s Office. (3 students each block. Available all blocks.)

Traditional - EL Clinical Rotation (5 hours)
FM 652A. Family Medicine Clerkship. The senior student is assigned to a work in the department's two Family Medicine Residency Clinics where he or she sees ambulatory patients and participates in department conferences. The student is evaluated by the physician team. Seniors must register in the departmental office as well as with the Registrar's Office. Two (2) students each block. Available all months except July.) Traditional - EL Clinical Rotation (12 hours)

FM 656A. Family Medicine In-Patient Service. The student will spend one month working with a team of family medicine residents and faculty and serving as a sub-intern. The student, with resident and faculty supervision, will evaluate patients in the emergency room, admit patients for continuing care, and assume primary responsibility for hospital care of patients to include coordination of consultation, as appropriate. (Two (2) students each block. Available all blocks.) Traditional - EL Clinical Rotation (10 hours)

FM 665A. General Medicine Clerkship. This required senior rotation in medicine will be an extension of the Junior Medicine Clerkship. Students will be assigned to the Veterans Affairs Medical Center or the University Medical Center. Students will elicit histories, perform physical examinations, and carry out appropriate diagnostic and therapeutic procedures under the supervision of the house staff and attending staff. Assignments will be made at the discretion of the Department of Medicine. (All students/required block. Scheduled in equal numbers of student from July through May.) Traditional - EL Clinical Rotation (10 hours)

MED 652A. Ambulatory Medicine. In this elective, the student will be assigned three patients per week for complete evaluation and current literature search. The student participates in divisional activities, including twice daily rounds, weekly teaching rounds, reviews of biopsy specimens, and attends all procedures such as endoscopy, liver biopsy, esophageal motility, percutaneous cholangiogram, etc. The student will meet weekly with the director of the division or senior fellow to review specific subjects in gastroenterology about which he or she has read during the week. (One (1) students each block. Available all blocks.) Traditional - EL Clinical Rotation (10 hours)

MED 655A. Gastroenterology. In this elective, the student will be assigned three patients per week for complete evaluation and current literature search. The student participates in divisional activities, including twice daily rounds, weekly teaching rounds, reviews of biopsy specimens, and attends all procedures such as endoscopy, liver biopsy, esophageal motility, percutaneous cholangiogram, etc. The student will meet weekly with the director of the division or senior fellow to review specific subjects in gastroenterology about which he or she has read during the week. (One (1) students each block. Available all blocks.) Traditional - EL Clinical Rotation (10 hours)

MED 659A. Pulmonary Diseases/Critical Care Med. Students are assigned to the Pulmonary and Critical Care Medicine services at either UMMC or VAMC. At the University Hospital, the student will actively participate in the work-up and care of patients whose illnesses range from various respiratory diseases to the critically ill. At the Veterans Hospital, the students will be assigned to the Medical Intensive Care Unit and work closely with the Internal Medicine resident in the care of critically ill patients. Formal teaching rounds are held daily. Conferences and didactic lectures are held three times weekly. Students are introduced to pulmonary function testing, fiber optic bronchoscopy, hemodynamic monitoring, including invasive monitoring. Students will be on the Pulmonary Consult Service at UMMC. (Two (2) students each block. Available all blocks.) Traditional - EL Clinical Rotation (10 hours)

MED 660B. Nephrology. The object of this elective is designed to familiarize the student with the evaluation, diagnosis, medical management, and follow-up of patients with diseases of the kidney. The student will be seeing patients on inpatient consult service and will participate in decision making and care related to these patients. Additionally, the students will receive a series of lectures covering different aspects of the kidney. Students are encouraged to attend one half day a week outpatient clinic at Jackson Medical Mall. (2 students each block. Available all blocks.) Traditional - EL Clinical Rotation (10 hours)

EDM 663A. Ambulatory Med Amazon Jungles of Peru. This course consists of two weeks spent at UMMC and two weeks spent in Peru. During the first two weeks, students review tropical medicine with emphasis on parasitology, infectious diseases and dermatology. During the last two weeks, students work with UMMC faculty to provide primary care to undeveloped residents of the province of Loreto in Peru (Ten (10) students per block. Available in February only.) Traditional - EL Lecture (10 hours)

THE UNIVERSITY OF MISSISSIPPI MEDICAL CENTER
MED 666A. Endocrinology. This elective is designed to demonstrate the application of basic endocrinology to patient care. The student participates in the care of patients, attending endocrine clinics at UMMC and VA Medical Centers, and the diabetic clinic and hypertension clinic at UMMC. In addition, the student sees consultations at both hospitals, participates in the supervised reading, and attends the endocrine conference. Research opportunities are available. (Two (2) students each block. Available all blocks.) Traditional - EL Clinical Rotation (10 hours)

MED 667A. Medical Consult Service Elective. This elective gives the student an opportunity to be part of the medical consult team consisting of a senior house officer and a member of the Division of General Internal Medicine. This team is asked to see a wide variety of medical problems that occur in patients in other departments throughout the Medical Center. The assessment of surgical risk, common medical problems and unusual medical complications will be reviewed on daily rounds. The student will have an opportunity to assess patients on his own and jointly with the house officer. A practical approach to patient management in consultation will be provided, with ample opportunity for personal study in General Internal Medicine. (Two (2) student each block. Available all blocks.) Traditional - EL Clinical Rotation (10 hours)

MED 668A. Rheumatology. This program will provide the student with experience in the clinical and laboratory assessment of patients with rheumatic diseases at the UMMC and VAMC. Students take an active role in the management of both ambulatory and hospitalized patients. The student will assume supervised primary care for those patients admitted to members of the rheumatology staff and will attend daily teaching rounds where the clinical, radiological and laboratory aspects of patients' diseases are discussed. Students will assume supervised primary care for patients that are being followed in the arthritis and lupus clinics at UMMC. At the VAMC, the student will assume supervised primary care for arthritis patients on the service of the rheumatology staff, will attend the arthritis clinic at the hospital, and will assist in providing consultations. At both hospitals, the students will receive instruction in performing joint injection, aspiration, and in synovial fluid analyses. (Two (2) students each block. Available all blocks.) Traditional - EL Clinical Rotation (10 hours)

MED 670A. Medical Oncology. The objective of this elective is to familiarize the student with the evaluation, medical management, and follow-up of patients with cancer in both the inpatient and outpatient setting. The student will work closely with the inpatient attending and fellow to answer consults and will participate in decision-making and care related to these patients. In addition, the student will participate in the daily outpatient clinic with fellows and faculty for a broader exposure to patients with different malignancies. Self-assessment test material will be provided for student's use. (Two (2) students each block. Available all blocks.) Traditional - EL Clinical Rotation (10 hours)

MED 673A. Ambul Internal Med in Econ Underservd MS. This course will concentrate on the evaluation, diagnosis, and treatment of the ambulatory patient in an underserved area in the state of Mississippi. Each student will spend time with a selected physician practicing primary care in an economically underserved area to obtain knowledge and experience in ambulatory medicine typical of primary care in these regions. Emphasis will be placed on arranging appropriate follow-up for each patient in the outpatient and inpatient settings. The training is focused on establishing a quality educational experience for the students in order to enhance recruitment of these future physicians into practice in these particular areas within our state. (Two (2) students per block. Available all blocks. Traditional - EL Clinical Rotation (12 hours)

MED 674A. Hospital Medicine. The Division of Hospital Medicine provides an in-patient educational experience for all M-4 students as an elective. Students will work directly with the hospitalist on a non-resident service. Students will perform history and physicals on new admissions and will write daily notes on select patients. Students will also be responsible for recommending daily orders, communicating with patients and family, communicating with consulting services, assisting with procedures and developing therapeutic plans. In addition to usual admissions typical to internal medicine (Congestive Heart failure, Pneumonia, DVT/PE, DKA, Acute Renal Failure, Sepsis, GI Bleed), students will also get to experience co-management of orthopedic, interventional radiology, and neurological patients (Intracranial Hemorrhage, Preoperative and Postoperative management of hip fracture). (Two (2) students each block. Available all blocks except July.) Traditional - EL Clinical Rotation (10 hours)

MED 675A. Interventional Cardiology. This is a 4 week rotation. Interventional cardiology will allow students to be involved with the care of patients receiving cardiac interventional procedures. This will include training to improve coronary and peripheral circulation and alleviate valvular stenosis and treat structural heart disease. This offers the opportunity to be directly involved in patient care. Students are encouraged and expected to participate in the planning of procedures as well as pre and post patient evaluations to increase their depth of knowledge of disease, indications, diagnostic and therapeutic procedures in interventional cardiology. (2 student each block. Available all blocks.) Traditional Clinical Rotation (10 hours)

MED 851. Internal Medicine Extramural. Extramural rotations for four weeks or longer can be arranged with the course director or chair's approval for students who are interested in the specialty. (Available for senior medical students only. Available all months.) Traditional - EL Clinical Rotation (10 hours)

MED 852. Internal Medicine Extramural. Extramural rotations for four weeks or longer can be arranged with the course director or chair's approval for students who are interested in the specialty. (Available for senior medical students only. Available all months.) Traditional - EL Clinical Rotation (10 hours)

NEUR 651A. Clinical Neurology. This block may be set up to the student's preference. (651) Student may work with private neurologist, (651a) have a clinic or primarily outpatient rotation e.g. Muscular Dystrophy, Seizure, (651b) Neuro- ophthalmology or (651c) assist with answering inpatient consults at either VA or UMMC. (Two (2) students each block. Available all blocks. Traditional - EL Clinical Rotation (10 hours)

NEUR 651B. Clinical Neurology. This block may be set up to the student's preference. (651) Student may work with private neurologist, (651a) have a clinic or primarily outpatient rotation e.g. Muscular Dystrophy, Seizure, (651b) Neuro- ophthalmology or (651c) assist with answering inpatient consults at either VA or UMMC. (2 students each block. Available all blocks.) Traditional Clinical Rotation (5 hours)

NEUR 652A. Clinical Neurology Acting Internship. Student will work under the supervision of house staff and attending staff on the inpatient Neurology services. This rotation provides supervised teaching and instructions on core neurological principles of localization, summation and formulation of assessments and treatment plans uniquely tailored to patients with stroke or general neurological disorders such as epilepsy, neuromuscular disorders, neuro-inmunological disorders, neurodegenerative disorders and neuro-ophthalmological disorders, to name a few, that are of significant severity or acuity to require inpatient admission for diagnosis and/or treatment. Additionally, the student will experience the role of the subspecialist expert (the neurologist) as a consultant in the ED and various non-neurology inpatient services. (Two (2) students each block. Available all blocks except December.) Traditional - EL Clinical Rotation (10 hours)

NEUR 652B. Clinical Neurology Acting Internship. Student will work under the supervision of house staff and attending staff on the inpatient Neurology services. This rotation provides supervised teaching and instructions on core neurological principles of localization, summation and formulation of assessments and treatment plans uniquely tailored to patients with stroke or general neurological disorders such as epilepsy, neuromuscular disorders, neuro-inmunological disorders, neurodegenerative disorders and neuro-ophthalmological disorders, to name a few, that are of significant severity or acuity to require inpatient admission for diagnosis and/or treatment. Additionally, the student will experience the role of the subspecialist expert (the neurologist) as a consultant in the ED and various non-neurology inpatient services. (2 students each block. Available all blocks.) Traditional Clinical Rotation (5 hours)

NEUR 658A. Neuroscience Critical Care. This course is designed for the student considering neuroscience critical care or a closely related field as a discipline and will afford this experience as an acting internship. This clerkship was established to give future health care providers a unique
OB/GYN 661A. OB/GYN Research. This course is designed to teach M4 students research tools and their application to answering medically relevant research questions, specifically of interest to those specializing in Obstetrics & Gynecological research. (Ten (10) students each block. Available September only.) Traditional Independent Study (10 hours)

NEUR 851. Neurology Extramural. Extramural rotations for four weeks or longer can be arranged with the course director or chair’s approval for students who are interested in the specialty. (Available for senior medical students only. Available all months.) Traditional - EL Clinical Rotation (10 hours)

COG 852. Neurology Extramural. The course is designed for students pursuing a surgical career who are interested in increasing their knowledge of pelvic anatomy and fundamental surgical skills with an emphasis in minimally invasive surgery. The student will complete a structured curriculum that includes pelvic anatomy, surgical instrumentation, surgical energy, and fundamental laparoscopic skills. The student will participate in clinical activities including observation in the operating room one and one half days a week and will be involved in direct patient care two half days in outpatient gynecology clinics. The remainder of the time will be in self-directed study and surgical simulation skills. The student will be assigned a mentor from the Gynecology Division to supervise the completion of the course. (One (1) student each block. Available all blocks except for November and December.) Traditional Clinical Rotation (12 hours)

OB/GYN 655A. High Risk Obstetrics. The student will actively participate in the hospital management of high risk obstetric patients under the supervision of the Maternal-Fetal Medicine faculty and fellows. The student will also be involved with patients receiving genetic counseling and undergoing antenatal diagnosis. In addition to the clinical experience, tutorial sessions with perinatal faculty and fellows will provide the student with an understanding of current literature and an opportunity to explore a specific topic in-depth. (One (1) student each block. Available all blocks.) Traditional - EL Clinical Rotation (10 hours)

NEUR 852. Neurology Extramural. Extramural rotations for four weeks or longer can be arranged with the course director or chair’s approval for students who are interested in the specialty. (Available for senior medical students only. Available all months.) Traditional - EL Clinical Rotation (10 hours)

NS 655A. Neurosurgery. Four week rotation to be served at one of the Medical Center neurological services and will consist of patient care, diagnostic studies, surgery, as well as joint conferences and clinics. Independent study projects in areas of specific student interest will be assigned. (Four (4) students each block. Available all blocks.) Traditional - EL Clinical Rotation (12 hours)

NS 655B. Neurosurgery. Rotation to be served at one of the Medical Center neurological services and will consist of patient care, diagnostic studies, surgery, as well as joint conferences and clinics. Independent study projects in areas of specific student interest will be assigned. (Four (4) students each block. Available all blocks.) Traditional - EL Clinical Rotation (10 hours)

OB/GYN 656A. Operative Gynecology. Students will spend one calendar month with either the GYN A ( benign gynecology) or the GYN B (urogynecology) service. They will participate in all activities undertaken by the respective service including ambulatory clinics, operative experiences, conferences/didactics, small group sessions, and care for unscheduled hospital admissions. The student will work closely with the residents and faculty as a vital member of the team, carrying the same patient load that is expected of a PGY-1. This should prepare the student for this level of service activity upon graduation. (One (1) student each block. Available all blocks.) Traditional - EL Clinical Rotation (10 hours)

OB/GYN 656B. Operative Gynecology. Students will spend one calendar month with either the GYN A ( benign gynecology) or the GYN B (urogynecology) service. They will participate in all activities undertaken by the respective service including ambulatory clinics, operative experiences, conferences/didactics, small group sessions, and care for unscheduled hospital admissions. The student will work closely with the residents and faculty as a vital member of the team, carrying the same patient load that is expected of a PGY-1. This should prepare the student for this level of service activity upon graduation. (One (1) student each block. Available all blocks.) Traditional - EL Clinical Rotation (10 hours)

OB/GYN 658A. Gynecologic Oncology. The student will actively participate in the management of gynecologic oncology patients. This includes preoperative and postoperative management as well as assisting in radical surgery and medical admissions. An emphasis is placed on allowing an increased level of clinical responsibility and faculty interaction. (One (1) student each block. Available all blocks.) Traditional - EL Clinical Rotation (10 hours)

NS 655A. Neurosurgery. Extramural rotations for four weeks or longer can be arranged with the course director or chair’s approval for students who are interested in the specialty. (Available for senior medical students only. Available all months.) Traditional - EL Clinical Rotation (10 hours)

OB/GYN 655A. OB/GYN Ambulatory Care. Students are responsible for seeing new and return patients in the OB - GYN ambulatory care setting. On the first visit, a complete history is taken. On return patient visits, an interval note is recorded. All examinations, diagnoses and suggested treatments are supervised by the attending physician. (One (1) student each block. Available all blocks.) Traditional - EL Clinical Rotation (12 hours)

OB/GYN 661A. OB/GYN Research. This course is designed to teach M4 students research tools and their application to answering medically relevant research questions, specifically of interest to those specializing in Obstetrics & Gynecological research. (Ten (10) students each block. Available September only.) Traditional Independent Study (10 hours)

OB/GYN 661B. OB/GYN Research. This course is designed to teach M4 students research tools and their application to answering medically relevant research questions, specifically of interest to those specializing in Obstetrics & Gynecological research. (Ten (10) students each block. Available September only.) Traditional Independent Study (10 hours)

OB/GYN 655A. OB/GYN Ambulatory Care. Students are responsible for seeing new and return patients in the OB - GYN ambulatory care setting. On the first visit, a complete history is taken. On return patient visits, an interval note is recorded. All examinations, diagnoses and suggested treatments are supervised by the attending physician. (One (1) student each block. Available all blocks.) Traditional - EL Clinical Rotation (12 hours)

OB/GYN 655A. OB/GYN Ambulatory Care. Students are responsible for seeing new and return patients in the OB - GYN ambulatory care setting. On the first visit, a complete history is taken. On return patient visits, an interval note is recorded. All examinations, diagnoses and suggested treatments are supervised by the attending physician. (One (1) student each block. Available all blocks.) Traditional - EL Clinical Rotation (12 hours)

OB/GYN 655A. OB/GYN Ambulatory Care. Students are responsible for seeing new and return patients in the OB - GYN ambulatory care setting. On the first visit, a complete history is taken. On return patient visits, an interval note is recorded. All examinations, diagnoses and suggested treatments are supervised by the attending physician. (One (1) student each block. Available all blocks.) Traditional - EL Clinical Rotation (12 hours)

OB/GYN 655A. OB/GYN Ambulatory Care. Students are responsible for seeing new and return patients in the OB - GYN ambulatory care setting. On the first visit, a complete history is taken. On return patient visits, an interval note is recorded. All examinations, diagnoses and suggested treatments are supervised by the attending physician. (One (1) student each block. Available all blocks.) Traditional - EL Clinical Rotation (12 hours)
PATH 651A. Pathology, Anatomic. This elective is for students with an interest in anatomic pathology. The student will be introduced to the various disciplines in anatomic pathology, including general surgical pathology, autopsy, cytopathology, and subspecialties such as hematopathology, dermatopathology, neuropathology, and pediatric pathology to name a few. The student will learn the gross and microscopic pathology of surgical specimens and assist in performing an autopsy, including a review of history, examination of microscopic sections, and correlation of the pathologic findings with the clinical picture. This learning experience will be enhanced by attendance at conferences, where the student will review, as well as present interesting and unusual material. The student will be expected to complete all assignments for the month, including glass slide and digital image case studies, autopsy presentation, and review of pertinent and current literature. (Three (3) students each block. Available all blocks except July. MUST BE SCHEDULED IN ADVANCE.) Traditional - EL Lecture/Lab (10 hours)

PATH 652A. Pathology, Clinical. An elective designed to introduce the student to the practice of Clinical Pathology through participation in activities of each section including Chemistry, Transfusion Medicine (Blood Bank), Microbiology, and Hematology. The student will develop a working knowledge of how the laboratory functions in providing laboratory results, and the interpretation of results in clinical practice. (Two (2) students each block. Available all blocks except July. MUST BE SCHEDULED IN ADVANCE.) Traditional - EL Laboratory (10 hours)

PATH 652B. Pathology, Clinical. An elective designed to introduce the student to the practice of Clinical Pathology through participation in activities of each section including Chemistry, Transfusion Medicine (Blood Bank), Microbiology, and Hematology. The student will develop a working knowledge of how the laboratory functions in providing laboratory results, and the interpretation of results in clinical practice. (Two (2) students each block. Available blocks 3-12. MUST BE SCHEDULED IN ADVANCE.) Traditional Clinical Rotation (5 hours)

PATH 851. Ophthalmology Extramural. Extramural rotations for four weeks or longer can be arranged with the course director or chair's approval for students who are interested in the specialty. (Available for senior medical students only. Available all months.) Traditional - EL Clinical Rotation (10 hours)

ORTHO 851. Orthopedic Surgery Extramural. Extramural rotations for four weeks or longer can be arranged with the course director or chair's approval for students who are interested in the specialty. (Available for senior medical students only. Available all months.) Traditional - EL Clinical Rotation (10 hours)

ORTHO 852. Orthopedic Surgery Extramural. Extramural rotations for four weeks or longer can be arranged with the course director or chair's approval for students who are interested in the specialty. (Available for senior medical students only. Available all months.) Traditional - EL Clinical Rotation (10 hours)

OTO 661A. Otolaryngology - Surgical. This course is designed for students considering a residency in otolaryngology. The student will be exposed to outpatient, inpatient and surgical aspects of otolaryngology. Emphasis will be placed on understanding head and neck disorders. (Three (3) students each block July through October. One (1) student each block November through May.) Traditional - EL Clinical Rotation (12 hours)

OTO 662B. Primary Care Otolaryngology. This course is designed for those students pursuing primary care fields to gain a better understanding of otolaryngology. Emphasis will be placed on recognizing and first line treatment of common head and neck diseases and proper consultation guidelines. (1 student each block. Available all blocks.) Traditional Clinical Rotation (5 hours)

OTO 663A. Otolaryngology - Research. The student will participate in clinical and/or laboratory research. The student will be assigned a research mentor to facilitate the learning of research design, research techniques, data collection, statistical analysis, manuscript development, and presentation skills. Students may join an existing project or submit original ideas. (Two (2) students each block unless course director makes an exception. Available all blocks.) Traditional - EL Clinical Rotation (10 hours)

OTO 851. Otolaryngology Extramural. Extramural rotations for four weeks or longer can be arranged with the course director or chair's approval for students who are interested in the specialty. (Available for senior medical students only. Available all months.) Traditional - EL Clinical Rotation (10 hours)

OTO 852. Otolaryngology Extramural. Extramural rotations for four weeks or longer can be arranged with the course director or chair's approval for students who are interested in the specialty. (Available for senior medical students only. Available all months.) Traditional - EL Clinical Rotation (10 hours)

PED 651A. Pediatric Ambulatory Care. Under the supervision of one attending, the student can practice history and physical exam skills as well as patient care skills during a wellness and acute care visit in our Pediatric Ambulatory Clinics. Will practice complete presentations,
including possible differential diagnosis and treatment. CLIPP cases and basic pediatric lectures will review Core General Pediatrics. The rotation requires six half days a week and may have up to four (4) students each block. Available all blocks. Traditional - EL Clinical Rotation (12 hours)

PED 652A. Pediatric Externship. The extern functions as a first year house officer under the supervision of the resident and the attending staff. (Four (4) students each block. Available all blocks.) Traditional - EL Clinical Rotation (12 hours)

PED 653A. Neonatal Medicine. Study and management of disorders which occur in the first 28 days of life including the sequelae of extreme prematurity. Experience is directed particularly toward the management of acute problems in the immediate newborn period such as stabilization and resuscitation, acid base balance, ventilator management and nutrition. Students will function as an acting intern with a limited number of patients. Students will have four night calls during their month. Night call will end at 10:00 pm. (Four (4) students each block. Available all blocks.) Traditional - EL Clinical Rotation (12 hours)

PED 654A. Child Development Clinic. The student participates as part of the clinic team. He/She works up patients referred to this clinic, follows some patients through psychological testing, speech evaluation, and hearing evaluation, biochemical screening, and final disposition and counseling. Designed for those interested in pediatrics, neurology, family practice and/or psychiatry. (One (1) student each block. Available all blocks.) Traditional - EL Clinical Rotation (10 hours)

PED 655A. Pediatric Cardiology. This course is an introduction to all aspects of congenital heart disease. Students function as externs (i.e. learners) and will work in pediatric cardiology clinic, pediatric ICU, and pediatric catheterization laboratory. Students will be actively engaged by PCAR staff with the primary goal of learning basic concepts in CHD pathophysiology, interpreting common cardiac tests (e.g. ECGs), developing thorough, age-appropriate differential diagnoses and basic treatment plans. (One (1) student each block. Available all blocks.) Traditional - EL Clinical Rotation (12 hours)

PED 656A. Pediatric Hematology-Oncology. Consists of training in normal and abnormal peripheral blood and bone marrow morphology and participation in the inpatient and outpatient care of pediatric patients with hematology-oncology problems. (One (1) student each block. Available all blocks.) Traditional - EL Clinical Rotation (10 hours)

PED 656B. Pediatric Hematology Oncology. Consists of training in normal and abnormal peripheral blood and bone marrow morphology and participation in the inpatient and outpatient care of pediatric patients with hematology-oncology problems. (One (1) student each block. Available all blocks.) Traditional Clinical Rotation (5 hours)

PED 657A. Pediatric Endocrinology. The student functions as an extern, seeing outpatients and inpatients, and gains knowledge in related function studies. (One (1) student each block. Available all blocks.) Traditional - EL Clinical Rotation (10 hours)

PED 657B. Pediatric Endocrinology. The student functions as an extern, seeing outpatients and inpatients, and gains knowledge in related function studies. (Two (2) students each month except the block of July, December and May, which take two (2) students each month. Available all other blocks.) Traditional - EL Clinical Rotation (12 hours)

PED 658A. Pediatric Allergy-Immunology. The student will serve as an extern with training involving normal development and care of acute and chronic neurologic problems in both inpatient and outpatient clinics. The student is also required to research a topic related to the nervous system and give an oral presentation. (One (1) student each block. Available all blocks.) Traditional - EL Clinical Rotation (10 hours)

PED 659A. Pediatric Intensive Care. The student functions as an extern evaluating patients with rheumatologic disorders. Special emphasis is placed on the interpretation of diagnostic tests, natural history, and treatment of acute and chronic disorders of the kidney. Students are also exposed to children with end stage renal disease undergoing dialysis or transplantation. (One (1) student each block. Available all blocks.) Traditional - EL Clinical Rotation (10 hours)

PED 660A. Pediatric Gastroenterology. The student will function as an extern seeing patients in the emergency department. Experience is directed at the management of acute pediatric illnesses and injuries. Students will perform an equal number of shifts as a pediatric intern. Students will each month except the block of July, December and May, which take one (1) student. Available all other blocks.) Traditional - EL Clinical Rotation (12 hours)

PED 661A. Pediatric Rheumatology. The student functions as an extern evaluating patients with rheumatologic disorders. Special emphasis is placed on evaluation of history, physical findings and specific lab tests in order to develop a practical, logical approach to management of autoimmune disorders. (One (1) student each block. Available all blocks.) Traditional - EL Clinical Rotation (10 hours)

PED 662A. Special Pediatrics. Individualized programs for four weeks or longer can be arranged with the chairman of the department for students who are interested in obtaining experience in clinical blocks not offered at UMMC or who wish to engage in individualized Pediatric programs at UMMC or other medical schools. (One (1) student each block. Available all blocks.) Traditional Clinical Rotation (5 hours)

PED 662B. Special Pediatrics. Individualized programs for four weeks or longer can be arranged with the chairman of the department for students who are interested in obtaining experience in clinical blocks not offered at UMMC or who wish to engage in individualized Pediatric programs at UMMC or other medical schools. (One (1) student each block. Available all blocks.) Traditional Clinical Rotation (5 hours)

PED 663A. Pediatric Infectious Diseases. Primary objective is to provide an understanding of the fundamentals of infectious diseases and infection control. The student will function as a house officer, i.e. answering consultations and attending ID. conferences and journal club. Additional experiences will include microbiology laboratory rounds and instruction in the pharmacokinetics of antibiotics. (One (1) student each block. Available all blocks.) Traditional - EL Clinical Rotation (12 hours)

PED 663B. Pediatric Infectious Diseases. Primary objective is to provide an understanding of the fundamentals of infectious diseases and infection control. The student will function as a house officer, i.e. answering consultations and attending ID. conferences and journal club. Additional experiences will include microbiology laboratory rounds and instruction in the pharmacokinetics of antibiotics. (One (1) student each block. Available all blocks.) Traditional - EL Clinical Rotation (10 hours)

PED 664A. Pediatric Nephrology. The student functions as an extern and participates in the evaluation and care of children with kidney diseases. Special emphasis is placed on the interpretation of diagnostic tests, natural history, and treatment of acute and chronic disorders of the kidney. Students are also exposed to children with end stage renal disease undergoing dialysis or transplantation. (One (1) student each block. Available all blocks.) Traditional - EL Clinical Rotation (10 hours)

PED 664B. Pediatric Nephrology. The student functions as an extern and participates in the evaluation and care of children with kidney diseases. Special emphasis is placed on the interpretation of diagnostic tests, natural history, and treatment of acute and chronic disorders of the kidney. Students are also exposed to children with end stage renal disease undergoing dialysis or transplantation. (One (1) student each block. Available all blocks.) Traditional - EL Clinical Rotation (10 hours)

PED 665A. Pediatric Emergency Room. The student functions as an extern evaluating patients with digestive disorders. The emphasis of this elective will be to develop a practical, logical approach to the diagnosis and management of children with gastrointestinal dysfunction. (One (1) student each block. Available all blocks.) Traditional - EL Clinical Rotation (10 hours)

PED 666A. Pediatric Emergency Room. The student functions as an extern evaluating patients with digestive disorders. The emphasis of this elective will be to develop a practical, logical approach to the diagnosis and management of children with gastrointestinal dysfunction. (One (1) student each block. Available all blocks.) Traditiona - EL Clinical Rotation (5 hours)
PED 672A. Pediatric Hospitalist. This course will allow 4th year students to work with pediatric hospitalists. The hospitalist’s service co-
manages patients with the different pediatric surgical specialties as well as seeing general pediatric inpatients. The student will function as an
exert in seeing patients with the pediatric resident and attending. (One (1) student each block. Available all blocks except December, which
takes no students.) Traditional Clinical Rotation (12 hours)

PED 673A. Pediatric Pulmonology. This elective will allow 4th year students to function as an exert and obtain training in the management
of pediatric patients with pulmonary disorders, both in the inpatient and outpatient settings. Special emphasis is placed on the interpretation
of diagnostic testing modalities, natural history and treatment of common pulmonary conditions. Student may also function as part of the
bronchoscopic team. (One (1) student each block, except the block of December. Available all other blocks.) Traditional Clinical Rotation (12 hours)

PED 673B. Pediatric Pulmonology. This elective will allow 4th year students to function as an exert and obtain training in the management
of pediatric patients with pulmonary disorders, both in the inpatient and outpatient settings. Special emphasis is placed on the interpretation
of diagnostic testing modalities, natural history and treatment of common pulmonary conditions. Student may also function as part of the
bronchoscopic team. (1 student each block. Available all blocks except for 6 and 7.) Traditional Clinical Rotation (5 hours)

PED 674B. Pediatric Palliative Care. This is a 2 week elective rotation in Pediatric Palliative Care where fourth year medical students will gain
experience in the diverse aspects of Palliative Medicine, including: discussion goals of care for patients and families dealing with serious illness;
management of refractory symptoms such as pain, dyspnea, anxiety, and others; including end of life care; provision of supportive care through
compassionate communication with patients and families grappling with uncertain or terminal prognosis; and a focus on the quality of life of
the whole patient and family. Students will participate in the inpatient and outpatient visits of patients being cared for by the Pediatric Palliative
Care team, including family conferences, bereavement meetings, and end-of-life/hospice management. There will also be occasional discussion-
based lectures on topics central to Pediatric Palliative Care. In this rotation, it is hoped that students, through the experience of direct patient
care and observation, should demonstrate knowledge about established and evolving biomedical, clinical and social-behavioral sciences
relevant to the care of infants and children with life-limiting and life-threatening conditions and to their families, and relate this knowledge to the
growing field of Hospice and Palliative Medicine. Additionally, students will recognize the importance of whole-person care, including
identifying and treating the psycho/social/spiritual dimensions of suffering, as well as gain practice in the important work of self-awareness and
self-care for physicians dealing with difficult cases. (2 students each block. Available all blocks.) Traditional Clinical Rotation (5 hours)

PED 675A. Pediatric Interventional Cardiology. This is a 4 week rotation. Interventional cardiology will allow students to be involved with the
care of patients receiving cardiac interventional procedures. This will include training to improve coronary and peripheral circulation and alleviating valvular stenosis and treat structural heart disease. This offers the opportunity to be directly involved in patient care. (2 students each block. Available all blocks.) Traditional Clinical Rotation (5 hours)

PED 851. Pediatrics Extramural. Extramural rotations for four weeks or longer can be arranged with the course director or chair’s approval
for students who are interested in the specialty. (Available for senior medical students only. Available all months.) Traditional - EL Clinical Rotation (10 hours)

PED 852. Pediatrics Extramural. Extramural rotations for four weeks or longer can be arranged with the course director or chair’s approval
for students who are interested in the specialty. (Available for senior medical students only. Available all months.) Traditional - EL Clinical Rotation (10 hours)

PHARM 652A. Pharmacology. This is an independent study course in which students are expected to identify a topic in pharmacology and
therapeutics, retrieve pertinent basic and clinical data from the scientific literature, and prepare a written report in which those data are
discussed in relation to the presentation of a disease, future directions for disease management and overcoming the limitations of existing
(accepted) pharmacotherapy. The topic of the report should be a novel aspect of pharmacotherapy including, but not limited to, a discrepancy
they have encountered in the clinical use of a drug/-drug class, a novel therapy (ies) for a disease for which current drugs might now fully prevent
disease progression or an emerging field of pharmacology. Pharmacology 620 is a prerequisite. Inquiries concerning the course can be made with
the department chair, director of the second year medical pharmacology course or any other pharmacology faculty. Arrangements for taking the
course must be made in advance of registration. (Available blocks 2, 3, 4, 8 and 9).

PHYSIO 651A. Physiology Senior Elective. A course of study synthesized from available resources of the department along the lines of interest
indicated by the student. The elective consists of a thorough review of pertinent literature, participation in ongoing projects, attendance at
seminars, and a final examination and/or prepared thesis and required. (Five (5) students each block. Available all blocks.) Traditional - EL Clinical Rotation (10 hours)

PM 657A. Clinical Preventive Medicine. This is a four (4) week rotation in preventive medicine where fourth year medical students will gain
hands-on experience in nutrition, physical activity, weight management, stress reduction, and sleep management as tools in preventing and
reversing chronic diseases and their complications. This rotation is designed for students who are interested in understanding and intervening in
the root causes driving the chronic disease epidemic in Mississippi and the country. Utilizing case presentations, lectures, discussions,
readings, and hands-on experiences, students will: 1) gain the knowledge to live a healthy lifestyle through proper nutrition, physical activity,
weight management, stress reduction and smoking cessation. 2) achieve the ability to provide effective lifestyle counseling in the clinical setting and
3) identify and demonstrate understanding of the role of health care partners in achieving lifestyle changes for their patients. (2 students each block. Available all blocks.) Traditional Clinical Rotation (10 hours)

PM 660A. Preventive Medicine. This is a 4-week elective for fourth year medical students interested in health policy. During this rotation
students will work directly with Theresia Hana, executive director of the Center for Mississippi Health Policy (http://www.mshealthpolicy.com/), and her staff. Students will attend Public Health, Medicaid, and other legislative committee meetings at the Capitol building during the legislative session in February and will also view floor debates in February (in-person or by webcast). In addition, there will be opportunity for students to interact with lobbyists and other professionals involved in the healthcare field. Sessions will be also be arranged with the legislative liaison of the state health department. Throughout the rotation, students will follow bills that are relevant to the medical field in order to gain an understanding of the complexities of the process by which a bill becomes a law. Students will also have discussions with legislative staff at UMMS on what constitutes appropriate institutional advocacy. (Two (2) students each rotation. Available in February only.) Traditional Clinical Rotation (10 hours)

PSYCH 653A. General Psychiatry. Students may propose their own plan of study which must be approved by the Department prior to the start of
the block. Opportunities are available for students to design, with guidance, a clinical elective that meets their specific needs, e.g., combining
inpatient and outpatient work, or participating in ongoing clinically relevant basic research projects within the department. Such projects can
be supervised by faculty members in any of the disciplines (psychiatry, psychology and research) represented within the department. (Three (3) students each block. Available all blocks.) Traditional Clinical Rotation (10 hours)

PSYCH 653B. General Psychiatry. Students may propose their own plan of study which must be approved by the Department prior to the start of
the block. Opportunities are available for students to design, with guidance, a clinical elective that meets their specific needs, e.g., combining
inpatient and outpatient work, or participating in ongoing clinically relevant basic research projects within the department. Such projects can

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be supervised by faculty members in any of the disciplines (psychiatry, psychology and research) represented within the department. (3 students each block. Available all blocks.) Traditional Clinical Rotation (5 hours)

**PSYCH 658A. Sleep Disorders.** The senior student spends four weeks assigned to the Sleep Disorders Center at UMMC. The rotation exposes the student to the evaluation, differential diagnosis, and treatment of sleep disorders. Under close faculty supervision the student participates in initial patient evaluations, follow-up appointments, and reviewing polysomnograms. (1 student per block. Available all blocks except December and January.) Traditional - EL Clinical Rotation (10 hours)

**PSYCH 658B. Sleep Disorders.** The senior student spends four weeks assigned to the Sleep Disorders Center at UMMC. The rotation exposes the student to the evaluation, differential diagnosis, and treatment of sleep disorders. Under close faculty supervision the student participates in initial patient evaluations, follow-up appointments, and reviewing polysomnograms. (1 student per block. Available all blocks except 7 and 8.) Traditional Clinical Rotation (5 hours)

**PSYCH 659A. Behavioral Health Specialty Clinics.** The senior student spends four weeks assigned to the UMMC Health Specialty Clinics, where he/she receives training and experience in the treatment of patients with a wide range of acute and chronic psychiatric disorders. The student attends daily clinics, as well as scheduled teaching sessions. He/she gains experience in all modalities used in outpatient psychiatric care and performs initial evaluations on a select number of patients, and patients presenting for weekly follow-up visits. The student also learns about the coordination of ancillary services, including vocational rehabilitation, social services and becomes more familiar with other agencies offering service to psychiatric patients. The student assumes a higher level of responsibility and accountability within the limits set forth by the School of Medicine. The student is expected to be closely involved in the total care of each patient including medication and therapy management. Close supervision by attending faculty is provided throughout the block. Two (2) students per block. Available all blocks. Traditional Clinical Rotation (10 hours)

**PSYCH 659B. Behavioral Health Specialty Clinics.** The senior student assigned to the UMMC Behavior Health Specialty Clinics, where he/she receives training and experience in the treatment of patients with a wide range of acute and chronic psychiatric disorders. The student attends daily clinics, as well as scheduled teaching sessions. He/she gains experience in all modalities used in outpatient psychiatric care and performs initial evaluations on a select number of patients, and patients presenting for weekly follow-up visits. The student may also choose to participate in other clinic activities, e.g., groups. The student also learns about the coordination of ancillary services, including vocational rehabilitation, social services and becomes more familiar with other agencies offering service to psychiatric patients. The student assumes a higher level of responsibility and accountability within the limits set forth by the School of Medicine. The student is expected to be closely involved in the total care of each patient including medication and therapy management. Close supervision by attending faculty is provided throughout the block. (1 student per block. Available all blocks except 7 and 8.) Traditional Clinical Rotation (5 hours)

**PSYCH 661A. Senior Elective in Acute Care Psychiatry.** This four week course is designed to provide senior medical students interested in the clinical practice of psychiatry with the opportunity to extend and deepen their exposure to addiction psychiatry, including medication-assisted treatment of substance use disorders. Students will function as subinterns conducting independent interviews, proposing individualized treatment plans, arranging admission to psychiatric inpatient facilities when necessary, developing transfer plans, and submitting chart notes. In addition, senior medical students serve as mentors to junior clerks, reviewing notes and presentations prior to review by residents and attendings. The bulk of time in this course (80%) will be spent in clinical settings under the supervision of attending psychiatrists and psychologists as well as senior residents in the Department of Psychiatry in the UMMC. The remaining time (20%) will be spent on a capstone project assignment. The topic of the project will be identified at the start of the elective in collaboration with the course directors and will focus on an advanced topic in mental health care. Capstone projects will be presented to faculty and residents at the conclusion of the elective. (Available all blocks. Can accommodate a maximum of 2 students per block) Traditional Clinical Rotation (10 hours)

**PSYCH 661B. Senior Elective in Acute Care Psychiatry.** This course is designed to provide senior medical students interested in the clinical practice of psychiatry with the opportunity to extend and deepen their exposure to consult/liaison psychiatry and psychiatric emergency services. Students will function as subinterns conducting independent interviews, proposing individualized treatment plans, arranging admission to psychiatric inpatient facilities when necessary, and developing transfer plans. In addition, senior medical students serve as mentors to junior clerks, reviewing notes and presentations prior to review by residents and attendings. The bulk of time in this course (80%) will be spent in clinical settings under the supervision of attending psychiatrists and psychologists as well as senior residents in the Department of Psychiatry in the UMMC. The remaining time (20%) will be spent on a capstone project assignment. The topic of the project will be identified at the start of the elective in collaboration with the course directors and will focus on an advanced topic in mental health care. Capstone projects will be presented to faculty and residents at the conclusion of the elective. (Available all blocks. Can accommodate a maximum of 2 students per block) Traditional Clinical Rotation (10 hours)

**PSYCH 662A. Senior Elective in Inpatient Psychiatry.** This month-long course of approximately 160 hours is designed to provide senior medical students interested in the clinical practice of psychiatry with the opportunity to extend and deepen their exposure to adult inpatient psychiatry. Students will function as subinterns conducting independent interviews, proposing individualized treatment plans, arranging social work meetings and family conferences, and developing aftercare plans. In addition, senior medical students serve as mentors to junior clerks, reviewing notes and presentations prior to review by residents and attendings. The bulk of time in this course (80%) will be spent in clinical settings under the supervision of attending psychiatrists and psychologists as well as senior residents in the Department of Psychiatry in the UMMC. The remaining time (20%) will be spent on a capstone project assignment. The topic of the project will be identified at the start of the elective in collaboration with the course directors and will focus on an advanced topic in mental health care. Capstone projects will be presented to faculty and residents at the conclusion of the elective. (Available all blocks. Can accommodate a maximum of 2 students per block, depending on the patient census of the inpatient units.) Traditional Clinical Rotation (10 hours)

**PSYCH 662B. Inpatient Psychiatry.** This course is designed to provide senior medical students interested in the clinical practice of psychiatry with the opportunity to extend and deepen their exposure to adult inpatient psychiatry. Students will function as subinterns conducting independent interviews, proposing individualized treatment plans, arranging social work meetings and family conferences, and developing aftercare plans. In addition, senior medical students serve as mentors to junior clerks, reviewing notes and presentations prior to review by residents and attendings. The bulk of time in this course (80%) will be spent in clinical settings under the supervision of attending psychiatrists and psychologists as well as senior residents in the Department of Psychiatry in the UMMC. The remaining time (20%) will be spent on a capstone project assignment. The topic of the project will be identified at the start of the elective in collaboration with the course directors and will focus on an advanced topic in mental health care. Capstone projects will be presented to faculty and residents at the conclusion of the elective. (2 students per block, depending on the patient census of the inpatient units. Available all blocks.) Traditional Clinical Rotation (5 hours)

**PSYCH 663A. Addiction Psychiatry.** This four week course of approximately 160 hours is designed to provide senior medical students interested in the clinical practice of psychiatry with the opportunity to extend and deepen their exposure to addiction psychiatry, including medication-assisted treatment of substance use disorders. Students will function as subinterns conducting independent interviews, proposing...
individualized treatment plans, arranging admission to psychiatric inpatient facilities when necessary, developing transfer plans, and submitting chart notes. In addition, senior medical students serve as mentors to junior clerks, reviewing notes and presentations prior to review by residents and attendings. The bulk of time in this course (80%) will be spent in clinical settings under the supervision of attending psychiatrists and psychologists as well as senior residents in the Department of Psychiatry and Human Behavior. The remaining time (20%) will be spent on a capstone project assignment. The topic of the project will be identified at the start of the elective in collaboration with the course directors Drs. Saurabh and Paul and will focus on an advanced topic in mental health care for substance use disorders. Capstone projects will be presented to faculty and residents at the conclusion of the elective. Traditional Clinical Rotation (10 hours)

PSYCH 663B. Addiction Psychiatry. This two-credit elective course is designed to provide senior medical students interested in the treatment of patients with substance use disorders with the opportunity to extend and deepen their exposure to addiction psychiatry, including medication-assisted treatment of substance use disorders. The course is likely to be valuable for students planning to pursue specialties other than psychiatry who nevertheless want to be knowledgeable about evidence-based approaches to the diagnosis and treatment of substance use disorders. Students will function as subinterns conducting independent interviews, proposing individualized treatment plans, arranging admission to psychiatric inpatient facilities when necessary, developing transfer plans, and submitting chart notes. In addition, senior medical students serve as mentors to junior clerks, reviewing notes and presentations prior to review by residents and attendings. For this 2-week course, almost all time in the course will be spent in clinical settings under the supervision of attending psychiatrists and psychologists as well as senior residents in the Department of Psychiatry and Human Behavior. A small amount will be spent in seminars and case discussions. Traditional Clinical Rotation (10 hours)

PSYCH 851. Psychiatry Extramural. Extramural rotations for four weeks or longer can be arranged with the course director or chair’s approval for students who are interested in the specialty. (Available for senior medical students only. Available all months.) Traditional - EL Clinical Rotation (10 hours)

PSYCH 852. Psychiatry Extramural. Extramural rotations for four weeks or longer can be arranged with the course director or chair’s approval for students who are interested in the specialty. (Available for senior medical students only. Available all months.) Traditional - EL Clinical Rotation (10 hours)

RADIO 651A. Senior Radiology. This elective is for all students, including students pursuing a career in radiology as well as students seeking to become more sophisticated, better-informed users of imaging services. Completion of the third-year course, RADIO 631, is NOT a prerequisite. All students will sharpen their skills in selecting appropriate imaging studies and in recognizing and communicating the most important findings on those studies. One of the goals of this expanded elective is to prepare students for their remaining senior clerkships and for on-call duties during internship. Toward this end, critical imaging findings and typical emergency imaging work-ups are reviewed and emphasized. In addition to improving proficiency in the interpretation of chest radiographs, the student will also learn a basic approach to the interpretation of cross-sectional imaging studies, with an emphasis on CT. The student spends four weeks rotating through the various subspecialties of radiology: Body CT (where CT’s of the chest, abdomen and pelvis are read), Breast Imaging (Mammography), Cardiovascular Imaging, Chest Radiography, Neuroradiology, Nuclear Medicine, Pediatric Radiology, Ultrasoundography, and Vascular & Interventional Radiology. (Six (6) students per block. Available all blocks except May and December.) Traditional - EL Clinical Rotation (10 hours)

RADIO 651B. Senior Radiology. This elective is for all students, including students pursuing a career in radiology as well as students seeking to become more sophisticated, better-informed users of imaging services. Completion of the third-year course, RADIO 631, is NOT a prerequisite. All students will sharpen their skills in selecting appropriate imaging studies and in recognizing and communicating the most important findings on those studies. One of the goals of this expanded elective is to prepare students for their remaining senior clerkships and for on-call duties during internship. Toward this end, critical imaging findings and typical emergency imaging work-ups are reviewed and emphasized. In addition to improving proficiency in the interpretation of chest radiographs, the student will also learn a basic approach to the interpretation of cross-sectional imaging studies, with an emphasis on CT. The student spends four weeks rotating through the various subspecialties of radiology: Body CT (where CT’s of the chest, abdomen and pelvis are read), Breast Imaging (Mammography), Cardiovascular Imaging, Chest Radiography, Neuroradiology, Nuclear Medicine, Pediatric Radiology, Ultrasoundography, and Vascular & Interventional Radiology. (3 students per block. Available all blocks except 6, 7, and 12.) Traditional Clinical Rotation (5 hours)

RADIO 656A. Special Radiology Elective. A self-designated rotation on radiology clinical areas in which the student will rotate through one or two subspecialty areas of interest. Attendance is required, and must be a appropriately recorded to pass this block. The student will also present an interesting case observed during their rotation (15-20 minutes in length) at a departmental conference (as scheduled, or to the course director or his designate). Additional requirements may vary based on chosen subspecialty area. Completion of RADIO 651 is a pre-requisite. At the discretion of the course director, this pre-requisite may be waived, in certain circumstances. (Four (4) students per block. Available all blocks except May and December.) Traditional - EL Clinical Rotation (10 hours)

RADIO 656B. Special Radiology Elective. A self-designated rotation on radiology clinical areas in which the student will rotate through one or two subspecialty areas of interest. Attendance is required, and must be appropriately recorded to pass this block. The student will also present an interesting case observed during their rotation (15-20 minutes in length) at a departmental conference (as scheduled, or to the course director or his designate). Additional requirements may vary based on chosen subspecialty area. Completion of RADIO 651 is a pre-requisite. At the discretion of the course director, this pre-requisite may be waived, in certain circumstances. (2 students per block. Available all blocks.) Traditional Clinical Rotation (5 hours)

RADIO 657A. Interventional Radiology. This is a 4 week rotation. Interventional Radiology covers vascular, GI, GU and biliary procedures under fluoroscopic and ultrasound guidance. We also perform ultrasound and CT scan guided interventions. This offers the opportunity to be directly involved in patient care. (2 students each block. Available all blocks.) Traditional Clinical Rotation (10 hours)

RADIO 851. Radiology Extramural. Extramural rotations for four weeks or longer can be arranged with the course director or chair’s approval for students who are interested in the specialty. (Available for senior medical students only. Available all months.) Traditional - EL Clinical Rotation (10 hours)

RADIO 852. Radiology Extramural. Extramural rotations for four weeks or longer can be arranged with the course director or chair’s approval for students who are interested in the specialty. (Available for senior medical students only. Available all months.) Traditional - EL Clinical Rotation (10 hours)

RADIO 651A. Senior Radiation Oncology. This course is designed to introduce the student to basic concepts of radiotherapy, not only for those considering radiation oncology as a career, but also for those who are going to pursue medical or surgical oncology as their residencies. Students will participate in evaluation of patients with a wide variety of physical findings, under direct supervision of several faculty radiation oncologists. Ambulatory patients in treatment or follow-up clinics will be seen in addition to new consultations. Students will follow at least one new patient each week through simulation, administration of informed consent, patient teaching, treatment planning and implementation. Attendance at pediatric and adult tumor conferences will emphasize the importance of a multidisciplinary approach to cancer management. A reading list will be provided. (Two (2) students each block. Available all blocks.) Traditional - EL Clinical Rotation (10 hours)
RADONC 651B. Senior Radiation Oncology. This course is designed to introduce the student to basic concepts of radiotherapy, not only for those considering radiation oncology as a career, but also for those who are going to pursue medical or surgical oncology as their residencies. Students will participate in radiation oncology, allowing them to gain a wide variety of physical findings of radiation oncologists. Ambulatory patients in treatment for follow-up clinics will be seen in addition to new consultations. Students will follow at least one new patient each week through simulation, administration of informed consent, patient teaching, treatment planning and implementation. Attendance at pediatric and adult tumor conferences will emphasize the importance of a multidisciplinary approach to cancer management. A reading list will be provided. (2 students each block. Available all blocks.) Traditional Clinical Rotation (5 hours)

RADONC 651. Radiation Oncology Extramural. Extramural rotations for four weeks or longer can be arranged with the course director or chair's approval for students who are interested in the specialty. (Available for senior medical students only. Available all months.) Traditional - EL Clinical Rotation (10 hours)

RADONC 652. Radiation Oncology Extramural. Extramural rotations for four weeks or longer can be arranged with the course director or chair's approval for students who are interested in the specialty. (Available for senior medical students only. Available all months.) Traditional - EL Clinical Rotation (10 hours)

SURG 652A. General Surgery. This course allows the medical student to spend one month on an adult general surgery service functioning as a sub-intern. The student will be assigned significant patient care responsibilities with faculty and senior house staff supervision. Students will be allowed to choose between four general surgery services (Surgery A, Surgery B, Acute Care Surgery, and Veterans Administration), and will be given priority to a service on a first come, first serve basis. (Four (4) students each block. Available all blocks.) Traditional - EL Clinical Rotation (12 hours)

SURG 652B. General Surgery. This course allows the medical student to spend one month on an adult general surgery service functioning as a sub-intern. The student will be assigned significant patient care responsibilities with faculty and senior house staff supervision. Students will be allowed to choose between four general surgery services (Surgery A, Surgery B, Acute Care Surgery, and Veterans Administration), and will be given priority to a service on a first come, first serve basis. (2 students each block. Available all blocks.) Traditional Clinical Rotation (5 hours)

SURG 653A. Cardiothoracic Surgery. Particularly stressed is major heart surgery, and the pre and postoperative care of these patients. Angiography, catheterization and other diagnostic testing are emphasized. Congenital heart diseases and their therapy is part of the course as well. The student will also be exposed to a broad spectrum of cardiopulmonary surgical problems related to pulmonary, esophageal and chest wall abnormalities. Ward rounds, patient management, cardiac conferences, chest conferences, clinic follow-up and surgical assistance comprise the spectrum of duties. Cardiothoracic Surgery would consist of all clinics, consults and operations performed during the day. Research opportunities available. (Two (2) students each block. Available all blocks.) Traditional - EL Clinical Rotation (10 hours)

SURG 653B. Cardiothoracic Surgery. Particularly stressed is major heart surgery, and the pre and postoperative care of these patients. Angiography, catheterization and other diagnostic testing are emphasized. Congenital heart diseases and their therapy is part of the course as well. The student will also be exposed to a broad spectrum of cardiopulmonary surgical problems related to pulmonary, esophageal and chest wall abnormalities. Ward rounds, patient management, cardiac conferences, chest conferences, clinic follow-up and surgical assistance comprise the spectrum of duties. Cardiothoracic Surgery would consist of all clinics, consults and operations performed during the day. Research opportunities available. (1 student each block. Available all blocks.) Traditional Clinical Rotation (5 hours)

SURG 654A. Surgical Critical Care. The student will be an integral part of the team participating in the daily management of patients in either the Surgical Intensive Care Unit or the Cardiovascular Intensive Care Unit (based upon their residency area of interest). Emphasis will be placed on cardiopulmonary physiology, ventilator management, nutrition, and critical care management. Ethical and medical legal issues pertaining to critical care medicine will be discussed. Participation will be under the guidance of the ICU faculty. (Three (3) students each block. Available all blocks.) Traditional - EL Clinical Rotation (12 hours)

SURG 654B. Surgical Critical Care. The student will be an integral part of the team participating in the daily management of patients in either the Surgical Intensive Care Unit or the Cardiovascular Intensive Care Unit (based upon their residency area of interest). Emphasis will be placed on cardiopulmonary physiology, ventilator management, nutrition, and critical care management. Ethical and medical legal issues pertaining to critical care medicine will be discussed. Participation will be under the guidance of the ICU faculty. (1 student each block. Available all blocks.) Traditional Clinical Rotation (5 hours)

SURG 655A. Pediatric Surgery. The student will assume, with close senior resident and faculty supervision, a significant role in the total management of pediatric surgical patients. The student will have the opportunity to integrate fetal physiology and embryology knowledge into clinical care. The student will elect either an ambulatory or inpatient focus and the didactic and clinical expectations will be specific to the focus chosen. Most Pediatric surgery has become ambulatory in nature in terms of operations and clinic as well as daytime consultations. Departmental core conference attendance is required for all students. (Two (2) students each block. Available all blocks.) Traditional - EL Clinical Rotation (12 hours)

SURG 655B. Pediatric Surgery. The student will assume, with close senior resident and faculty supervision, a significant role in the total management of pediatric surgical patients. The student will have the opportunity to integrate fetal physiology and embryology knowledge into clinical care. The student will elect either an ambulatory or inpatient focus and the didactic and clinical expectations will be specific to the focus chosen. Most Pediatric surgery has become ambulatory in nature in terms of operations and clinic as well as daytime consultations. Departmental core conference attendance is required for all students. (1 student each block. Available all blocks.) Traditional Clinical Rotation (5 hours)

SURG 656A. Vascular Surgery. The students will have the opportunity to participate in the management and work up of patients with vascular disease. The settings will include the VAMC and University Hospital clinics and OR’s. The students will understand the physiology and anatomy of the circulatory system in health and disease and will learn to take an appropriate history and physical exam. Ambulatory focus will revolve around vascular interventions, clinics and outpatient or daytime surgery. (Two (2) students each block. Available all blocks.) Traditional - EL Clinical Rotation (12 hours)

SURG 656B. Vascular Surgery. The students will have the opportunity to participate in the management and work up of patients with vascular disease. The settings will include the VAMC and University Hospital clinics and OR’s. The students will understand the physiology and anatomy of the circulatory system in health and disease and will learn to take an appropriate history and physical exam. Ambulatory focus will revolve around vascular interventions, clinics and outpatient or daytime surgery. (1 student each block. Available all blocks.) Traditional Clinical Rotation (5 hours)

SURG 657A. Trauma Surgery. Students will participate in the care of injured patients in the ER and the OR and understand the principles of ATLS teaching. In addition, the students will have the opportunity to follow patients in an outpatient setting to understand the outcomes of trauma. The ambulatory focus will be limited to the clinics at the medical mall and daytime emergency room consults, especially those seen and subsequently either discharged or admitted to another service. Students will have the choice of participating in the daytime trauma service with night time call, or our "on-call," night float team working 5 nights per week for the month. (Two (2) students each block. Available all blocks.) Traditional - EL Clinical Rotation (12 hours)
SURG 657B. Trauma Surgery. Students will participate in the care of injured patients in the ER and the OR and understand the principles of ATLS teaching. In addition, the students will have the opportunity to follow patients in an outpatient setting to understand the outcomes of trauma. The ambulatory focus will be limited to the clinics at the medical mall and daytime emergency room consults, especially those seen and subsequently either discharged or admitted to another service. Students will have the choice of participating in the daytime trauma service with night time call, or our “on-call” night float team working 5 nights per week for the month. (1 student each block. Available all blocks.) Traditional Clinical Rotation (5 hours)

SURG 658A. Urology. Emphasis is placed upon clinical experience and responsibility. Students will participate in patient care in the hospital, operating rooms and clinics. Independent reading is encouraged and time is provided for formal teaching sessions. Research projects such as chart reviews and case reports are supported and encouraged. (Two (2) students each block. Available all blocks.) Traditional - EL Clinical Rotation (12 hours)

SURG 658B. Urology. Emphasis is placed upon clinical experience and responsibility. Students will participate in patient care in the hospital, operating rooms and clinics. Independent reading is encouraged and time is provided for formal teaching sessions. Research projects such as chart reviews and case reports are supported and encouraged. (1 student each block. Available all blocks.) Traditional Clinical Rotation (5 hours)

SURG 659A. Surgical Research. This elective is designed for students who have had previous and ongoing research experience with a Department of Surgery faculty member to allow dedicated time to continue their research endeavors. A letter of ongoing research is required from the Department of Surgery faculty member prior to approval into this four week elective. (Variable number of students each block. Available all blocks.) Traditional - EL Laboratory (10 hours)

SURG 660A. Plastic and Reconstructive Surgery. The objectives of this course include introduction to the elements of plastic surgery (grafts, flaps, craniofacial procedures and microsurgery) and their application to traumatic wounds, infection, cancer, reconstruction and congenital abnormalities. Participation by the student in clinical services allows for understanding of the planning, perioperative and overall management of these patients. Ambulatory care is based in the clinics and outpatient surgery. The student is expected to participate in all conferences and educational opportunities to expose the student to academic and research concepts in plastic surgery. Student projects and presentations will be strongly encouraged. (Two (2) students each block. Available all blocks.) Traditional - EL Clinical Rotation (12 hours)

SURG 660B. Plastic and Reconstructive Surgery. The objectives of this course include introduction to the elements of plastic surgery (grafts, flaps, craniofacial procedures and microsurgery) and their application to traumatic wounds, infection, cancer, reconstruction and congenital abnormalities. Participation by the student in clinical services allows for understanding of the planning, perioperative and overall management of these patients. Ambulatory care is based in the clinics and outpatient surgery. The student is expected to participate in all conferences and educational opportunities to expose the student to academic and research concepts in plastic surgery. Student projects and presentations will be strongly encouraged. (1 student each block. Available all blocks.)

SURG 665A. Breast Surgery. This course is focused on surgical diseases of the breast. Students will assist with the initial evaluation of patients with breast pathology and learn the diagnostic skills required to treat breast disease, determine when surgery is indicated and assist with postoperative care. Students will also participate in the operating room, and ward rounds when patients are hospitalized. (One (1) student each block. Available all blocks.) Traditional Clinical Rotation (5 hours)

SURG 665B. Breast Surgery. This course is focused on surgical diseases of the breast. Students will assist with the initial evaluation of patients with breast pathology and learn the diagnostic skills required to treat breast disease, determine when surgery is indicated and assist with postoperative care. Students will also participate in the operating room, and ward rounds when patients are hospitalized. (1 student each block. Available all blocks.) Traditional Clinical Rotation (5 hours)

SURG 666A. Outpatient Surgery Clinic. This course is designed to expose 4th year students to outpatient surgical patients across a variety of subspecialties. Students will evaluate surgical patient preoperatively determining the indications for surgical intervention and postoperatively to distinguish a normal versus a complicated postoperative course. Clinic schedule will be assigned by Course Director, taking into account student’s areas of interest when possible. (Three (3) students each block. Available all blocks.) Traditional - EL Clinical Rotation (12 hours)

SURG 666B. Outpatient Surgery Clinic. This course is designed to expose 4th year students to outpatient surgical patients across a variety of subspecialties. Students will evaluate surgical patient preoperatively determining the indications for surgical intervention and postoperatively to distinguish a normal versus a complicated postoperative course. Clinic schedule will be assigned by Course Director, taking into account student’s areas of interest when possible. (1 student each block. Available all blocks.) Traditional Clinical Rotation (5 hours)

SURG 668A. Transplant Surgery. Students will participate in the care of kidney, pancreas, and liver transplant patients, as well as hepatobiliary patients. Participation in at least one organ donor recover procedure is strongly encouraged. (Two (2) students each block. Available all blocks.) Traditional - Clinical Rotation (12 hours)

SURG 668B. Transplant Surgery. Students will participate in the care of kidney, pancreas, and liver transplant patients, as well as hepatobiliary patients. Participation in at least one organ donor recover procedure is strongly encouraged. (1 student each block. Available all blocks.) Traditional Clinical Rotation (5 hours)

SURG 669B. Surgery Resident Prep Course. This is a course that is designed to provide students with the practical information and skills needed to prepare for the intern year as a surgical resident. Students will participate in hands-on simulation, such as suturing, laparoscopic skills and other clinical skills; on call phone scenarios; and didactic lectures and workshops. This course is an M4 elective and only offered in the month of March. The maximum number of students is 12. Preference will be given to students who applied for general surgery or a surgical subspecialty. (12 students per block. Available blocks 11 and 12.) Traditional Clinical Rotation (5 hours)

SURG 851. Surgery Extramural. Extramural rotations for four weeks or longer can be arranged with the course director or chair's approval for students who are interested in the specialty. (Available for senior medical students only. Available all months.) Traditional - EL Clinical Rotation (10 hours)

SURG 852. Surgery Extramural. Extramural rotations for four weeks or longer can be arranged with the course director or chair's approval for students who are interested in the specialty. (Available for senior medical students only. Available all months.) Traditional - EL Clinical Rotation (10 hours)

FACULTY

Abdo, Ashraf, MD; Associate Professor-Medicine
Abraham, George, MD; Associate Professor-Medicine
Abussa, Tayser, MD; Associate Professor-Pediatrics
Adair, Thomas H., PhD; Professor-Physiology and Biophysics
Adams, John, MD; Assistant Professor-Anesthesiology
Adcock, Kim, PharmD; Professor-Pediatrics
Afridi, Shabina, MD; Assistant Professor-Medicine
Afshar, Sabahat, MD; Assistant Professor-Pediatrics
Aggarwal, Avichal, MD; Associate Professor-Pediatrics
Ahuja, Shradha, MD; Assistant Professor-Medicine
Aiken, Emem, MD; Assistant Professor-Pediatrics
Akerley, Brian, PhD; Associate Professor-Microbiology and Immunology
Akhtar, Israh, MD; Associate Professor-Pathology
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<th>Name</th>
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<td>Albrecht, Svenja, MD</td>
<td>Assistant Professor-Medicine</td>
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<td>Cornelius, Denise, PhD</td>
<td>Instructor-Emergency Medicine</td>
</tr>
<tr>
<td>Correa, Adolfo, MD</td>
<td>Professor-Medicine</td>
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<tr>
<td>Correia, John, PhD</td>
<td>Professor-Cell &amp; Molecular Biology</td>
</tr>
<tr>
<td>Cox, Robert, MD</td>
<td>Professor-Emergency Medicine; Associate Professor-Pharmacology and Toxicology</td>
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<td>Craddock, Puja, MD</td>
<td>Assistant Professor-Pediatrics</td>
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<tr>
<td>Craft, Barbara, MD</td>
<td>Associate Professor-Medicine</td>
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<td>Craig, Jasmina, MD</td>
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<td>Creswell, Lawrence, MD</td>
<td>Associate Professor-Surgery</td>
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<td>Crout, Jeffrey, MD</td>
<td>Professor-Pediatrics</td>
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<td>Crout, Teresa, MD</td>
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<td>Crowder, Kimberly, MD</td>
<td>Professor and Chair-Ophthalmology</td>
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<td>Cui, Dongmei, PhD</td>
<td>Professor-Preventive Medicine</td>
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<tr>
<td>Davis, Dereck, MD</td>
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<td>Professor-Surgery; Professor-Medicine</td>
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<td>Drummond, Heather, PhD</td>
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<td>Duzeit, William, MSc</td>
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<td>Ebeid, Makram, MBCH</td>
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<tr>
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<td>Emerson, Ashley, MD</td>
<td>Assistant Professor-Dermatology</td>
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<td>Garcia-Anton, Desiree, MBBS</td>
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<td>Garg, Padma, MD</td>
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<td>Garla, Vishnu, MD</td>
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<td>Gaught, Natalie, PhD</td>
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<td>George, Eric, PhD</td>
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<td>Ghanamah, Mohammed, MD</td>
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<td>Gibson, Kara, MA</td>
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Schumacher-Coffey, Julie, PhD; Professor-Psychiatry and Human Behavior
Schweinfurth, John, MD; Professor-Otolaryngology and Communicative Sciences
Scott, Charletta, MD; Assistant Professor-Medicine
Seawright, Ashley, NP; Instructor-Surgery
Senikto, Michal, MD; Assistant Professor-Medicine
Shaffery, James, PhD; Associate Professor-Psychiatry and Human Behavior
Shafi, Tariq, MD; Professor-Medicine
Shah, Niraj, MBBS; Assistant Professor-Medicine
Shake, Jay, MD; Professor-Surgery
Shakti, Divya, MD; Associate Professor-Pediatrics
Shamberger, Susan, MD; Assistant Professor-Radiology
Sheehan, John, MD; Associate Professor-Medicine
Shermer, Chester, MD; Professor-Emergency Medicine
Sherwood, Jula, MD; Assistant Professor-Pediatrics
Sheth, Michelle, MD; Associate Professor-Anesthesiology
Shiflett, Amber, MD; Associate Professor-Obstetrics and Gynecology
Shiflett, James, MD; Assistant Professor-Neurosurgery
Shipley, Sonya, MD; Assistant Professor-Family Medicine
Shores, Jennifer, MD; Professor-Pediatrics
Showalter, John, MD; Associate Professor-Family Medicine; Associate Professor-Medicine
Silver, Sara, DO; Assistant Professor-Pediatrics
Simpson, Kimberly, PhD; Associate Professor-Neurobiology and Anatomical Sciences
Simpson, Scott, MD; Assistant Professor-Pediatrics
Sims, Mario, MD; Associate Professor-Medicine
Sinning, Allan, PhD; Interim Chair and Professor-Neurobiology and Anatomical Sciences
Skelton, Thomas, MD; Professor-Medicine
Smith, Patrick, PhD, ABPP; Professor-Family Medicine; Professor-Surgery
Smith, Stanley, PhD; Associate Professor-Pharmacology and Toxicology
Snyder, David, MD; Assistant Professor-Surgery
Sones, James, MD; Professor-Medicine
Sopelak, Victoria, PhD; Associate Professor-Obstetrics and Gynecology
Sorey, Mary, MS; Instructor-Otolaryngology and Communicative Sciences
Sorey, William, MD; Professor-Pediatrics
Spankovich, Christopher, AuD, PhD; Associate Professor-Otolaryngology and Communicative Sciences
Speed, Joshua S., PhD; Assistant Professor-Physiology and Biophysics
Spencer, Charles, MD; Professor-Pediatrics
Spencer, Jessie, MD; Associate Professor-Medicine
Spradley, Frank T., PhD; Assistant Professor-Surgery; Instructor-Physiology and Biophysics
Spragins, Mary, AuD; Assistant Professor-Otolaryngology and Communicative Sciences
Spruzem, John, MD; Professor-Medicine
Stanley, Anza, MD; Assistant Professor-Pediatrics
Stanley-Copleand, Ashley, MD; Assistant Professor-Pediatrics
Stein, David E., PhD; Professor-Physiology and Biophysics
Steiner, Michael, MD; Assistant Professor-Radiology
Stempak, Lisa, MD; Assistant Professor-Pathology
Stephens, Amy, MD; Assistant Professor-Pediatrics
Sterling, Sarah, MD; Associate Professor-Emergency Medicine
Stewart, Jimmy, MD; Professor-Medicine; Professor-Pediatrics
Stewart, Patricia, MD; Assistant Professor-Medicine
Stockmeier, Craig, PhD; Professor-Psychiatry and Human Behavior
Storrs, Judd, PhD; Assistant Professor-Radiology
Stover, Kayla, PharmD; Associate Professor-Pharmacology and Toxicology
Stray, Stephen, PhD; Associate Professor-Microbiology and Immunology
Stringer, Scott, MD; MS; Professor and Chair-Otolaryngology and Communicative Sciences
Stringer, Susan, MS; Instructor-Otolaryngology and Communicative Sciences
Sstryk, Benjamin, MD; Assistant Professor-Orthopedic Surgery and Rehabilitation
Sturdvant, Grace, AuD; Assistant Professor-Otolaryngology and Communicative Sciences
Subauste, Angela R., MD; Associate Professor-Medicine; Assistant Professor-Physiology and Biophysics
Subauste, Jose, MD; Professor-Medicine
Sugg, Rebecca, MD; Associate Professor-Neurology; Assistant Professor-Radiology; Assistant Professor-Surgery
Sukkarieh, Handi, MD; Assistant Professor-Orthopedic Surgery and Rehabilitation
Sukumaran, Anju, MD; Assistant Professor-Pediatrics
Summers, Richard L., MD; Professor-Emergency Medicine; Professor-Physiology and Biophysics
Sundaram, Mecheri, MBBS; Professor-Neurology
Sutton, Monica, PhD; Professor-Pediatrics
Suzuki, Takeki, MD; Assistant Professor-Medicine
Swiatlo, Edwin, MD; Professor-Medicine; Assistant Professor-Microbiology and Immunology
Syed, Maryam, PhD; Assistant Professor-Cell & Molecular Biology
Sykes, Leon, MD; Professor-Surgery
Tahtavi, Michelle, MD; Assistant Professor-Obstetrics and Gynecology
Takalapalli, Ramarao, MBBS; Professor-Anesthesiology
Tamanna, Sadela, MD; Associate Professor-Medicine
Tanawuttivat, Tanyanan, MD; Assistant Professor-Medicine
Tandon, Ritesh, PhD; Associate Professor-Microbiology and Immunology
Tang, Aihua, PhD; Assistant Professor-Microbiology and Immunology
Tang, Shou-Ching, MD; Professor-Medicine
Tanner, Stephanie, MD; Instructor-Cell & Molecular Biology
Tansey, Keith, MD; Professor-Neurosurgery
Tarver, Kim, MD; Assistant Professor-Medicine
Tarver, Emily, MD; Assistant Professor-Emergency Medicine
Taylor, Erin B., Ph.D; Instructor-Physiology and Biophysics
Taylor, Mary, MD; MSCI, Professor-Pediatrics; Professor-Anesthesiology
Tennin, L, MD; Assistant Professor-Medicine
Thaggard, Anson, MD; Associate Professor-Radiology
Thigpen, Calvin, MD; Assistant Professor-Medicine
Thomas, Kathryn, MD; Assistant Professor-Pediatrics
Thompson, James, MD; Professor-Emergency Medicine
Tieu, Brian, MD; Assistant Professor-Ophthalmology
Tinpis, Sajani, MD; Professor-Pediatrics
Tiscareno, Jennifer, MD; Assistant Professor-Emergency Medicine
Tollefson, Brian, MD; Professor-Emergency Medicine; Assistant Professor-Orthopedic Surgery and Rehabilitation
Tonore, Thais, MD; Professor-Family Medicine
Topaloglu, Ali, MD; Associate Professor-Pediatrics
Troutman, William, MD; Assistant Professor-Pediatrics
Trujillo, Rodolfo, MD; Instructor-Dermatology
Tucci, Michelle, PhD; Professor-Orthopedic Surgery and Rehabilitation
Tucker, Douglas, MD; Assistant Professor-Anesthesiology
Tucker, Lauren, MD; Assistant Professor-Pediatrics
Tullis, Jason, MD; Associate Professor-Neurosurgery
Turner, Nicholas, MD; Assistant Professor-Radiology
Twyner, Channing, MD; Assistant Professor-Anesthesiology
Tyrone, Rachel, MS; Instructor-Otolaryngology and Communicative Sciences
Uhaidhilq, Muhammad, MD; Assistant Professor-Pediatrics
Ullah, Mohammad, MBBS; Associate Professor-Medicine
Undesser, Eric, MD; Associate Professor-Neurology
Upchurch, Mallory, MS; Instructor-Otolaryngology and
Communicative Sciences
Urbe, Juan, MD; Assistant Professor-Neurosurgery
Uschmann, Hartmut, MD; Professor-Neurology; Associate
Professor-Neurosurgery
VaiIa, Pradeep Kumar, MD; Assistant Professor-Medicine
Vale, Henrique, MD; Assistant Professor-Anesthesiology
Vallender, Eric, PhD; Associate Professor-Psychiatry and
Human Behavior
Vanucci, Andrea, MD; Professor-Anesthesiology
Vaughn, Cynthia, MD; Assistant Professor-Anesthesiology
Vetter, Douglas, PhD; Associate Professor-Neurobiology and
Anatomical Sciences
Vick, Kenneth, MD; Professor-Surgery
Vick, Laura, MD; Associate Professor-Surgery
Vig, Farminder, PhD; Professor-Neurology; Professor-Cell &
Molecular Biology; Associate Professor-Neurobiology and
Anatomical Sciences
Vijayakumar, Srinivasan, MBBS, DMRT, DABR, FCR; Professor
and Chair-Radiation Oncology
Vijayakumar, Vani, MBBS; Professor-Radiology
Villacorta, Jennifer, MD; Assistant Professor-Neurosurgery
Villablobas, Miguel, MD; Assistant Professor-Surgery
Walker, Evelyn, MD; Assistant Professor-Family Medicine
Walker, Marc, MD; Assistant Professor-Surgery
Walker, Rosalyn; Associate Professor-Pediatrics
Walker, Thomas, MD; Associate Professor-Pediatrics; Associate
Professor-Anesthesiology
Wallace, Kedra, MD; Assistant Professor-Obstetrics and
Gynecology
Walters, Bradley, PhD; Assistant Professor-Neurobiology and
Anatomical Sciences; Associate Professor-Otolaryngology
and Communicative Sciences
Wang, Junming, PhD; Associate Professor-Pathology
Wang, Niping, PhD, DDS; Assistant Professor-Neurobiology and
Anatomical Sciences
Wang, Zhen, PhD; Instructor-Physiology and Biophysics
War, Kimberley, MD; Professor-Dermatology
War, Stan, MD; Associate Professor-Orthopedic Surgery and
Rehabilitation
Warren, Susan, PhD; Professor-Neurobiology and Anatomical
Sciences
Washington, Chad, MD; Assistant Professor-Neurosurgery
Watiker, Valerie, MD; Associate Professor-Pediatrics
Watkins, William, MD; Assistant Professor-Ophthalmology
Weatherly, Brandon, MD; Assistant Professor-Radiology
Weatherly, Lyssa, MD; Assistant Professor-Medicine
Webb, April, MS; Instructor-Otolaryngology and
Communicative Sciences
Webb, Risa, MD; Professor-Medicine
Weisenberger, Sara, MD; Associate Professor-Pediatrics
Welch, Irma, MD; Assistant Professor-Family Medicine
Wells, Catherine, NP; Assistant Professor-Medicine
Wells, Richard, MBBS; Assistant Professor-Medicine
Wen, Tony, MD; Professor-Obstetrics and Gynecology
Wentland, Kathleen, MA; Instructor-Otolaryngology and
Communicative Sciences
Wilhelm, Andrew, DO; Associate Professor-Medicine
Wilkinson, Aubrey, MD; Associate Professor-Anesthesiology
Williams, Daniel, PhD; Associate Professor-Psychiatry and
Human Behavior
Williams, Jan, PhD; Associate Professor-Pharmacology and
Toxicology
Williams, Jason Henry, MD; Assistant Professor-Radiology
Williams, Nilda, MD; Assistant Professor-Radiology
Willis, Tanya, NP; Instructor-Pediatrics
Wilson, James G., MD; Professor-Physiology and Biophysics;
Professor-Medicine; Assistant Professor-Microbiology and
Immunology
Wilson, Melanie, PhD; Professor-Microbiology and Immunology
Windham, Gwen, MD, MHS; Professor-Medicine
Winniford, Michael, MD; Professor-Medicine; Professor-Surgery
Winscott, John, MD; Associate Professor-Medicine
Wirschell, Maureen, PhD; Assistant Professor-Cell & Molecular
Biology
Wyatt, Felicie, MD; Assistant Professor-Medicine
Young, Kathleen, PhD, MPH; Assistant Professor-Family
Medicine
Zeiner, Jennifer, DO; Assistant Professor-Pediatrics
Zhang, Xinhong, MD; Assistant Professor-Medicine
Zimmerman, Catherine Carlyle, MD; Assistant Professor-
Orthopedic Surgery and Rehabilitation; Assistant Professor-
Pediatrics
Zima, Gretchen, MD; Assistant Professor-Pediatrics
Zimmerman, Catherine Carlyle, MD; Assistant Professor-
Orthopedic Surgery and Rehabilitation; Assistant Professor-
Pediatrics
school of graduate studies in the health sciences

The University of Mississippi Medical Center
### 2019-2020 Academic Calendar

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<thead>
<tr>
<th>Month</th>
<th>Date</th>
<th>Event</th>
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</thead>
<tbody>
<tr>
<td>April</td>
<td>8</td>
<td>Monday Registration begins for 2019-2020 Summer Term</td>
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<tr>
<td></td>
<td>***12</td>
<td>Friday <em><strong>Last day to submit an application for August 2019 degree</strong></em></td>
</tr>
<tr>
<td>May</td>
<td>1</td>
<td>Wednesday Deadline for summer semester applications (Graduate Certificate program only)</td>
</tr>
<tr>
<td></td>
<td>14</td>
<td>Tuesday $50 Late Registration Fee For 2019-2020 Summer Term Effective Today</td>
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<td></td>
<td>24</td>
<td>Friday 2019 Commencement</td>
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<tr>
<td>SUMMER SEMESTER</td>
<td>28</td>
<td>Tuesday Classes begin</td>
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<td></td>
<td>28</td>
<td>Tuesday $100 Late Registration Fee For 2019-2020 Summer Term Effective Today</td>
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<tr>
<td>June</td>
<td>7</td>
<td>Friday Last day to register</td>
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<td>10</td>
<td>Monday Last day to withdraw from a course or from school without receiving a withdrawal grade and to receive a tuition refund</td>
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<td>14</td>
<td>Friday Deadline for completion of all requirements for August 2019 degree</td>
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<tr>
<td></td>
<td>19</td>
<td>Wednesday Registration begins for 2019-2020 Fall Semester</td>
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<tr>
<td>July</td>
<td>1</td>
<td>Monday Deadline for Fall Semester applications (Graduate Certificate program only)</td>
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<tr>
<td></td>
<td>4</td>
<td>Thursday Independence Day Holiday observed</td>
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<td>5</td>
<td>Friday Classes resume</td>
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<tr>
<td></td>
<td>29</td>
<td>Monday $50 Late Registration Fee For 2019-2020 Fall Semester Effective Today</td>
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<tr>
<td>August</td>
<td>2</td>
<td>Friday Last day of summer term</td>
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<td></td>
<td>5</td>
<td>Monday Last day to submit grades</td>
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<tr>
<td>FALL SEMESTER</td>
<td>12</td>
<td>Monday Classes begin</td>
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<td></td>
<td>12</td>
<td>Monday $100 Late Registration Fee For 2019-2020 Fall Semester Effective Today</td>
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<td>16</td>
<td>Friday Last day to register for fall semester</td>
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<tr>
<td></td>
<td>23</td>
<td>Friday Last day to add a course</td>
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<tr>
<td></td>
<td>***23</td>
<td>Friday ***Last day to submit an application for December 2019 degree</td>
</tr>
<tr>
<td></td>
<td>29</td>
<td>Thursday Last day to withdraw from school or form a course without receiving a withdrawal grade and to receive a tuition refund</td>
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<tr>
<td>September</td>
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<td>Monday Labor Day Holiday observed</td>
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<td>3</td>
<td>Tuesday Classes resume</td>
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<tr>
<td>October</td>
<td>18</td>
<td>Friday Deadline for completion of all requirements for December 2019 degree</td>
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<tr>
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<td>25</td>
<td>Friday Research Day School of Graduate Studies in the Health Sciences</td>
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<tr>
<td>November</td>
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<td>Monday Registration begins for 2019-2020 Spring Semester</td>
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<td>11-18</td>
<td>Monday-Friday Course Evaluations</td>
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<td>20</td>
<td>Wednesday Thanksgiving Holiday begins at 5:00pm</td>
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<td>Monday Classes resume</td>
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<td>December</td>
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<td>Tuesday Deadline for Spring Semester applications (Graduate Certificate program only)</td>
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<td>2-13</td>
<td>Monday-Friday Fall Semester Examinations</td>
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<td>14</td>
<td>Saturday End of fall semester</td>
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<td>17</td>
<td>Tuesday Last Day to submit grades</td>
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<td>23</td>
<td>Monday $50 Late Registration Fee For 2019-2020 Spring Semester Effective Today</td>
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<td>SPRING SEMESTER</td>
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<td>Monday Classes Begin</td>
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<td>6</td>
<td>Monday $100 Late Registration Fee For 2019-2020 Spring Semester Effective Today</td>
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<td>10</td>
<td>Friday Last day to register for spring semester</td>
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<td>17</td>
<td>Friday Last day to add a course</td>
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<td>***17</td>
<td>Friday ***Last day to submit an application for May 2020 degree</td>
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<td>20</td>
<td>Monday Martin Luther King's Birthday Holiday observed</td>
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<td>21</td>
<td>Tuesday Classes resume</td>
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HISTORY

The School of Graduate Studies in the Health Sciences at the University of Mississippi Medical Center in Jackson was established in 2001 by the Board of Trustees of State Institutions of Higher Learning. The Graduate Programs in the Health Sciences previously operated under the auspices of the Graduate School of the University of Mississippi.

PROGRAMS

The School of Graduate Studies in the Health Sciences offers programs leading to Master of Science (MS) and Doctor of Philosophy (PhD) degrees. A listing of the graduate degree programs offered at the Medical Center follows.

Master of Science Degree Programs

- Master of Science in Biomedical Materials Science (Program no longer accepting new graduate students)
- Master of Science in Biomedical Sciences
- Master of Science in Clinical Investigation

Doctor of Philosophy Degree Programs

- Doctor of Philosophy in Biomedical Materials Science (Program no longer accepting new graduate students)
- Doctor of Philosophy in Biomedical Sciences
- Doctor of Philosophy in Cell and Molecular Biology
- Doctor of Philosophy in Clinical Anatomy
- Doctor of Philosophy in Experimental Therapeutics and Pharmacology
- Doctor of Philosophy in Microbiology and Immunology
- Doctor of Philosophy in Neuroscience
- Doctor of Philosophy in Nursing
- Doctor of Philosophy in Pathology (Program no longer accepting new graduate students)
- Doctor of Philosophy in Physiology and Biophysics

Additional information about specific programs, application procedures, and the Graduate Student Handbook are available at our website: http://www.umc.edu/graduateschool/

Post-Baccalaureate Certificate Program

Certificate in Biochemistry (distance education)

MISSION STATEMENT

The mission of the School of Graduate Studies in the Health Sciences (SGSHE) is to: (1) train highly qualified researchers who will make significant contributions to the scientific literature; (2) educate those who will train the next generation of biomedical scientists and health care professionals; (3) foster the spirit of scientific inquiry; and (4) promote an environment that embraces diversity and cultural differences.

ADMISSION TO THE SCHOOL OF GRADUATE STUDIES

GENERAL REQUIREMENTS - Selection of applicants is made on a competitive basis, without regard to race, color, religion, sex, age, disability, marital status, national origin, sexual orientation, genetic information, or veteran status. A student with a baccalaureate degree from a regionally accredited institution may apply for study in areas in which competence has been demonstrated by scholastic performance.

Prospective students must submit an online application for admission to the Office of Student Records and Registrar, an official transcript of undergraduate and graduate (if applicable) grades, and an official statement of scores (verbal, quantitative and analytical) received on the Graduate Record Examination (GRE), and a personal statement. Applicants to the PhD programs and MS in Clinical Investigation program must also submit three letters of recommendation. Specific requirements can be found under the degree program section of this catalog. With the exception of those students applying for admission directly from a Master's Degree program, the GRE examination must be taken within five years of application. Information regarding the GRE may be obtained from the Educational Testing Service, Princeton, NJ 08540. International applicants must have transcripts evaluated in a course-by-course report from World Education Services (WES) or Educational Credential Evaluators (ECE).

Additional prerequisites may be required by certain programs, and these may be determined by contacting the specific program to which the applicant desires admission.

Initial applicant evaluation for admission to the School of Graduate Studies is made on the basis of undergraduate (and graduate, if applicable) scholastic performance, letters of recommendation, and scores received on the GRE. Those applicants for whom the initial evaluation indicates scholastic competence necessary to successfully pursue a graduate degree may be further evaluated by personal interview.

PhD applicants will be evaluated based on the following:

- Baccalaureate degree in a relevant scientific discipline
- GPA (3.0 or better)
- Three letters of recommendation
- A personal statement
- A GRE score ≥300 on the combined verbal and quantitative scores
- Students whose combined verbal and quantitative scores are ≥300 will be granted full admission to the School of Graduate Studies. Students whose combined verbal and quantitative scores are < 300 will be considered for conditional admission based on the recommendation of the program director. To be removed from conditional status the student must, within three academic semesters...
of admission, attain a GPA of ≥3.0, or retake the GRE and score ≥300. Conditional students who fail to meet the criteria listed above will be dismissed from the program. Notwithstanding the above, individual programs may set higher minimum standards than those required by the School of Graduate Studies.

MS applicant requirements are similar to those seeking the PhD degree with the listed exceptions:

- Baccalaureate degree in a relevant scientific discipline
- GPA (3.0 or better, preferred)
- 3 letters of recommendation (check program specific requirements)
- A personal statement (application essay)
- A GRE score ≥295 on the combined verbal and quantitative scores,
- Or a DAT score ≥15,
- Or an MCAT score ≥492 is also acceptable for those applying to the MS-Biomedical Sciences program.

For the Masters in Clinical Investigation, program admission requirements can be found in the program section of this Bulletin.

For both MS and PhD programs, individual programs may set higher minimum standards than those required by the School of Graduate Studies. In view of that, students are requested to consult the director of their intended program of study in order to ascertain program-specific requirements.

Post-baccalaureate certificate applicants will be evaluated based on the following:

- A complete application;
- A bachelor’s degree in a science related field or must have completed five semester courses in biology, chemistry, physics, engineering, or math;
- A cumulative GPA of 2.0 or higher on a 4.0 scale;
- Official transcripts from all schools attended;

Applicants whose native language is not English and/or who have completed their tertiary education primarily outside of the USA must submit official scores of the Test of English as a Foreign Language (TOEFL), International English Language Testing System (IELTS) or Pearson Test of English-Academic (PTE-A) as evidence of English language proficiency.

- TOEFL-Internet Based Test (IBT): 79 or higher
- TOEFL-Paper Based Test (PBT): 550 or higher
- IELTS: 6.5 overall band score or higher
- PTE-A: 53 or higher

However, this requirement may be waived for students who are currently enrolled at a college or university in the United States and/or who demonstrate a proficiency in written and spoken English following a personal interview. Admission of a student to a graduate program must be approved by the program director and by the dean of the Graduate School. No individual may enroll in graduate level courses without proper approval and notification from the School of Graduate Studies in the Health Sciences.

**Conditional Acceptance** - Acceptance to the School of Graduate Studies is conditional; the admission committee may rescind an offer of acceptance at any time before matriculation if an applicant fails to maintain expectations upon which the acceptance was based. Examples include, but are not limited to, a significant decline in academic performance, failure to complete prerequisites or other course work and degrees in progress, patterns of unprofessional behavior and incidents discovered in a criminal background check.

**Criminal Background Checks (CBCs)** - Any preadmission agreement executed by the health care program with a student shall be void if there is a disqualifying incident or pattern of unprofessional behavior in the CBC prior to enrollment.

**Fingerprint-Based CBC** - All accepted applicants are required to be fingerprinted. Students receiving a stipend must be fingerprinted and drug tested.

**TECHNICAL STANDARDS FOR ADMISSION**

Technical Standards are non-academic requirements essential for meeting the academic requirements of the programs in the School of Graduate Studies in the Health Sciences. Within any area of specialization, students must demonstrate competence in those intellectual and physical tasks that together represent the fundamentals of research in their chosen discipline.

The PhD degree programs and some of the MS degree programs within the School of Graduate Studies in the Health Sciences require a dissertation or thesis based on independent research. Granting of those degrees implies the recipient has demonstrated a base of knowledge in their chosen field of study and the ability to independently apply that knowledge to form hypotheses, design and conduct experiments, interpret experimental results, and communicate these findings to the scientific community. Thus, a candidate for the PhD or MS degree in the health sciences must possess abilities and skills that allow for observation, intellectual and conceptual reasoning, motor coordination, and communication. The use of a trained intermediary is not acceptable.

The following technical skills are required of a successful PhD student:

**Observation**

The candidate must be able to acquire knowledge by direct observation of demonstrations, experiments, and experiences within the research and instructional setting.

**Intellectual/Conceptual Abilities**

The candidate must be able to measure, calculate, analyze, reason, integrate and synthesize information to solve problems.

**Motor Skills**

The candidate must possess motor skills necessary to perform procedures required for experimentation within the chosen discipline. Those individuals with physical challenges are encouraged to contact the appropriate administration to determine their educational options within the chosen discipline.

**Communication**

The candidate must be able to communicate and discuss his or her experimental hypotheses and results to the scientific community.

**Behavioral and Social Attributes**

The candidate must possess the emotional and mental health required for full utilization of his or her intellectual abilities, the exercise of good judgment, the prompt completion of responsibilities inherent in managing a scientific setting, the ability to function under the stress inherent in research, and the ability to understand and comply with ethical standards for the conduct of research.
APPLICATION PROCEDURE
The application may be obtained online from the School of Graduate Studies website. If problems are encountered, please contact the graduate school office for assistance (601-984-1195).

All transcripts and documents submitted to the Office of Student Records and Registrar in support of an application become the property of The University of Mississippi Medical Center and will not be returned to an applicant or forwarded to another school or individual. Contact information: Office of Student Records and Registrar, University of Mississippi Medical Center, 2500 North State Street, Jackson, MS 39216, 601-984-1080, 601-984-1079 (Fax).

DEADLINES FOR APPLICATIONS - The School of Graduate Studies accepts applications throughout the calendar year. However, applications for a specific academic term must be received by the Office of Student Records and Registrar by the deadlines below:

- Summer Term: April 1
- Fall Semester: June 1
- Spring Semester: October 1
- Prospective PhD students who wish to attend the Graduate School Spring Recruitment Day must have applications submitted by December 15.
- MS Clinical Investigation: June 1
- MS Programs: June 1
- Post-Baccalaureate certificate in Biochemistry
  - Summer: May 1
  - Fall: July 1
  - Spring: December 1

Students wishing to be considered for a graduate stipend for the upcoming Fall semester should apply for admission prior to April 1. Stipends are assigned on a competitive basis. An applicant is considered for the enrollment period designated on the application. If the applicant is accepted and fails to enroll, or is not accepted, a new application must be submitted if consideration for a subsequent enrollment date is desired.

APPLICATION FEE - A nonrefundable fee of $25 must accompany the initial application.

REGISTRATION - Registration for classes is not permitted unless the applicant has received notification of acceptance to a specific graduate program from the School of Graduate Studies in the Health Sciences. Registration for courses must be approved by the graduate program director and advisor. No credit is given for any course for which a student is not officially registered. All students and advisors must complete the required Registration Approval Form before each semester.

NON-DEGREE SEEKING STUDENTS - UMMC employees who wish to take graduate courses but are not members of a School of Graduate Studies degree program may apply as non-degree seeking students. Applicants must first complete an approval to register form. The form and instructions for the non-degree student are located on the Graduate School website. Non-degree students may not earn more than 9 semester hours. Furthermore, successful completion of courses taken does not in itself qualify the individual for subsequent admission to a graduate program.

TUITION AND REQUIRED FEES
Tuition and fees for the current academic year can be found on the institutional website. Non-resident PhD students will pay in-state tuition. Tuition is subject to change pending information from the Institutions of Higher Learning (IHL).

GRADUATE STUDENT HANDBOOK
The purpose of the School of Graduate Studies Handbook is to provide students with specific information concerning school policies, regulations and services. As a student of the University of Mississippi Medical Center School of Graduate Studies, you are responsible to read and become familiar with the contents of this handbook and all other such publications by the institution. The Graduate School Student Handbook can be found on the School of Graduate Studies website. Additional institutional policies can be found in the UMMC Document Center.

REQUIRED LAPTOPS
Entering students are required to have a laptop computer that meets the annually revised UMMC Minimal Laptop Specifications that are posted on the School of Graduate Studies website. Students should purchase a laptop meeting or exceeding the UMMC Minimal Specifications from regular retail channels. Students will be personally responsible for maintenance/repair of their laptop. All students are required to maintain up to date virus and spyware detection software to allow access to the UMMC public wireless network. Students should acquire their laptop prior to the first week of August. Students will need to bring their functional laptop to a computer orientation.

PREDOCTORAL FINANCIAL ASSISTANCE
STIPENDS AND LOANS
Financial support in the form of stipends may be available in some programs. Academic excellence, maturity, and research experience are the main qualifications considered in the appointment of trainees and assistants. Inquiries should be addressed to the director of the graduate program in which the applicant wishes to undertake study. Students receiving a stipend are assessed in-state fees. Stipends are not tax exempt. Information on the Graduate School Stipend Policy can be found at the website. Graduate Students may also apply for additional funding through various loan mechanisms. Students should contact the Office of Student Financial Aid to determine if they qualify for these loan programs.

SCHOLARSHIPS AND AWARDS

DEAN'S SCHOLARSHIP - The Dean's Scholarship is a full-tuition recruitment scholarship, which is awarded to students for outstanding academic achievement. All students on stipends or extramural support are eligible for the Dean's Scholarship.

DEAN'S SERVICE AWARD - Presented to the graduate student who exemplifies the outstanding attributes of leadership, community outreach and service.

DR. L. WILLIAM CLEM ENDOWED MEMORIAL AWARD - This award, endowed by a generous gift from Dr. Wei Yu and wife Dr. Fei Lu, provides funds for student travel to scientific meetings and for other allowable student expenses. The award is available to Microbiology and Immunology students who are in good academic standing. Recipients will be selected by the Microbiology Graduate Faculty and approved by the Dean of the School of Graduate Studies in the Health Sciences.
HELEN REEVES TURNER, MD, PHD AWARD. Established in 2013 and is awarded each year to a deserving student from one of the Medical Center Schools. The recipient of this award, selected by the dean or his designee, exemplifies Dr. Turner’s outstanding attributes of leadership, education and service.

RANDALL-TRUSTMARK GRADUATE RESEARCH AWARD. This award is made in memory of Dr. Charles C. Randall, the first chair of microbiology at UMMC and an early director of Graduate Studies at UMMC. Dr. Randall set a high standard for scholarship and directed graduate studies during its formative years at UMMC. The Randall-Trustmark Graduate Research Award and cash prize are presented in recognition of outstanding research accomplishments and scientific contributions by a graduate student.

REGIONS GRADUATE RESEARCH AWARD. The Regions Graduate Research Award and cash prize are presented in recognition of outstanding research accomplishments by a graduate student.

ROBERT A. MAHAFFEY JR., MEMORIAL AWARD. It was the first research award established at UMMC for the recognition, encouragement, and promotion of superior scientific capability of young investigators. Established in 1976 in memory of the late Robert Mahaffey Jr., a UMMC graduate student in immunopathology, this award consists of a cash prize and certificate, signed by the Vice-Chancellor, awarded to each recipient in recognition of exceptional research potential in basic or clinical biomedical science. In addition, the recipient’s name is engraved on a permanent plaque displayed in the Medical Center.

REGULATIONS AND OTHER INFORMATION

SCHOLASTIC REQUIREMENTS - It is the responsibility of the student to ascertain the general and specific requirements for the degree program in which they are enrolled. Students can obtain all relevant information from the program director, their advisor, or the Office of the Dean, School of Graduate Studies in the Health Sciences.

GRADING POLICY - Grades for academic credit will be awarded based on a 4 point grading scale according the Grading Policy. Grades are reported as a percentage, which are converted into a letter grade and reported on the transcript according to the following rubric: A, 90-100; B, 80-89; C, 70-79; F, 0-69. Under such a scale, a grade of a is assessed for 4 points, a B is assessed for 3 points, a C is assessed for 2 points, and an F is assessed for 0 points. A grade of F is not acceptable for graduate credit, but is included in the calculation of the student’s GPA. A grade of C is acceptable for graduate credit, but an overall GPA greater than or equal to 3.0 (or 80% weighted numerical average) for a PhD student, or 2.8 (or 75% weighted numerical average) for a MS student, must be maintained.

ADD OR DROP A COURSE - The request form to add or drop a class is found on the SGSHS website under forms. Classes may be added until the day specified by the academic calendar. Registration for a course makes the student responsible for attending that class until the course is completed or until the program director and dean of the Graduate School authorize withdrawal from that course. Approved withdrawals from a course, if completed on or before the day specified by the academic calendar, will not be recorded on the student's record. Withdrawals authorized after that date will be recorded as W. A student can withdraw from a course and receive a W at any time up to the submission of the final grade. Once the final grade has been submitted, withdrawal is not permitted. Students may challenge grades within 30 days of issuance of final grades by the Office of Student Records and Registrar; otherwise, grades will stand as recorded.

ACADEMIC PROBATION - If at any time during an academic year the progress of a student is considered unsatisfactory, the student may be placed on academic probation or dismissed from the program. Students who are placed on academic probation because their GPA has fallen below 3.0 (PhD) or an 80% weighted numerical average or below 2.8 (MS) or a 75% weighted numerical average will have 3 semesters to raise their GPA to 3.0 (PhD) or 2.8 (MS) or higher. Failure to do so will result in dismissal.

DISMISSAL FROM THE SCHOOL OF GRADUATE STUDIES – Graduate students may be dismissed from the graduate program for cause. This may include unsatisfactory academic performance and/or lack of progress, failure to pass qualifying examinations, poor research performance, breaches of scientific integrity, i.e., plagiarism, falsification of data, etc. or personnel issues, i.e., harassment. Further information on the policy can be found on the SGSHS website.

TRANSFER OF GRADUATE CREDIT FROM ANOTHER INSTITUTION - With the approval of the program director and the Dean of the Graduate School, academic credit equal to no more than half the number of hours required for graduation may be transferred from a previous graduate program. However, credit from another institution will be accepted only when it is clearly relevant to the student's current program. Approval of transfer of credit hours are available online. There is no credit given for experiential learning. Grades received in transfer courses are not used to calculate the student’s GPA, but are counted toward the hours required for a given graduate degree. Transfer courses are indicated on the student's transcript by the designation T, to indicate credit has been given.

WITHDRAWAL FROM THE GRADUATE SCHOOL - A student who withdraws from the Graduate School must submit a Request for Withdrawal Form to the SGSHS office. This form is found on the SGSHS website. Failure to officially withdraw will result in a grade of F for each course in which the student is registered.

LEAVE OF ABSENCE - Leave of absence from graduate school may be granted by the dean or his/her administrative designee to students who meet the conditions listed in the Graduate Handbook.

a. To students in good academic standing, leaves of absence will be granted for periods for up to 12 months to pursue training at another institution,

b. To students in good academic standing, leaves of absence for generally no more than one academic semester will be allowed for personal, financial, or medical reasons, and

c. To students not in good academic standing, leaves of absence will be granted for periods no more than one full calendar year.

Such students will be permitted the option of withdrawal. Forms are available online.

DEGREES AND COMMENCEMENT - Degrees earned in a graduate program are awarded at the end of each semester. A student must complete all degree requirements and complete an Application for Graduation through the MyU Portal by the dates designated in the academic calendar. All graduates are encouraged to participate in spring commencement exercises.

COURSE LOAD - A full-time course load in the School of Graduate Studies is 9 credit hours per semester except for the summer term when 1 credit hour is sufficient. A student who is admitted to candidacy and is working on his/her thesis or dissertation may be classified as full-time while registering for 1 credit hour. Student and advisor must complete the required registration approval form.

ENROLLMENT POLICY – Once students are accepted into a program, they must be continuously enrolled in classes until the degree is completed or have been granted a leave of absence. Leave of absence forms can be obtained from the SGSHS website.
COUNSELING
Professional and career counseling are available from each program director, the Graduate School deans, and other appropriate professionals at The University of Mississippi Medical Center. Personal counseling services related to life, relationships, work, money, legal, family and everyday issues, are available to UMMC students through UMMC's Student and Employee Assistance Program. LifeSynch username: UMMC, password: UMMC, or 866-219-1232.

STUDENT GOVERNMENT
The Graduate Student Body constitutes the student government executive organization and is comprised of the students enrolled in graduate programs at the UMMC. Elected officers and representatives serve in various student government capacities.

GRADUATE PROGRAMS
A range of circumstances and conditions determines the number of admissions to the various graduate programs. Therefore, students interested in a particular program of study are strongly urged to contact the director of that program prior to completing an application to determine whether openings exist for the current academic year and to ascertain specific program requirements.

MASTER OF SCIENCE
The School of Graduate Studies in the Health Sciences offers Master of Science degrees in Biomedical Sciences and Clinical Investigation. Within the Biomedical Sciences program are two tracks: Biomedical Sciences and Maternal-Fetal Medicine (MD degree required). Information about each of these two tracks can be obtained from the program director or from the relevant section of the Bulletin.

ACADEMIC REQUIREMENTS (NUMBER OF CREDITS/MINIMUM GRADE POINT AVERAGE) - A minimum of 30 (semester) credit hours is required for the MS degree. The minimum GPA for a MS degree is 2.8 (on the 4 point scale) or a weighted numerical average (WNA) of 75%. These requirements notwithstanding, individual MS programs can establish more stringent criteria for graduation.

TIME LIMIT - The time limit for completing all requirements for a Master of Science degree is six years from the date of first registration.

THESIS - Some programs may require a thesis as a requirement for graduation. The thesis should show evidence of original investigation. Thesis must be approved by the advisory committee and the SGSHS dean. An oral examination and thesis defense is mandatory in programs requiring a thesis. The candidate's Advisory Committee will conduct the examination.

DOCTOR OF PHILOSOPHY
The degree of Doctor of Philosophy is offered by the University of Mississippi Medical Center in Biomedical Materials Science (no longer enrolling students), Biomedical Sciences, Cell and Molecular Biology, Clinical Anatomy, Experimental Therapeutics and Pharmacology, Microbiology and Immunology, Neuroscience, Nursing, Pathology (no longer enrolling students), and Physiology and Biophysics. In addition, a combined MD/PhD program is offered to highly qualified students who wish to pursue a career as a physician-scientist (see below). Prospective students interested in any of these programs are invited to contact the specific program in which they wish to study or the School of Graduate Studies in the Health Sciences, University of Mississippi Medical Center, Jackson, Mississippi 39216-4505.

The Doctor of Philosophy degree is a research degree and is not conferred solely as a result of formal course work, no matter how superior and extensive. The program leading to the PhD degree represents more than the sum of time in residence, and the plans of study listed below are only a minimum. To receive the doctoral degree, the candidate must demonstrate evidence of proficiency and distinctive attainment in a special field, and a recognized ability for independent investigation as presented in a dissertation based upon original research. The following requirements for the PhD degree are the minimal requirements and apply to all students seeking the doctoral degree. Because individual programs may have additional specific requirements, the student is urged to clearly identify them before beginning a course of study. A description of program-specific policies is available from the relevant program director.

ADMISSION REQUIREMENTS - The previously listed general requirements for admission to a graduate program apply to the doctoral programs.

TIME LIMITS - Completion of a PhD degree generally requires five to six years, but must take no more than five years following admission to candidacy.

ACADEMIC REQUIREMENTS (NUMBER OF CREDITS/MINIMUM GRADE POINT AVERAGE)

COURSE WORK - All doctorate degrees require a minimum of 60 credit hours beyond a baccalaureate degree (or 30 credit hours beyond a master’s degree). Credits representing research and preparation of the dissertation are to be earned as directed by the student's Advisory Committee. Credit hour requirements may differ for other programs so the student should consult the relevant program director for specific details.

MINIMUM GRADE POINT AVERAGE - The minimum GPA to obtain the PhD degree is a GPA of 3.0 (on a 4.0 scale) or a weighted numerical average of 80%. This requirement notwithstanding individual graduate programs may choose to set a higher standard for their program.

LABORATORY ROTATIONS - Laboratory rotations allow students the opportunity to discover the many different areas of research at UMMC, familiarize themselves with the lab communities, and determine whether a particular lab environment would be suitable for their dissertation research.

QUALIFYING EXAMINATION AND ADMISSION TO CANDIDACY - An examination to qualify students for admission to Candidacy for the PhD degree is administered by each program within the School of Graduate Studies. The Qualifying Examination is given to graduate students in good academic standing upon completion of coursework. The exact form of the examination (oral, written, comprehensive, or research based) varies from program to program. Information on the specific format used within a program may be obtained from the relevant Program Director or from the program's policy manual.

DISSERTATION ADVISORY COMMITTEE - The advisory committee must consist of a minimum of five members. Four of the members must be members of the graduate faculty. Three of the members must be from the student’s major program and at least one graduate faculty member from outside the major program. In addition to the four graduate faculty members mentioned above, the fifth committee member can be from inside or outside of UMMC. If the fifth member is not a member of the graduate faculty, a CV must be submitted for approval by the dean. The Nomination of Advisory Committee Form found on the SGSHS website should be submitted to the Office of the Graduate School. It is the responsibility of the student to prepare and deliver the completed forms to the appropriate office or individual.

DISSERTATION - The dissertation must show originality of thought and demonstrate the results of independent investigation. It should contribute to the advancement of knowledge, exhibit mastery of the subject literature, and be written with an acceptable degree of literary skill. The dissertation, written according to prescribed form, is prepared under the direction of the candidate’s advisor and must be approved by the candidate's Dissertation Advisory Committee and the dean of the Graduate School. This approval must be obtained and all other requirements completed by the date given in the official academic calendar. Guidelines outlining the prescribed form for a student's written dissertation can be found on the SGSHS website.
All requirements for the certificate program must be completed within a two-year time span.

**Time Limit for Degree Requirements**

- Students should access the SGSHS website (under ID 714 [Professional Skills]).
- All students must pass ID 709 (Responsible Conduct in Research) with the exception of students enrolled in the PhD in Nursing (PHN) programs who must take ID 700 (Ethics in Research).
- In addition, all graduates with the exception of PHN students must successfully pass ID 714 (Professional Skills).

**MD/PhD PROGRAM**

The goal of the MD/PhD program is to train medical students to become physician-scientists. To prepare students for careers in academic medicine, the program will provide them with a broad understanding of contemporary medical knowledge and the ability to productively investigate issues related to human disease. The MD/PhD Program is a seven-year program consisting of the first three years of medical school (M1-M3), three years of graduate study (G1-G3), and a final year of medicine (M4). To closely align clinical and research interests, students typically select an area for graduate study during their M3 year and maintain association with their clinical interests through interaction with clinical faculty mentors during their G1-G3 years.

Acceptance into the MD/PhD program at The University of Mississippi Medical Center requires prior admission into medical school. Moreover, in addition to completion of a national medical school application materials, applicants must also provide their GRE scores and a written personal statement indicating the reasons for choosing the MD/PhD program (see options on the School of Medicine's Secondary Application). Since the purpose of the MD/PhD program is to train clinical researchers, each applicant should list under “Experiences” in his/her American Medical College Application Service (AMCAS) application all relevant research experience and research presentations and provide at least one letter of recommendation from an individual capable of evaluating the candidate’s research potential. All application materials should be sent to the associate dean for medical school admissions. MD/PhD applicants who are invited to interview with the Medical School Admissions Committee will also meet with one or more members of the graduate school’s MD/PhD Admissions Committee. Prior to the interview with the Graduate School, the student must complete the Graduate School application for the PhD program.

The MD/PhD program is a 3/3/1 pathway (3 years Medical School, 3 years Graduate School and the last year in Medical School). During the M1 or M2 year students may take the graduate school’s Responsible Conduct in Research course (ID709). If the student's research interests involve the use of vertebrate animals, MD/PhD students may also select “An Introduction to Animal Research” (ID 704). In addition, courses taken for graduate credit during the M1 and M2 years may have additional departmental requirements. After identification of a specific program in which to pursue a PhD degree and with the Program Director's recommendation to the dean of the Graduate School, an MD/PhD student will receive graduate credit for relevant courses taken during the M1/M2 years. Prior to choosing a program in which to major, MD/PhD students will be required to attend specific departmental seminars in research areas of interest. When a major program has been identified, no later than April 1 of their M3 year, the MD/PhD student will select an advisor and begin to fulfill specific requirements of that PhD program.

Years G1 through G3 are devoted to research and writing and fulfilling all program requirements for the PhD. It is anticipated that some candidates may wish to continue research during their M4 year, which would be permitted, even encouraged.

**Laboratory Rotations**

MD/PhD students are required to complete lab rotations in a minimum of three mentors' labs in two different departments during the summer terms prior to their M1 and M2 years. The summer prior to their M1 year, the student will complete a five-week rotation in two different biomedical science programs. For the summer prior to the M2 year, the student may opt to complete the entire 10-week lab rotation in only one program or choose a new one.

**POST- BACC CERTIFICATE PROGRAMS**

The School of Graduate studies offers a distance education graduate certificate program in Biochemistry.

**APPLICATION PROCEDURE**

All correspondence regarding admission should be addressed to the Office of Student Records and Registrar, The University of Mississippi Medical Center, 2500 North State Street, Jackson, MS 39216-4505. A nonrefundable application fee of $25 must accompany each application. All transcripts and documents submitted in support of an application become the property of the University of Mississippi Medical Center and cannot be returned or forwarded to another school or individual. Applications are accepted beginning July 1 of the year prior to the desired year of enrollment and continue until the deadline for the particular term of attendance.

**Time Limit for Degree Requirements**

All requirements for the certificate program must be completed within a two-year time span.

**PROGRAMS AND PLANS OF STUDY**

All courses listed by programs offering graduate degrees are not available each semester. For information on availability of courses the student should access the SGSHS website for current schedules and the SGSHS Bulletin or contact the office of the specific program. Approval of the instructor is required for registration in all courses outside the major program. When approved by the dean of the graduate school and the program director, specific basic science courses required for the DMD or MD degree may be included in programs leading to graduate degrees.

For each program listed below, an outline of courses, taken during the first two years of graduate study, is presented. These plans will provide the greater part of the course work required for a PhD degree. Additional courses, needed to attain the required 60 hours are listed in the course offerings.

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**D ISSERTATION DEFENSE**

The dissertation defense is conducted by the candidate’s Advisory Committee and consists of a public presentation and defense of the dissertation. **Two weeks** prior to a student’s public defense, an administrative staff member from that particular program sends announcement information to the Graduate School office. The following information should be included in the announcement: Student Name, Program, Dissertation or Thesis, Title of Dissertation/Thesis, Date of Defense, Time of Defense, and Place of Defense. In private deliberation, the Advisory Committee will determine the acceptability of the defense and dissertation. Further questioning of the candidate may be included in the committee’s deliberations. The dissertation must be submitted to the Advisory Committee at least 10 days before the exam date. Members of the Advisory Committee must be present at the final oral examination.

**ADDITIONAL GRADUATION REQUIREMENTS**

- Students receiving the PhD degree are required to have the results of their research accepted for publication prior to awarding of the degree. This manuscript must meet the publication requirement, i.e., the student must be listed as the sole first author on at least one publication in a national or international peer-reviewed journal. Verification of the publication requirement requires submission of the Publication Requirement Form found [online](#).
- All students must pass ID 709 (Responsible Conduct in Research) with the exception of students enrolled in the PhD in Nursing (PHN) programs who must take ID 700 (Ethics in Research). In addition, all graduates with the exception of PHN students must successfully pass ID 714 (Professional Skills).
POST- BACCALAUREATE BIOCHEMISTRY CERTIFICATE PROGRAM

The graduate certificate program in Biochemistry is a distance education program aimed at working professionals or graduates whose professions are impacted by the field of medical biochemistry with an understanding of medical biotechnology and underlying genetic deficiencies of common metabolic disorders. Students who successfully complete 11 credit hours will be able to demonstrate knowledge in the areas of biochemistry, enzymology, cellular metabolism, biotechnology, forensics, and genetic deficiencies of human disease.

SUGGESTED CERTIFICATE PLAN OF STUDY

Students are required to complete CMB 705 Biochemistry I: Molecular, Structural, and Cellular Function and CMB 706 Biochemistry II: Enzymology and Cellular Metabolism. Students are also required to take one of the remaining two components to fulfill the certificate program. Students may take all four courses if desired.

**SEMESTER 1**
- CMB 705 Biochemistry I 4
- CMB 707 Biochemistry III 2

**SEMESTER 2**
- CMB 706 Biochemistry II 4
- CMB 708 Biochemistry IV 2

BIOMEDICAL MATERIALS SCIENCE PROGRAM (Program no longer accepting new graduate students)

Amol Janorkar, PhD, Director

The Biomedical Materials Science program at University of Mississippi Medical Center offers a PhD program. Students complete a structured course work and a hands-on research project giving them a solid background in materials science and biomaterials. Graduates and PhD programs will possess the necessary skills for research careers in academia as well as industry. Entering students must have an undergraduate degree from an accredited institution of higher learning in engineering, science, or healthcare. Students from other disciplines with appropriate preparation may be considered on a case-by-case basis. The education of the student focuses on the fundamental understanding of materials science, materials formulation and processing, and the biological principles that govern the response to biomedical materials and devices when implanted in the body. Students are educated through didactic instruction, laboratories, and involvement in active research projects. Depending on a student’s educational background (some may be stronger in biological sciences while others may have greater strengths in engineering), an individualized curriculum will be implemented. Students will be taught to present the results of their scientific investigations, both orally and in peer-reviewed publications, cogently, with appropriate statistical analysis.

TYPICAL COURSE OF STUDY – DOCTOR OF PHILOSOPHY (PhD)

Students in the PhD program will select their coursework in consultation with the advisor and advisory committee and will usually be required to include the following in their coursework selection:

**ID 715** Teaching in Higher Education

**BMS 703A/B** Experimental Methods in Materials Science A/B

**BMS 710** Fundamentals of Polymer Science

**BMS 711** Fundamentals of Ceramics

**BMS 712** Fundamentals of Metals

**BMS 728** Failure Analysis of Medical Implants

**BMS 730** Grant Writing and Management

Students must have taken and passed ID 714 (Professional Skills), usually taken in the year prior to the awarding of the degree.

For students being admitted from another MS program or directly from a BS program, a typical course of study might be as follows (Please note that many elective courses may only be offered in alternate years):

**YEAR 1 - FALL**
- BMS 701A Fundamentals of Materials Science A 3
- BMS 702A Fundamental of Biomaterials A 3
- BMS 703A Experimental Methods in Materials Science A 1
- BMS 708 Mathematics for Materials Study (For Students without adequate preparation in mathematics) 4
- ID 740 Statistical Methods in Research I (For Students not enrolled in BMS 708) 3
- BMS 798 Dissertation and Dissertation Research 1 or 2

**YEAR 1 - SPRING**
- BMS 701B Fundamentals of Materials Science B 3
- BMS 702B Fundamental of Biomaterials B 3
- BMS 703B Experimental Methods in Materials Science B 1
- ID 709 Responsible Conduct in Research 1
- BMS 798 Dissertation and Dissertation Research 4
Similar courses taken at other universities in pursuit of the MS may be considered for substitution on a case-by-case basis. Students entering the program having received an MS degree at another university or who have taken graduate level courses as a part of a BS degree program may submit information about coursework that may be eligible for transfer to partially fulfill requirements for coursework toward the PhD. The courses may complement or substitute for courses in the BMS program. Up to 15 semester hours may be transferred with the approval of the student’s advisor, the Director of the Graduate Program and the Dean of the School of Graduate Studies in the Health Sciences.

Upon recommendation of the student’s advisor, one or more off-campus internships may be required, for which the student will receive academic credit as BMS 750 (Special Topics in Biomedical Materials Science). Such internships will be individually arranged to meet the goals of the research and plan of study for the student.

**BIOMEDICAL SCIENCES PROGRAM**

**MASTER OF SCIENCE IN BIOMEDICAL SCIENCES**

The School of Graduate Studies in the Health Sciences at the University of Mississippi Medical Center offers a Master of Science degree in Biomedical Sciences (MS-BMS). The degree program is designed to meet the needs of several groups of students:

- Those seeking to broaden their scientific background prior to application to, or entry into, professional or graduate school,
- Those interested in teaching at the high school or junior college level,
- Those interested in improving their knowledge base prior to entering into governmental service.

The MS in Biomedical Sciences program requires a minimum of 30 credit hours beyond a BS or BA degree. A typical course of study for students interested in professional or graduate school is shown below. To be eligible for graduation, students must maintain a GPA of 2.8 or higher or a weighted numerical average greater than or equal to 75%.

**CORE COURSES - 10 of the 30 hours required for graduation must be selected from the core courses below.**

*Group A (at least 1 course must be chosen from this group):*

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<tr>
<td>CMB 704</td>
<td>Fundamental Biochemistry (or another CMB course)</td>
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<tr>
<td>PHYSIO 725</td>
<td>Fundamental Physiology (or another PHYSIO course)</td>
<td>8</td>
</tr>
<tr>
<td>MICRO 741</td>
<td>Fundamental Microbiology (or another MICRO course)</td>
<td>6</td>
</tr>
<tr>
<td>PHARM 726</td>
<td>Fundamental Pharmacology (or another PHARM course)</td>
<td>6</td>
</tr>
<tr>
<td>BMS 701 A and B</td>
<td>Fundamentals of Materials Science A and B</td>
<td>6</td>
</tr>
<tr>
<td>ANAT 715</td>
<td>Neurobiology (or another Neuroscience course)</td>
<td>4-6</td>
</tr>
<tr>
<td>ID 767</td>
<td>Fundamental Histology and Cell Biology (or ANAT 713)</td>
<td>2</td>
</tr>
<tr>
<td>ID 768</td>
<td>Essential Anatomy (or ANAT 711)</td>
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*Group B (at least 1 course must be chosen from this group):*

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<td>ID740</td>
<td>Statistical Methods in Research I</td>
<td>3</td>
</tr>
<tr>
<td>ID 727</td>
<td>Professional Development for Biomedical Careers</td>
<td>1</td>
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BIOMEDICAL SCIENCES TRACK
Hanna Broome, PhD, Program Director
Faculty: Current members of the graduate faculty.

PLAN OF STUDY

YEAR 1 - FALL
CMB 704  Fundamental Biochemistry  7
PHYSIO 725  Fundamental Physiology  8
ID 727  Professional Development for Biomedical Careers  1
  16

YEAR 1 - SPRING
MICR 741  Fundamental Microbiology and Immunology  6
PHARM 726  Fundamental Pharmacology  6
ID 767  Fundamental Histology and Cell Biology  2
ID 768  Essential Anatomy  2
  16

The Plan of Study outlined above is recommended for those students with a goal to pursue medical or dental school following the completion of this degree program. For students wishing additional study in a particular discipline, elective courses may be substituted, as long as a minimum of 10 hours of coursework come from the CORE COURSES listed above. These students should consult the director of the relevant graduate program and the director for the MS-Biomedical Sciences program for alternative study plans.

ELECTIVE OPTIONS
ID 715  Teaching in Higher Education  3
ID 716  Teaching Practicum  1-3
ID 737  Research in Biomedical Sciences  3

For students wishing additional study in a particular discipline, elective courses may be substituted in place of non-core courses. These students should consult the director of the relevant graduate program and the director for the MS-Biomedical Sciences program for alternative study plans.

Program prerequisites:
- Although a BS or BA degree in Biology, Chemistry, or another natural or physical science is preferred, graduates with a BS or BA in other disciplines who have an interest in Biomedical Science are encouraged to apply. However, because of the rigorous nature of the curriculum, all applicants are encouraged to take General Chemistry, Organic Chemistry, General Physics, General Biology, college-level Algebra and Trigonometry, or Calculus, and at least one advanced Biology course (e.g., Genetics, Biochemistry, Comparative Anatomy, etc.)
- Admission is competitive and based on your personal statement (application essay), academic record (GPA), and performance on the GRE, MCAT, or DAT. Preference is given to students with an overall GPA ≥ 3.0 on a 4-point scale and to those with a combined score ≥295 on the Verbal + Quantitative sections of the Graduate Record Examination (GRE), or ≥492 on the MCAT or ≥ 15 on the DAT.
- Applicants to the MS BMS degree program who are participants in the Professional Portal Program must be recommended by the Admissions Committee of either the UMMC School of Medicine (SOM) or School of Dentistry (SOD), and must meet the minimum admission criteria for the MS in biomedical sciences program
- Note: Because of space constraints, this program is limited to legal residents of Mississippi, US citizens, and permanent residents of the USA (Green Card Holders). In addition, because an important aspect of UMMC’s mission is training health care providers for Mississippi, preference is given to Mississippi residents.

Application Deadline and Requirements: The online application for the MS in biomedical sciences program opens July 1. Applications must be submitted by June 1 for those wishing to enroll in the fall semester; classes begin early to mid-August. Students are encouraged to complete their applications as early as possible, because admission is made on a rolling basis beginning in April and continuing until the class is filled. Admission as a new student for the spring semester is not available. Access to the online application is available on the School of Graduate Studies website.

- Students are encouraged to apply early and may apply prior to receiving their Bachelor’s degree. In those cases, a partial transcript reflecting previous undergraduate coursework should be submitted. Based on that, conditional admission may be granted. However, full admission will not be conferred until the complete undergraduate transcript is received by the Office of the Registrar.
- Likewise, students may apply without a GRE/MCAT/DAT score, but must take the examination prior to June 1 of the year in which they enroll. However, students with current GRE/MCAT/DAT scores will be given first preference for admission. Official scores must be received by the Office of the Registrar in order for the application to be complete.
- Lastly, applicants must submit an original personal statement (application essay) that highlights their strengths, motivation for this program, and leadership and service record.

PHD IN BIOMEDICAL SCIENCES
Amol Janorkar, PhD, Program Director
The Doctor of Philosophy in Biomedical Sciences program is intended to educate and train the next generation of biomedical researchers. The program will be an interdisciplinary program and emphasize specific training in areas of biomedical sciences, pathology, and biomedical materials science. The plan of study begins with coursework, followed by a combination of coursework and laboratory research, and finishes with mentored research on an independent project in the laboratory of one of the program faculty. Students will be educated through didactic instruction, laboratory practicums, and involvement in active research projects. Successful graduates of the program will be expected to possess the necessary skills for research careers in academia as well as industry through independent and collaborative research practices.
DOCTOR OF PHILOSOPHY (PhD)
BIOMEDICAL MATERIALS SCIENCE TRACK

**YEAR 1 - FALL**

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**YEAR 1 - SPRING**

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**YEAR 2 - SUMMER**

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**YEAR 2 - FALL**

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**YEAR 2 - SPRING**

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<td>BMS 797</td>
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**YEARS 3+ - SUMMER**

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**YEARS 3+ - FALL**

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**YEARS 3+ - SPRING**

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Similar courses taken at other universities in pursuit of the MS may be considered for substitution on a case-by-case basis. Students entering the program having received an MS degree at another university or who have taken graduate level courses as a part of a BS degree program may submit information about coursework that may be eligible for transfer to partially fulfill requirements for coursework toward the PhD. The courses may complement or substitute for courses in the BMS program. Up to 15 semester hours may be transferred with the approval of the student's advisor, the Director of the Graduate Program and the Dean of the School of Graduate Studies in the Health Sciences.

Upon recommendation of the student's advisor, one or more off-campus internships may be required, for which the student will receive academic credit as BMS 750 (Special Topics in Biomedical Materials Science). Such internships will be individually arranged to meet the goals of the research and plan of study for the student.

For students being admitted after having completed their MS degree at UMMC, a typical course of study might be as follows: Students entering directly from the MS program in the department will have taken a majority of their core courses previously and will rather begin taking elective courses in the area of specialization in their first semester. Please note that many elective courses may only be offered in alternate years:

Among other electives from outside the department that are available to interested students are the following:

<table>
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<tr>
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<td>BIOCH 742</td>
<td>Experimental Methods in Molecular Biology</td>
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</table>
Elective courses will be chosen from the courses offered in the department, courses offered by other UMMC graduate departments, and/or courses offered in conjunction with the School of Engineering at the main campus of the University of Mississippi. Courses offered by other schools may be included with approval of the student's advisor, the director of the graduate program, and the dean of the School of Graduate Studies in the Health Sciences. Upon recommendation of the student's advisor, one or more off-campus internships may be required, for which the student will receive academic credit as BMS 750 (Special Topics in Biomedical Materials Science). Such internships will be individually arranged to meet the goals of the research and plan of study for the student.

PATHOLOGY TRACK

YEAR 1 - FALL

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YEAR 1 - SPRING

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YEAR 2 - SUMMER

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YEAR 2 - FALL

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YEARS 3+ - SUMMER

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CELL AND MOLECULAR BIOLOGY PROGRAM

Michael Hebert, PhD, Program Director

The Department of Cell and Molecular Biology offers a 4-5 year program of study leading to the PhD degree. The program begins with course work, followed by a combination of course work and laboratory research and finishes with independent research conducted in the laboratory of one of the faculty. The department is well equipped for biochemical training and research. Each faculty member has generous laboratory space and the specialized equipment necessary for his/her research. In addition, there is an abundance of shared, state-of-the-art, departmental equipment and facilities. Application for pre-doctoral funding is promoted as an essential part of the students' training and development. The Department of Cell and Molecular Biology is strongly committed to graduate research and teaching. A particular advantage is that the department is relatively small in size, which promotes close scientific interactions between faculty members and students.
PLAN OF STUDY

YEAR 1 - FALL
CMB 710  Biochemistry  10
CMB 740  Biochemical Methods  2  12

YEAR 1 - SPRING
CMB 711  Mechanisms of Enzyme Action  2
CMB 715  Physical Biochemistry  2
CMB 741  Advanced Biochemical Methods  1
CMB 720  BIOCH Journal Club (Seminar)  1
ID 709  Responsible Conduct in Research  1
Elective  3  10

YEAR 2 - SUMMER
CMB 760  Biochemistry Research  1
1

YEAR 2 - FALL
CMB 720  BIOCH Journal Club (Seminar)  1
ID 740  Statistical Methods in Research I  3
CMB 760  Biochemistry Research  5  9

YEAR 2 - SPRING
CMB 744  Cellular Biochemistry  6
CMB 720  BIOCH Journal Club (Seminar)  1
ID 710  Research Tools in Molecular Biology  3
CMB 760  Biochemistry Research  1
ID 714  Professional Skills  1  12

YEAR 2 - SUMMER
CMB 760  Biochemistry Research  1
1

YEAR 3+ - FALL
CMB 798  Dissertation and Dissertation Research  9  9

YEAR 3+ - SPRING
CMB 798  Dissertation and Dissertation Research  1
1

CLINICAL ANATOMY PROGRAM
Andrew Notebaert, PhD, Program Director
The Program in Clinical Anatomy offers a PhD in Clinical Anatomy, aimed at training the next generation of educators and scholars in the field. The program is intended to train professionals to become master educators in anatomy, qualified to communicate anatomical knowledge to future personnel in the health professions. Students will learn the anatomical disciplines of human gross anatomy and developmental anatomy, Histology (microanatomy), Neuroanatomy, and will be trained in educational theory and skills. Doctoral students who successfully pass their qualifying examinations will do a dissertation project either in the pedagogical methods of teaching anatomy, which may include the development of new methods, or in the clinical applications of anatomy. In addition, the program will train students to teach at the postgraduate level and to do research in clinical anatomy or the teaching of anatomy.

PLAN OF STUDY

CORE COURSES
During the first two years students will be exposed to basic anatomical content, education content, and educational research. Beginning their second year, students will take one teaching practicum each semester. In addition, students will perform research rotations with various faculty in which they will be introduced to educational research in anatomy, research in clinical anatomy, or both. These rotations are intended to aid students in choosing their advisors. Core courses can be taken in any order unless part of a sequence, but all of them have to be completed prior to the beginning of the third year so that the candidacy examination can be taken during the second summer of the program.

YEAR 1 - FALL
ANAT 711  Gross Anatomy  6
ANAT 716  Developmental Anatomy  2
ANAT 722  Topics in Contemporary Anatomy  2
ANAT 742  Learning in the Health Sciences  3  13
YEAR 1 - SPRING
ANAT 713 Histology & Cell Biology  4
ANAT 717 Clinical Anatomy Research Rotations  3
ANAT 743 Pedagogy in the Health Sciences  3
ID 709 Responsible Conduct in Research  1

YEAR 2 - SUMMER
ANAT 717 Clinical Anatomy Research Rotations  1

YEAR 2 - FALL
ANAT 744 Health Sciences Curriculum Development  3
ANAT 745 Clinical Anatomy Research Project  3
ID 740 Statistical Methods in Research I  3
*Teaching Practicum course  3-6

YEAR 2 - SPRING
ANAT 745 Clinical Anatomy Research Project  3
*Teaching Practicum Course  3-6
**Elective  1+

YEAR 3 - SUMMER
ANAT 717 Clinical Anatomy Research Rotations  1

YEAR 3+ - FALL
ANAT 798 Dissertation and Dissertation Research  1

YEAR 3+ - SPRING
ANAT 798 Dissertation and Dissertation Research  1
ID 714 Professional Skills  3

YEAR 4+ - SUMMER
ANAT 798 Dissertation and Dissertation Research  1

TEACHING PRACTICUM COURSES
ANAT 730 Teaching Practicum in Gross Anatomy  6
ANAT 731 Teaching Practicum in Histology and Cell Biology  3
ANAT 733 Teaching Practicum in Neurobiology  3
ANAT 734 Teaching Practicum in Graduate Anatomy  2

*Teaching practicum courses are selected from the list above. Semester hours depend on the practicum selected.

**Electives are selected with the guidance of the program director or the student’s advisor.

CLINICAL INVESTIGATION PROGRAM
MASTER OF SCIENCE IN CLINICAL INVESTIGATION
Kedra Wallace, PhD, Program Director
Joshua Mann, MPH, MD, Associate Program Director
The School of Graduate Studies in the Health Sciences at the University of Mississippi Medical Center offers a Master of Science degree in Clinical Investigation. The degree program is designed for clinical professionals and clinical scientists including faculty and resident physicians, fellows in training, dentists, nurses, pharmacists and other terminal degree clinical professionals. Successful graduates of the program will be expected to conduct independent and collaborative clinical studies in their special areas of practice and interest while holding positions as clinician-investigators in academic settings. The program will also serve as a formalized training program for participants seeking extramural career development support (K awards).

The program will emphasize specific training in three principle areas:
- Clinical Trials,
- Population/Outcomes Research,
- Translational Human Studies.
- Maternal Fetal Medicine.

The MS in Clinical Investigation program requires a minimum of 30 credit hours. To be eligible for graduation, students must maintain a GPA of 3.0 or higher or a weighted numerical average greater than or equal to 80%.
CORE COURSES
MSCI 710 Epidemiology I 3
ID 740 Statistical Methods in Research I 3
MSCI 790 Grant and Scientific Writing 1
ID 709 Responsible Conduct in Research 1
MSCI 791 Capstone Project 1+

11

CLINICAL TRIALS TRACK:
Alan Jones, MD, Track Director

PLAN OF STUDY
YEAR 1-FALL
MSCI 710 Epidemiology I 3
ID 740 Statistical Methods in Research I 3
MSCI 791 Capstone Project 1+
*Elective 1+

9

YEAR 1-SPRING
ID 709 Responsible Conduct in Research 1
MSCI 790 Grant and Scientific Writing 1
MSCI 791 Capstone Project 1+
*Elective 1+

4+

YEAR 2-FALL
MSCI 791 Capstone Project 1+
*Electives 1+

9

POPULATION/OUTCOMES RESEARCH TRACK
Robert Annett, PhD, Track Director

PLAN OF STUDY
YEAR 1-FALL
MSCI 710 Epidemiology I 3
ID 740 Statistical Methods in Research I 3
MSCI 791 Capstone Project 1+
Elective* 1+

9

YEAR 1-SPRING
ID 709 Responsible Conduct in Research 1
MSCI 790 Grant and Scientific Writing 1
MSCI 791 Capstone Project 1+
** Elective 1+

9

YEAR 2-FALL
MSCI 791 Capstone Project 1+
** Elective 1+

9
YEAR 2-SPRING
MSCI 791  Capstone Project  1+
** Elective  1+ 9

** Electives - Population/Outcomes Track
ID 741  Statistical Methods in Research II  3
MSCI 711  Epidemiology II  3
ID 717  Special Topics in Biostatistics, Bioinformatics, and Epidemiology  3
MSCI 730  Perspectives in Multidisciplinary and Clinic  1
ID 630  Health Care Quality Improvement  3
ID 725  Environmental Health  3
ID 701  Introduction to Geographic Information Systems  3
ID 718  Health Policy and the Healthcare System  3
MSCI 713  GIS in Healthcare and Epidemiology  3
PHS 700  Essentials of Population Health Science

TRANSLATIONAL HUMAN STUDIES TRACK
Gailen Marshall, MD, PhD, Track Director

PLAN OF STUDY

YEAR 1-FALL
MSCI 710  Epidemiology I  3
ID 740  Statistical Methods in Research I  3
MSCI 791  Capstone Project  1+
** Elective  1+ 9

YEAR 1-SPRING
ID 709  Responsible Conduct in Research  1
MSCI 790  Grant and Scientific Writing  1
MSCI 791  Capstone Project  1+
** Elective  1+ 9

YEAR 2-FALL
MSCI 791  Capstone Project  1+
** Elective  1+ 9

YEAR 2-SPRING
MSCI 791  Capstone Project  1+
** Elective  1+ 9

*** Electives - Translational Human Studies Track
ID 741  Statistical Methods in Research II  3
MSCI 722  Principles of Translational Research  3
MSCI 721  Biomarkers, Bioimaging, and Bioinformatics  3

MATERNAL FETAL MEDICINE TRACK
Kedra Wallace PhD, Track Director

PLAN OF STUDY

YEAR 1-FALL
MFM 612  MFM Research Methods, Projects & Applications  3
ID 740  Statistical Methods in Research I  3
MSCI 791  Capstone Project  3 9

YEAR 1-SPRING
ID 709  Responsible Conduct in Research  1
MFM 606  Antenatal Diagnosis I  3
MSCI 791  Capstone Project  3 9
YEAR 2 - FALL
MFM 607  Antenatal Diagnosis II  3
MSCI 790  Grants & Scientific Writing  1
MSCI 791  Capstone Project  5

YEAR 2 - SPRING
MFM 608  Antenatal Diagnosis III  3
MSCI 791  Capstone Project  6

YEAR 3 - FALL
MFM 609  Antenatal Diagnosis IV  3
MSCI 710  Epidemiology I  3
MSCI 791  Capstone Project  3

YEAR 3 - SPRING
MSCI 791  Capstone Project  9

Program prerequisites:
- Applicants must hold a terminal doctoral degree (MD, PhD, DMD, etc.) or demonstrate significant work experience relevant to the degree program.
- Applicants should be in good standing within their department at the time of admission.
- Applicants to the Maternal-Fetal-Medicine track must have concurrent admission to the UMMC Obstetrics & Gynecology Maternal-Fetal-Medicine Fellowship program.

Application Deadline and Requirements: Applications must be received by June 1 for those wishing to enroll in the fall semester; classes begin early to mid-August. However, students are encouraged to complete their applications as early as possible. Access to an online application form is available on the School of Graduate Studies website.
- Applicants will be evaluated on the following:
  - Three letters of recommendation that must include:
    - Letter of support from Division Chief or Departmental Chair
    - Letter of support from research mentor
    - Letter of recommendation
  - A personal statement which includes career goals, a brief description of research plan, and identification of research mentor
  - Applicant’s curriculum vitae
  - Mentor’s curriculum vitae
  - Transcripts from all previous colleges and universities

Admission to the program will be competitively determined by the admissions committee and will evaluated on the quality of the science proposed, the commitment of the mentor of the career development of the candidate, and on the overall impact of the training program on the applicant’s career development.

EXPERIMENTAL THERAPEUTICS AND PHARMACOLOGY
Jan M. Williams, PhD, Program Director
The Department of Pharmacology and Toxicology offers a program leading to the PhD, with the primary objective of training individuals for a successful independent career in pharmacology, toxicology or a related biomedical science.
The field of Pharmacology is very broad and offers many research directions and opportunities. Curiosity, drive, and dedication allow students to receive diverse training yet focus on areas that are personalized to the individual's interests. The breadth of training of a PhD in Pharmacology opens a wide range of career options and employment opportunities in academic, governmental and industrial organizations. That objective is achieved through a combination of formal course work, independent study and both faculty-directed and independent research. Students are exposed to fundamental principles of pharmacology as well as current concepts related to mechanisms of actions of an array of different classes of drugs and modern research techniques.
The curriculum provides ample opportunities for students to improve their written and verbal communication skills and to develop skills in critical thinking, problem solving and experimental design. The department has 19 faculty with primary appointments and secondary faculty who represent the Departments of Psychiatry & Human Behavior, Medicine, Emergency Medicine, and the Cancer Institute. Research interests of the faculty are diverse and include the cardiovascular and renal systems, pregnancy, metabolic diseases, signal transduction, membrane transport, drug metabolism/biotransformation, protein-DNA interactions, DNA damage and repair, cancer chemotherapy, and drug development.
Multidisciplinary approaches ranging from whole animal to genomic, transgenic, proteomics, and translational techniques and bioinformatics are used to investigate the genetic and molecular basis of human diseases. Departmental equipment includes electrophysiological instrumentation, fluorescence imaging, UV-Vis and laser spectrophotometers, fluorimeters, gas and liquid chromatographic-mass spectrometry facilities, cell culture facilities, and an extensive array of behavioral, cardiovascular, chemical, and biochemical instrumentation.
Admission to the program is competitive, and applicants with at least a baccalaureate degree are evaluated on the basis of undergraduate grades (particularly in science), Graduate Record Examination (GRE) scores and letters of recommendation. Financial assistance in the form of a stipend support and/or tuition scholarships may be available for full-time students accepted into the program.
A prerequisite for all courses is approval by the course director and the program director of the program in Experimental Therapeutics and Pharmacology. Graduate students outside the pharmacology program must also have approval of the program director of the program in which they are enrolled.

**PLAN OF STUDY**

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**YEAR 3+ - FALL**

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*Elective may be any 700 level course in any graduate program of interest to the student.

**MICROBIOLOGY AND IMMUNOLOGY PROGRAM**

Eva M. Bengten, PhD, Program Director

The Department of Microbiology and Immunology offers qualified students the opportunity to earn a PhD in microbiology and immunology. The department provides a creative research environment with close relationships between students and faculty. The low student-to-faculty ratio facilitates an exchange of ideas between students and faculty and enhances the student's graduate training. In addition to laboratory research under the direction of a faculty mentor, training includes formal course work, seminars, and journal clubs. Our core curriculum includes introductory courses in medical microbiology and biochemistry, and specialized graduate courses in immunology, bacterial physiology and virology. Together these experiences aid the student in learning to critically read the scientific literature, and in developing proficiency and competence in scientific writing and public speaking, all of which are crucial for success in a scientific career.
PLAN OF STUDY

YEAR 1 - FALL
MICRO 701 Medical Microbiology 6
CMB 710 Biochemistry 10

YEAR 1 - SPRING
MICRO 701 Medical Microbiology 6
MICRO 733 Experimental Immunochemistry and Immunobiology 3
MICRO 707 Microbiology & Immunology Lab Rotations 3
ID 709 Responsible conduct of Research 1

YEAR 2 - SUMMER
MICRO 704 Research in Microbiology & Immunology 1
MICRO 703 Seminar in Microbiology & Immunology 1

YEAR 2 - FALL
MICRO 708 Preparation for Instruction in Microbiology 3
MIRCO 703 Seminar in Microbiology & Immunology 1
ID 740 Statistical Methods in Research I (optional) 3
MICRO 704 Research in Microbiology & Immunology 2

YEAR 2 - SPRING
MICRO 702 Molecular and Cellular Virology 3
MICRO 703 Seminar in Microbiology & Immunology 1
MICRO 704 Research in Microbiology & Immunology 2
MICRO 725 Bacterial Structure and Function 3
Elective 3

YEAR 3 - SUMMER
MICRO 704 Research in Microbiology & Immunology 1

YEAR 3 - FALL
MICRO 704 Research in Microbiology & Immunology 1

YEAR 3 - SPRING
ID 714 Professional Skills 3
MICRO 703 Seminar in Microbiology & Immunology 1

YEAR 4+
MICRO 703 Seminar in Microbiology & Immunology 1
MICRO 750 Proposal in Microbiology & Immunology 3
MICRO 798 Dissertation and Dissertation Research 1
*Elective (optional, but recommended) 1-3

*ID 715. Teaching in Higher Education 1 credit hour
ID 716. Teaching Practicum 1-3 credit hours

NEUROSCIENCE PROGRAM
Douglas Vetter, PhD, Program Director

The Program in Neuroscience is a course of study leading to a PhD degree. It is an interdepartmental degree program with collaborating faculty from both basic and clinical departments at the University of Mississippi Medical Center. The objectives for the program in Neuroscience are to educate and train individuals to become independent research investigators, teachers and mentors with a broad understanding of the neurosciences as well as focused training within a subset of the areas of study which comprise neuroscience. These objectives apply whether the individual's ultimate career goal is to work in academic, government, industrial or administrative settings.

CORE COURSES. During the first year of study, students are required to take Foundations in Neuroscience (NSCI 701) which is an intensive overview of neuroscience coupled with analysis of relevant primary literature, Special Topics in Neuroscience (NSCI 708) focusing on current issues of interest in neuroscience, Tutorials in Neuroscience (NSCI 710) focusing on scientific rigor, experimental design and use of statistics in neuroscience research, and Fundamental Biochemistry (CMB 704). Students also engage in a series of up to six 4-5 week surveys (introductory
laboratory rotations) of different research laboratories affiliated with the program (NSCI 790). During the second year of study, students engage in intensive Senior Laboratory Rotations (NSCI 791), which typically are focused within the students’ planned dissertation laboratories. Throughout the first two years of study, students also engage in professional skills development with courses in Neuroscience Journal Club (NSCI 720), Scientific Writing (NSCI 721), and Responsible Conduct in Research (ID 709).

REQUIREMENTS FOR DISSERTATION CANDIDACY. In addition to the Core Courses described above, students must successfully pass a Qualifying Examination, which consists of developing and defending a research proposal students select from topics provided by the neuroscience faculty. This is normally completed in the summer between the second and third years. Successful completion is required in order to be admitted to candidacy for a dissertation.

COURSE DESCRIPTIONS. While the coursework listed is intended for graduate students in the Program in Neuroscience, some courses are open to qualified students in other departments with the approval of the program director and the individual course director.

PLAN OF STUDY

YEAR 1 - FALL

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YEAR 1 - SPRING

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YEAR 2 - SUMMER

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YEAR 2 - FALL

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YEAR 3 - SUMMER

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YEAR 3+

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<td>ID 716</td>
<td>Teaching Practicum (optional, but recommended)</td>
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NURSING PROGRAM

Mary W. Stewart, PhD, RN, Program Director

The PhD in Nursing program provides a strong foundation in theoretical and methodological content essential for the scholarly investigation of health care problems encountered in the practice of nursing. The program is designed to develop nurse researchers to generate and translate knowledge toward improving the health of individuals, families, communities, and populations through the conduct of biologic, physiologic, or experiential research in health and illness. The program of study and research are foundational to understanding client-centered health problems and developing the theoretical and experiential foundation necessary to initiate and coordinate clinical outcomes research. UMMS offers two entry points to the PhD in Nursing program: the post-BSN and post-masters. Individuals seeking admission to the PhD in Nursing program must meet the general admission requirements and technical standards for admission for the School of Graduate Studies (SGSHS), as well as those determined by the School of Nursing. Please contact the program director for specific program requirements.

OUTSIDE EMPLOYMENT

Students are advised to limit outside employment to 20 hours a week. Information about financial aid including, stipends and scholarships, is available. Students who receive stipends must have permission from the SGSHS Dean to engage in outside employment.
## POST-BSN ENTRY

### PLAN OF STUDY

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*Electives: Minimum of 6 hours required for degree – ID 718 Health Policy and the Healthcare System; ID 719 Introduction to the Science and Theory of Public Health; ID 725 Environmental Health; ID 701 Introduction to GIS; CHS 759 GIS in Healthcare and Epidemiology; PHN 780 Special Topics; PHN 715 Survey Design and Analysis; PHN 717 Directed Research; Advanced Research Methods; Advanced Statistics; Anthropology; Basic Science Lab Techniques; Biochemistry; Data Science; Epidemiology; Genomics; Leadership Development; Manuscript Development and Publication; Sociology; Systematic Reviews; or any other doctoral-level course approved by advisor.

**Students must enroll in PHN 701 every semester until successful dissertation proposal defense.
# POST-MSN ENTRY

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## YEAR 3+ - FALL+

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<td>PHN 798</td>
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**Students must enroll in PHN 701 every semester until successful dissertation proposal defense.

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# DOCTOR OF PHILOSOPHY IN PATHOLOGY

(Program no longer accepting new graduate students)

Michael J. Ryan, PhD, Interim Program Director

The Department of Pathology offers a 4-5 year program of study leading to the Doctor of Philosophy degree in Pathology. Highly qualified candidates with a bachelor’s, MS, or MD degree may be admitted. The program begins with course work, followed by a combination of course work and laboratory research and finishes with mentored research performing an independent project in the laboratory of one of the program faculty. Students enrolled in the program will be able to develop a broad base of understanding of general and systemic human pathology that fosters the ability to synthesize emergent information with current knowledge. In addition, students will be able to develop an introductory understanding of the clinical practice of pathology in order to gain an appreciation of how basic science and clinically applied pathology research findings contribute to medical practice and patient care. As experimental pathology is an extremely broad area of investigation, students not only may perform laboratory work under the guidance of current program faculty but also work with the program director to potentially identify faculty in other basic science programs or clinical areas with whom to perform their independent project, depending on the student’s particular area of interest. An important and unique opportunity in the program is the opportunity to perform independent research in the area of laboratory medicine health services focused on patient safety.
### PLAN OF STUDY

#### YEAR 1 - FALL
- **ANAT 713**: Histology and Cell Biology 3
- **CMB 710**: Biochemistry 10
- **PATH 700**: Pathology Journal Club 1

#### YEAR 1 - SPRING
- **ANAT 713**: Histology and Cell Biology 3
- **PATH 731**: Research in Pathology 3
- **PATH 700**: Pathology Journal Club 1
- **ID 709**: Responsible Conduct in Research 1
- Elective* 1-3

#### YEAR 2 - SUMMER
- **PATH 700**: Pathology Journal Club 1
- **PATH 731**: Research in Pathology 1

#### YEAR 2 - FALL
- **PATH 721**: General Pathology 8
- **PATH 731**: Research in Pathology 3
- **PATH 700**: Pathology Journal Club 1
- Elective* 1-3

#### YEAR 2 - SPRING
- **PATH 721**: General Pathology 8
- **PATH 731**: Research in Pathology 3
- **PATH 700**: Pathology Journal Club 1
- Elective* 1-3

#### YEAR 2 - SUMMER
- **PATH 743**: Research in Pathology 1
- **PATH 700**: Pathology Journal Club 1
- Qualifying Exam 2

#### YEAR 3 - FALL
- **PATH 747**: Clinical Practice in Laboratory Medicine 3+
- **PATH 798**: Dissertation and Dissertation Research 1
- **PATH 700**: Pathology Journal Club 1

#### YEAR 3 - SPRING
- **ID 714**: Professional Skills 3
- **PATH 700**: Pathology Journal Club 1
- **PATH 798**: Dissertation and Dissertation Research 1

#### YEAR 3 - SUMMER+
- **PATH 798**: Dissertation and Dissertation Research 1
- **PATH 700**: Pathology Journal Club 1

* A minimum of three elective are required to be taken prior to the Qualifying Exam, although more may be taken throughout the plan of study with advisor approval. Suggested electives include ID 721. Molecular Oncology; PATH 748. Problems in Cancer Biology; PATH 743. Pathology Seminar; BIOCH 742. Research Tools in Molecular Biology; BIOCH 744. Cellular Biochemistry; ID 740. Statistical Methods in Research; ANAT 715. Neurobiology; ID 715. Teaching in Higher Education; ID 716. Teaching Practicum; MICRO 761. Medical Immunology.

**Clinical Practice in Laboratory Medicine is a required course that may be taken any time after the student has passed his/her Qualifying Examination. Taking this course prior to the Qualifying Exam requires program director approval prior to registration.
PHYSIOLOGY AND BIOPHYSICS PROGRAM

Michael J. Ryan, PhD, Program Director

In keeping with the mission of the University of Mississippi Medical Center, the mission of the Department of Physiology is “to maintain the highest level of productivity and excellence in teaching and research to the University of Mississippi Medical Center, national, and international scientific communities”. In addition, the faculty play leading roles in national and international service to the American Physiological Society, the American Heart Association (AHA), the AHA Council on Hypertension, NIH, the International Society of Hypertension, and the Inter-American Society of Hypertension.

The Department offers a PhD in Physiology and supports a MD/PhD degree in Physiology. For the PhD degree, a minimum of 60 credit hours in physiology and biomedical science courses are required, and at least 15 of the 60 credits must be outside the major area of study. In addition, a dissertation is a requisite for the PhD. The MD/PhD degree is offered to highly qualified students by the School of Medicine in collaboration with the School of Graduate Studies in the Health Sciences. This program is designed primarily to train physician scientists who seek a professional career combining clinical skills and research.

PLAN OF STUDY

YEAR 1 - FALL
CMB 710 Biochemistry 10
ANAT 713 Histology and Cell Biology 3
PHYSIO 702 Physiological Concepts 1

YEAR 1 - SPRING
PHYSIO 701 Medical Physiology 12
ANAT 713 Histology and Cell Biology 3
ID 709 Responsible Conduct in Research 2
PHYSIO 702 Physiological Concepts 1

YEAR 2 - SUMMER
PHYSIO 707 Research in Physiology 1

YEAR 2 - FALL
PHYSIO 715 Endocrinology 2
PHYSIO 717 Circulatory Physiology 7
PHYSIO 727 Physiological Applications of Molecular Biology 2

YEAR 2 - SPRING
PHYSIO 731 Renal and Body Fluid Physiology 7
PHYSIO 744 Simulation of Physiological Mechanisms 3
NSCI 710 Tutorials in Neuroscience 1

YEAR 3+ - SUMMER
PHYSIO 735 Special Topics in Physiology 1

YEAR 3+ - FALL
PHYSIO 798 Dissertation and Dissertation Research 1
PHYSIO 728 Scientific Communications in Physiology 2

YEAR 3+ - SPRING
PHARM 726 Fundamental Pharmacology 6
PHYSIO 798 Dissertation and Dissertation Research 1
PHYSIO 705 Seminar 1
ID 714 Professional Skills 2

COURSES OF INSTRUCTION

ANAT 700. Fundamentals of Gross Anatomy. A study of the human body with an emphasis on the head, neck and trunk. This course incorporates lectures and a dissection laboratory. Although listed as a Spring Semester course, a component is taught at the start of the Fall Semester. Traditional Lecture (9 hours)

ANAT 701. Fundamental Micro and Devel Anatomy. A study of the microscopic structure and function of cells, tissues and organs. Traditional Lecture (6 hours)

ANAT 703. Seminar Writing Biomedical Research Paper. Basic elements of writing, such as sentence structure, and the traditional sections of the biomedical research paper (Introduction, Materials and Methods, Results, and Discussion) are taught through the use of examples and exercises. Traditional Lecture (1-2 hours)

ANAT 711. Gross Anatomy. A study of the human body utilizing dissection. Traditional Lecture (6-12 hours)
ANAT 712. Physiology for Clinical Anatomists. The course involves the study of human physiology with special emphasis on cardiopulmonary, musculoskeletal, nervous, endocrine, and respiratory systems as well as acid base balance. Prerequisite: ANAT 711 Traditional Lecture (3 hours)

ANAT 713. Histology and Cell Biology. A study of the structure and function of cells, tissues and organs. This 6 credit course runs through Fall and Spring Semesters, and students must register for 3 credit hours in each semester to obtain credit. Traditional Lecture (3 hours)

ANAT 715. Neurobiology. A study of the human nervous system Traditional Lecture (4-6 hours)

ANAT 716. Developmental Anatomy. A study of the embryonic development of the human body. Traditional Lecture (2 hours)

ANAT 717. Clinical Anatomy Research Rotations. Research experience with 1-3 members of the Clinical Anatomy faculty. Traditional Lecture (1-9 hours)

ANAT 722. Topics in Contemporary Anatomy. A seminar course in which students will take turns presenting the contents of assigned scientific papers or other readings dealing with research in anatomy or related topics. Traditional Lecture (1-2 hours)

ANAT 730. Teaching Practicum in Gross Anatomy. Advanced students will: 1) develop skills required to teach gross anatomy to professional and graduate students in a laboratory venue and 2) solidify his or her command of the subject. As part of the course, students will gain experience in the construction and administration of written and laboratory exams. Prerequisite: Anatomy 700 or 711 or equivalent. Traditional Lecture (6 hours)

ANAT 731. Teaching Practicum in Histology and Cell. Advanced students will 1) develop skills required to teach histology and cell biology to professional and graduate students in both a laboratory and lecture venue and 2) solidify his or her command of the subject. As part of the course, students will gain experience in the construction and administration of written and laboratory exams. Prerequisite: Anatomy 701 or 713 or equivalent. This 3 credit course runs through Fall and Spring Semesters, but students register for all 3 credits in the Fall Semester Traditional Lecture (1-3 hours)

ANAT 733. Teaching Practicum in Neurobiology. This course provides the advanced student with a mechanism for (1) developing the skills necessary to teach neurobiology to professional and graduate students and (2) solidifying his or her knowledge of neurobiology. Students receive instruction in current educational approaches, and engage in interactive learning activities with students enrolled in ANAT 615/715. Students in ANAT 733 gain experience in guiding group discussions, and obtain training in content delivery in a laboratory setting. The course will prepare students to play a critical role in enabling professional students to bridge the foundations in basic science to the health-related professions. Prerequisite: Anatomy 715 or equivalent. Traditional Lecture (3 hours)

ANAT 734. Teaching Practicum in Graduate Anatomy. This course is an opportunity for senior students in the PhD program in Clinical Anatomy to obtain experience in teaching in a graduate-school environment. Experience will be obtained in two courses taught in the MS in Biomedical Science Program: ID-767 Fundamental Histology & Cell Biology and ID-768 Essentials of Anatomy. Students in this course will obtain experience and training in lecturing to this audience, and in running laboratory and small-group sessions. Students will also assist in creating and conducting interactive small-group discussions using virtual slide technology. Traditional Practicum/Internship (2 hours)

ANAT 740. Readings in Contemporary Anatomy. A program of reading or reading and research assigned by a faculty advisor according to specific interests of the student. A written report of the work may be required of the student during or at the end of the semester. Traditional Lecture (1-9 hours)

ANAT 742. Learning in the Health Sciences. A seminar course intended to introduce students to education and basics of learning theory with particular emphasis on health sciences education. Traditional Lecture (3 hours)

ANAT 743. Pedagogy in the Health Sciences. This course will be an introduction to pedagogical theory and skills. Students will focus on developing their own ideas about teaching, including formulating and working on a teaching philosophy, observing and interviewing current faculty members, and developing a sample lesson plan. Traditional Lecture (3 hours)

ANAT 744. Health Sciences Curriculum Development. A seminar course intended to extend the work done in Skills Development in Clinical Anatomy I, focusing on curricular development of a full course and/or program. Traditional Lecture (3 hours)

ANAT 745. Clinical Anatomy Research Project. In consultation with their mentor and the Program Director, the student will participate in a research/scholarship project focused on an area of clinical anatomy or anatomical education. Traditional Laboratory (1-9 hours)

ANAT 750. Thesis Research Proposal. An advanced course in which master's students prepare a research proposal for their thesis research project. Traditional Thesis (1-9 hours)

ANAT 760. Dissertation Research Proposal. An advanced course in which doctoral students will either prepare for their qualifying exams or prepare for and defend a research proposal for their dissertation research project. Traditional Dissertation (1-9 hours)

ANAT 790. Thesis and Dissertation Research. Traditional Thesis (1-9 hours)

ANAT 798. Dissertation and Dissertation Research. Traditional Dissertation (1-9 hours)

BIOCH 744. Cellular Biochemistry. Cellular Biochemistry will cover the structure and function of eukaryotic cells. Topics covered include: gene expression and its regulation, cell cycle, organelle function, signal transduction, intracellular transport, bioenergetics, and model genetic systems. Traditional Lecture (6 hours)


BMS 700. Biomedical Sciences Journal Club. A review of significant findings in pathology through discussion of the current peer-reviewed literature spanning general and systems pathology, as well as the medical practice of anatomic and clinical pathology. Review of current literature, discussion, and oral presentation. Traditional Lecture (1 hour)

BMS 702A. Fundamentals of Biomaterials A. This course that will deal with metals, ceramics and polymers used for dental and medical applications. The physical, mechanical and biological interactions of these materials will be topics for discussion. The history of materials use in medicine, some of the pitfalls encountered and the current state of the art will be presented in detail. Tissue engineered medical products and guided tissue regeneration will also be covered. There will be an introduction to the methods used to assess the appropriateness of materials for use in contact with living tissues. Prerequisite: Consent of Instructor. Traditional Lecture (3 hours)

BMS 702B. Fundamentals of Biomaterials B. This course is a continuation of topics covered in BMS 702A. This course that will deal with metals, ceramics and polymers used for dental and medical applications. The physical, mechanical and biological interactions of these materials will be topics for discussion. The history of materials use in medicine, some of the pitfalls encountered and the current state of the art will be presented in detail. Tissue engineered medical products and guided tissue regeneration will also be covered. There will be an introduction to the methods used to assess the appropriateness of materials for use in contact with living tissues. Prerequisite: B.M.S. 702A or Consent of Instructor. Traditional Lecture (3 hours)

BMS 703. Experimental Methods in Materials Science. An introduction to the variety of equipment used to evaluate the structure and properties of materials and tissue response to biomaterials. SEM techniques, EDS, EBSD & WDS, mechanical testing equipment, thermal analysis equipment, light microscopy, histological specimen preparation, and aqueous corrosion measurement will be covered. The course will include one lecture and one three-hour laboratory per week. Traditional Lecture (2 hours)
BMS 704. Crystallography and X-Ray Diffraction. Principles of crystallography, including point groups, space groups, stereographic projections and reciprocal lattice. Topics in x-ray diffraction, with special emphasis on application of x-ray diffraction techniques to materials analysis, will be covered during lecture and laboratory. Traditional Lecture (3 hours)

BMS 705. Materials Thermodynamics. A graduate level course dealing with the principles of energetic equilibrium as applied to materials science. Materials thermodynamics provides a foundation for many other materials science courses. The first part of this course will introduce the apparatus of thermodynamics through classical steam engine calculations. The second part will apply that apparatus to predict the behavior of chemical solutions and mixtures. The following topics will be covered: the first, second, and third laws of thermodynamics; state functions and process variables; criteria for equilibrium; enthalpy of mixing; free energy basis for unary and binary phase diagrams; capillarity and surface energy; electrochemistry. This course will involve intensive application of algebra and differential and integral calculus. Prerequisite: BMS 701A/B and BMS 708 or Consent of Instructor. Traditional Lecture (4 hours)

BMS 708. Mathematics for Materials Study. This introduction for students who have a biological science background or who have not taken didactic study for some time. This course provides or refreshes the mathematical foundation necessary to study engineering. BMS708 is a prerequisite for many courses in the Biomedical Materials Science program. This course covers the following topics: orientation to MathCAD software, precision and accuracy, vector algebra, matrix algebra, complex/imaginary numbers, polar coordinates, trigonometry, differential calculus with emphasis on applications (curve sketching, design optimization, related rates, propagation of error, successive approximations, curvilinear motion), integral calculus with emphasis on applications (calculation of irregular areas, volumes, centroids, and moments of inertia; function approximation using Taylor series; spectrum analysis using Fourier series), and a brief introduction to differential equations. Traditional Lecture (4 hours)

BMS 710. Fundamentals of Polymer Science. An in-depth course in polymer chemistry and physics. Areas to be covered include polymerization mechanisms, methods of polymer analysis, mechanics of amorphous and crystalline polymers (including time-dependent mechanical behavior), thermodynamics and kinetics of polymer crystallization, and thermal and optical behavior of polymers. Prerequisite: BMS 701A/B or consent of instructor. Traditional Lecture (3 hours)

BMS 711. Fundamentals of Ceramics. This graduate level course provides advanced information on ceramic compositions, processing methods, material properties, and applications. The topics will mirror those already covered in BMS 701, but they will be covered in greater depth and with emphasis on practical examples, commercially available products, and quantitative prediction of material properties. Prerequisite: BMS 701 A/B or consent of instructor. Traditional Lecture (3 hours)

BMS 712. Fundamentals of Metals. An advanced study of the principles governing the properties of metals. Principles of structure and their relationship to mechanical, thermal, electrical, optical and surface properties will be discussed. Prerequisite: BMS 701A/B or consent of instructor. Traditional Lecture (3 hours)

BMS 713. Introduction to Electron Microscopy. A study of the principles and application of knowledge in electron microscopy. The use of both the Scanning Electron Microscope (SEM) and the Transmission Electron Microscope (TEM) will be included. The theory and practical aspects of performing compositional analysis and mapping using the energy dispersive and wavelength dispersive x-ray spectrometers will be covered. At completion of the course, the student should be able to use the integrated SEM/EDS/WDS system to qualitatively determine composition, as well as understand the use of calibration to produce quantitative results. Use of the system for digital image acquisition and elemental mapping will be covered. The student will learn appropriate methods for preparing samples for observation in the SEM and TEM, and learn to recognize artifacts of sample preparation. The student will select a project for analysis and prepare a portfolio of photomicrographs and/or analyses demonstrating proficiency with either microscope, and with the integrated Traditional Lecture (3 hours)

BMS 721. Polymer Processing. Methods used to fabricate polymer biomaterials will be presented and the parameters important to each method, the equipment and control mechanisms will be discussed with the advantages and disadvantages of the different methods compared. Among the topics to be included are injection molding, extrusion, machining, reactive injection molding and pultrusion. Traditional Lecture (3 hours)

BMS 723. Degradation Mechanisms in Materials. The various mechanisms of environmentally induced material degradation (e.g., oxidation and hydrolysis) for the three major classes of materials (metals, polymers, ceramics). The course will focus on the unique aspects of the biological environment which can alter conventional degradation mechanisms. Traditional Lecture (2 hours)

BMS 724. Electrochem & Corrosion of Implant Mat. A detailed description of the electrochemical kinetic and thermodynamic processes that govern corrosion. Particular attention will be given to the metals and alloys systems used in current implant devices. Traditional Lecture (3 hours)

BMS 725. Environmentally Assisted Fract of Implt Mat. A study of one of the principal failure mechanisms of metallic implants - environmentally assisted fracture (EAF). EAF includes the mechanisms of stress corrosion cracking (SCC) and corrosion fatigue (CF). The synergistic interaction of stress and corrosion will be discussed with particular attention to implant alloy systems. The role of EAF in the failure of other material systems (e.g., polymers) will also be discussed. Traditional Lecture (2 hours)

BMS 727. Surface Science. A study of the basic elements of surface characterization and the various physio-chemical phenomena that govern their properties. The theories of surface interactions with the biological environment will be discussed. Also covered will be methods for altering surface properties. Traditional Lecture (3 hours)

BMS 728. Failure Analysis of Medical Implant. This is an advanced graduate level course in which students will learn the protocol and will begin practicing the practical skills necessary to analyze failures of medical implants and prostheses following in vitro testing or clinical use. A brief review of structure, mechanical and electrochemical properties of materials used for biomedical applications will be provided. Methods used to determine appropriate material characteristics, such as grain structure, secondary phases, pores, inclusions, and mechanical and corrosion properties will be covered. Failures of metallic, polymeric, and ceramic materials will be analyzed with emphasis on methods for specimen cleaning and preservation, visual inspection, documentation, and optical and electron microscopy techniques. Prerequisite: BMS 701A/B and BMS 702A/B or Consent of Instructor. Traditional Lecture (3 hours)

BMS 737. Research in Biomedical Sciences. This course is to acquaint students with ongoing research programs and research methodologies in the Biomedical Sciences so they can choose appropriate mentor for their dissertation mentor and/or begin their training under the guidance of a chosen mentor. Only students enrolled in the Ph.D. in Biomedical Sciences degree program are allowed to enroll in this course prior to earning the Ph.D. candidacy status. Traditional Laboratory (1-9 hours)

BMS 750. Special Topics in Biomedical Mat Sci. Treatment of specific subjects not dealt with in other courses. This course may cover any area of interest to the student(s) and at least one faculty member. Traditional Lecture (1-9 hours)

BMS 797. Research Proposal in Biomedical Sciences. An advanced course in which doctoral students prepare and defend a research grant proposal concerning the topic of their dissertation research. Traditional Laboratory (1-9 hours)

BMS 798. Dissertation and Dissertation Research. Traditional Dissertation (1-9 hours)

CBM 701. Basic Biochemistry in Healthcare. Introductory course in biochemistry including chemistry of amino acids and proteins, nucleic acids, carbohydrates and lipids; enzymology; metabolism and metabolic regulation; membrane structure and function; physical biochemistry; cellular energy production; hormonal control mechanisms; differentiation; molecular genetics; and protein synthesis. Traditional Lecture (3 hours)

CBM 704. Fundamental Biochemistry. This course that presents a broad survey of biochemistry that is suitable for students whose major area of study is outside the discipline. Topics include the chemistry of amino acids and proteins, nucleic acids, carbohydrates and lipids; enzymology; metabolism and metabolic regulation; membrane structure and function; physical biochemistry; cellular energy production; hormonal control mechanisms; differentiation; molecular genetics; and protein synthesis. Traditional Lecture (3 hours)

CBM 705. Biochemistry I: Biochem & Mol Biology. A fundamental study in biochemistry that covers the chemistry, biosynthesis, and utilization of amino acids, proteins, nucleic acids, carbohydrates, and lipids. Other basic biochemical topics will be protein structure, membrane structure and function, cell organization and function, and cellular structures function and structure. Students will also develop problem solving and analytical skills that are more generally applicable to the life sciences. Online, Internet, or Web-based Lecture (4 hours)

CBM 706. Biochemistry II: Enzymology & Metabolism. A continuation of Biochemistry I. Topics include thermodynamics, pH and acid-base chemistry, metabolism and metabolic regulation including glycolysis, TCA cycle, and oxidative phosphorylation. Tissue-specific metabolism studies will include liver metabolism, muscle metabolism, hormonal action and blood clotting. Students will also explore how alteration of these metabolic pathways relates to the development and progression of some human diseases. Online, Internet, or Web-based Lecture (4 hours)

CBM 707. Biochemistry III: Forensic Biotechnology. The project-based course will include studies in DNA fingerprinting, PCR, CRIISP, bioinformatics, and western blot techniques; all important biotechnology techniques used currently in forensic sciences. The course is designed to give students a fundamental understanding of techniques covered as well as working knowledge through the use of some virtual labs. Students will also learn how these techniques can be applied towards new challenges in the biotechnology industry. Projects will include integrating knowledge and skills in the examination, analysis, interpretation and reporting of evidence. Students will also develop problem solving and analytical skills that are more generally applicable to the life sciences. Further, students will develop writing and presentation skills necessary for the biotechnology work force. Traditional Lecture (3 hours)

CBM 708. Biochemistry IV: Gen, Develop, & Disease. This project-based component will include studies in DNA repair mechanisms, the basis of selected genetic diseases and pedigree development, study of DNA mutation and cancer and treatment options for DNA-based diseases. Students will also explore how alteration of certain metabolic pathways relates to the development and progression of some human diseases. These projects will include the examination of regulations and ethics surrounding treatment and prevention of genetic diseases. Further, students will develop research, writing, and presentation skills necessary for the work force. Online, Internet, or Web-based Lecture (3 hours)

CBM 710. Biochemistry. Comprehensive course in biochemistry including chemistry of amino acids and proteins, nucleic acids, carbohydrates and lipids; enzymology; metabolism and metabolic regulation; membrane structure and function; physical biochemistry; cellular energy production; hormonal control mechanisms; differentiation; molecular genetics; and protein synthesis. This course extends over two quarters and the entire course must be completed to receive credit. Traditional Lecture (10 hours)


CBM 715. Physical Biochemistry. An introduction to methods in physical biochemistry: a problem solving approach including ligand binding, spectroscopy, fluorescence, circular dichroism, centrifugation, light scattering, electrophoresis, and separation techniques. Traditional Lecture (2 hours)

CBM 720. Seminar. A course in which the student prepares and presents a research seminar on a topic of contemporary interest. Traditional Lecture (1-4 hours)

CBM 730. Special Topics I. Treatment of specific subjects not dealt with fully in other courses. Traditional Lecture (1-9 hours)

CBM 731. Special Topics II. Treatment of specific subjects not dealt with fully in other courses Traditional Lecture (1-15 hours)

CBM 740. Biochemical Methods. Primarily a laboratory course having the objective of introducing the student to various basic procedures and techniques which are tools of biochemical research. Traditional Lecture (2 hours)

CBM 741. Advanced Biochemical Methods. An advanced laboratory course in which the student is involved in advanced procedures and techniques which are tools of biochemical research. Traditional Laboratory (1-9 hours)

CBM 742. Research Tools in Molecular Biology. A course designed to introduce students to contemporary methods in Molecular Biology including cloning, mutagenesis, transgenic animals, Genomics, Proteomics, and gene expression. Traditional Lecture (3 hours)

CBM 743. Cellular Biochemistry I. Traditional Lecture (4 hours)

CBM 760. Biochemistry Research. Thesis research project under supervision of Thesis Advisor Traditional Laboratory (1-9 hours)


ID 701. Introduction to Geographic Information S. This course introduces students to fundamental concepts and applications of Geographic Information Systems (GIS). Special emphasis is given in the areas of healthcare and epidemiology. This course combines an overview of the general principles of GIS and analytical use of spatial information technology applicable for healthcare professionals. This is the first course of a series on geospatial information technology to be offered as an interdisciplinary graduate course at UMMC. Traditional Lecture (3-4 hours)

ID 704. An Introduction to Animal Research. The use of animals as research tools, including characteristics of commonly used species, anesthesia and surgical techniques. Traditional Lecture (2 hours)

ID 705. History of Medicine from Antiquity-1700. This course introduces the student to the history of medicine in Europe from Greco-Egyptian antiquity to the association of post-mortem pathology with disease and the clinical movement of early 19th century Paris. Beginning with the earliest professionalization of healing, we will follow developments in the perception of health and disease, the elaboration of medical theory, the rise of university medicine and the professionalization of the M.D., social responses to disease and unusual mortalities, and the beginnings of public attempts to deal with the sick and contain epidemics. Students will also study not only what medical historians believe actually happened in the past, but also how contemporaries understood health and disease. Traditional Lecture (2 hours)

ID 706. History of Medicine From 1700 to 2000. This course is the second quarter of the introductory survey of the social and intellectual history of medicine. Traditional Lecture (2 hours)


ID 708. Topics in the History of Medicine. Topics vary. Emphasis on mid-18th century to the present. Traditional Lecture (2 hours)

ID 709. Responsible Conduct in Research. An interactive lecture course designed to provide an understanding of ethics in scientific research and the basic skills important for both oral and written scientific communication. Traditional Lecture (1-9 hours)

ID 710. Research Tools in Molecular Biology. A course designed to introduce students to contemporary methods in molecular biology including cloning, mutagenesis, transgenic animals, genomics, proteomics, and gene expression. Traditional Lecture (3 hours)
ID 713. Bioinformatics & Genomics. This multidisciplinary and interdepartmental course is designed to provide students in the School of Graduate Studies in the Health Sciences, and other related programs at UMMC, with sound training and knowledge in the use and application of bioinformatics tools and genomics recourses to analysis, visualization and interpretation of high-throughput "omics", genotype, proteomics, sequence, methylation and other biological data on cancer and other complex human diseases. Traditional Lecture (3 hours)

ID 714. Professional Skills. A course designed for early to late graduate students and postdoctoral fellows to acquire skills needed to be successful in a scientific work environment, with special emphasis on oral and written communication skills, grantsmanship, career choices, laboratory management, and academic teaching skills. Traditional Lecture (3 hours)

ID 715. Teaching in Higher Education. A course designed to provide practical and theoretical foundations for teaching in higher education. The course will offer experiences to explore and develop skills that promote learning as well as apply strategies for effective course design and assessment. The intended audience is graduate students and postdoctoral fellows. Traditional Lecture (3 hours)

ID 716. Teaching Practicum. The practicum enables student teachers to acquire beginning competencies for teaching in higher education in a classroom setting. Traditional Practicum/Internship (1-9 hours)

ID 717. Special Topics Biostat, Bioinfo, & Epi. Special Topics in Biostatistics, Bioinformatics & Epidemiology: This course is intended to meet the special needs of individual students. Students who wish to learn more about a particular topic can select from the list of available topics and/or contact the Center of Biostatistics & Bioinformatics with their mentor to request a new topic. The structure of individual course modules is decided upon by the module’s instructor. Traditional Lecture (1-3 hours)

ID 719. Introduction to the Science and Theory of. An interdisciplinary graduate-level course that addresses population-based approaches to community health improvement. Using problem-based learning, the course covers predominant theories to describe, explain, or predict human behavior to address the social and behavioral determinants of health and promote behavior change at the population level. Case studies for analysis are contemporary public health issues. Opportunities include working with a public health mentor and exposure to current efforts of local, state, and national figures. Synchronous and asynchronous instruction. Traditional Lecture (3 hours)

ID 720. Grant Writing and Management. This graduate level course provides an introduction to acquiring and managing extramural funding for sponsored projects with emphasis on NIH research grants. The following topics will be covered: searching for sponsors, including an overview of NIH funding mechanisms; grant writing, including development of specific aims and hypothesis, writing a literature review, presenting preliminary data, describing methods and timelines, and making a budget; the submission and review process; revising unsuccessful applications; starting a new laboratory; and submitting progress reports and competing continuations. Students will write and revise a grant application during this course. Traditional Lecture (1 hour)

ID 721. Molecular Oncology. The course will provide an in depth presentation of cancer biology topics including initiation, progression, metastasis, genetic instability, DNA damage response, cell cycle control, oncogenes and tumor suppressor genes, cancer immunology, and therapeutic approaches. Traditional Lecture (4 hours)

ID 725. Environmental Health. This course offers a general introduction to environmental health focusing on local, addressing fundamental topics and current issues. This course covers core topics that prepare students to comprehend environmental health issues leading to prevention and management of the major environmental health problems. Traditional Lecture (3 hours)

ID 727. Prof Develop for Biomedical Careers. This course will expose students to current biomedical research from a variety of disciplines in a didactic and discussion forum. Emphasis will be placed on current technologies and areas of research, how these areas address issues of biomedical interest, and how basic research is translated into clinical practice. Lecture and seminar presentations by students and medical center faculty. Traditional Lecture (1 hour)

ID 737. Research in Biomedical Sciences. An interdisciplinary course designed to acquaint students with ongoing research programs and methodologies in the Biomedical Sciences. Traditional Laboratory (1-9 hours)

ID 740. Statistical Methods in Research I. This course is an introduction to basic statistical methods for research and is designed to enable students to develop their data analysis and interpretation skills. Students will learn about experimental design, estimation, and hypothesis testing, and how to apply statistical techniques such as point and interval estimation, tests of statistical significance, correlation, linear and non-linear regression, ANOVA, and longitudinal data (repeated measures) analysis. The emphasis will be on applied rather than theoretical statistics, and on understanding and interpreting the results of statistical analyses. Data sets will be analyzed using the statistical package STATA. This is a "hands-on" class – in the computer lab, data sets will be analyzed under the supervision of instructors. Traditional Lecture (3 hours)

ID 741. Statistical Methods in Research II. A continuation of Statistical Methods in Research I, this course introduces the student to more complicated methods than those discussed in the first course. Datasets will be analyzed using the statistical package STATA throughout the course sequence. Traditional Lecture (3 hours)

ID 759. Geo Info Sys in Healthcare & Epidemiology. This course combines an overview of the general principles of GIS and analytical use of spatial information technology applicable for healthcare professionals. Traditional Lecture (3 hours)

ID 767. Fundamental Histology and Cell Biology. An integrated, system-based study of the microscopic structure and function of the human body. An introduction to histology and cell biology as it relates to medical science. Traditional Lecture (2 hours)

ID 768. Essential Anatomy. An introduction to human anatomy taught through lectures, classroom activities and the study of cadaveric specimens. Traditional Lecture (2 hours)

ID 770. Evidenced Based Clinical Research I. General introduction to descriptive and inferential statistical methods designed for students in the biomedical health science. The course will cover the basic statistical procedures including one sample t-test, two independent samples t-test, paired t-test, correlation and regression methods. Little exposure to experimental designs and their application in the medical field will be addressed as well. Methods of reliability and validity of screening tests will be discussed in this course. The students will be exposed to SPSS statistical software to learn how to analyze and interpret the results. Emphasis will be given to the applied nature of the course. Examples will be given to evaluate the quality of the clinical literature based on what the student learned in this course. Traditional Lecture (2-3 hours)

ID 777A. Biomedical Sciences-Thesis Proposal. This course is designed to instruct students in the writing of a MS Thesis. It will involve development of a research proposal phase in which the student maps out a research plan, and, presents it to his/her committee. The proposal formulated methods and is based for the research phase of the MS degree program. Traditional Thesis (3 hours)

ID 777B. Biomedical Sciences Thesis. This course is designed to instruct students in the writing of a MS Thesis. It will involve the writing of a masters thesis in which the student describes and discusses the research performed in the course of their graduate studies. Traditional Thesis (3 hours)

MFM 606. Antenatal Diagnos-Fetal Ther & Sem MFM I. This is a supervised course with extensive instruction in the utilization of basic and advanced targeted sonography for the evaluation of fetal and maternal pregnancy disorders. Included is an introduction to basic invasive fetal evaluation via amniocentesis, chorionic villus sampling, placental biopsy, and percutaneous umbilical blood sampling. Limited to M.D. postgraduates who have completed a residency in obstetrics and gynecology and are presently fellows in the maternal-fetal medicine fellowship training program. A weekly tutorial/seminar is conducted on topics in maternal-fetal medicine. Traditional Lecture (3 hours)
MFM 607. Antenatal Diagno-Fetal Ther & Sem MFM II. This is an advanced course of continuing supervised instruction in advanced obstetric ultrasound. Enrollment is limited to MFM fellows as are all courses in this program. It includes seminar/tutorial systematically reviewing one half of the major topical areas in maternal-fetal ultrasound. A weekly tutorial/seminar is conducted on topics in maternal-fetal medicine. Traditional Lecture (3 hours)

MFM 608. Antenatal Diagno-Fetal Ther & Sem MFM III. This is a continuation of the two other antenatal diagnosis courses with other topics in maternal-fetal medicine discussed over a 3 year curriculum. The same limitation of enrollment to fellows currently in the maternal-fetal medicine training program is applied to this and all courses in this degree program. Supervised instruction with emphasis on expertise and knowledge into all fetal organ systems and feta! therapy via intrauterine transfusion or drug therapy is addressed. Traditional Lecture (3 hours)

MFM 609. Antenatal Diagno-Fetal Ther & Sem MFM IV. The fourth course in this series continues seamlessly with the other three in the series, limited to MFM fellows in our postgraduate program. Major topical areas in maternal-fetal ultrasound are considered with continuing supervised clinical instruction. A weekly tutorial/seminar is conducted on topics in maternal-fetal medicine (3 year curriculum to topics and readings). Traditional Lecture (5 hours)

MFM 610. Thesis Work & Seminar in Mat Fet Med V. Closely directed supervision of thesis research project and weekly participation in MFM seminar series that is part of the three-year curriculum in the subspecialty. Limited to MFM fellows enrolled in our postgraduate program. Traditional Thesis (1-9 hours)

MFM 611. Thesis Work & Seminar in Mat-Fet Med V. Closely directed supervision of thesis research project and possibly other with weekly participation in the MFM seminar tutorial series that is part of the three-year curriculum in the subspecialty. Limited to MFM fellows enrolled in our postgraduate program. Traditional Thesis (1-9 hours)

MFM 612. Mfm Research Methods & Projects II. This is a continuation of MFM611 which is a prerequisite with enrollment likewise limited to fellow enrolled in the maternal-fetal medicine training program. Traditional Lecture (3 hours)

MFM 613. Mfm Research Methods & Projects III. Closely directed supervision of research projects that is limited to OB/GYN fellows enrolled in the maternal-fetal medicine fellowship program. Traditional Lecture (3 hours)

MFM 614. Clinical & Basic Research Methods & Proj. Traditional Laboratory (3 hours)

MFM 710. Fundamental Research Tools Methods. A course designed to introduce Maternal Fetal Medicine fellows to contemporary methods in Molecular biology research. Traditional Laboratory (3 hours)

MFM 717. Medical Genetics. Traditional Lecture (3 hours)


MICRO 701. Medical Microbiology. The fundamentals of microbial physiology, genetics and immunology are presented with important bacterial, viral, parasitic and mycotic infections discussed from the standpoint of etiology, epidemiology, pathogenesis and laboratory diagnosis. Participation in laboratory exercises and small group sessions is required. Traditional Lecture (6 hours)

MICRO 702. Molecular and Cellular Virology. The students will learn fundamentals of viral replication and pathogenesis with emphasis on pertinent aspects of molecular biology. Traditional Lecture (3 hours)

MICRO 703. Seminar in Microbiology & Immunology. Graduate students will prepare, present and attend weekly seminars. Traditional Lecture (1-9 hours)

MICRO 704. Research in Microbiology & Immunology. Students participate in an on-going research project under the direction of a graduate faculty member. Traditional Laboratory (1-9 hours)

MICRO 707. Microbiology & Immunology Lab Rotation. This course is designed to acquaint the student with ongoing research and research methodologies within the department. It is designed to prepare students for the doctoral dissertation project. Traditional Laboratory (6 hours)

MICRO 710. Clinical & Basic Research Methods & Proj. Traditional Laboratory (3 hours)

MICRO 715. Microbiology & Immunology Special Topics. The course is designed to meet the special needs of individual students. Students who wish to learn more about a particular topic can arrange this course by discussing their need with their mentor. Traditional Lecture (1-9 hours)

MICRO 725. Bacterial Structure and Function. A study of bacterial physiology, anatomy and regulatory mechanisms. Traditional Lecture (3 hours)

MICRO 733. Exp. Immunochemistry & Immunobiology. Theoretical and experimental applications of immunochrometry and immunobiology with major emphasis on in vivo and in vitro techniques used in investigating various aspects of humoral and cell-mediated immune responses. Traditional Lecture (3 hours)

MICRO 734. Advanced Immunology. An advanced course in which students discuss and critically review new research findings in various aspects of human and comparative immunology. Prerequisite: MICRO 701, MICRO 733. Traditional Lecture (1-3 hours)

MICRO 735. Advanced Virology. An advanced course in which students study, discuss and critically review new research findings, concepts and laboratory techniques in the areas of viral biochemistry, molecular biology, tumor virology and medical virology. Prerequisite: MICRO 701, BIOCH 710 and MICRO 702. Traditional Lecture (1-3 hours)

MICRO 741. Fundamental Microbiology & Immunology. Basic concepts in microbiology and immunology are presented and correlated with disease processes having a bacterial, viral, mycotic or parasitic etiology. The relevance of microbial pathogenesis in general medicine is discussed. NOTE: This course is not offered to microbiology and immunology graduate students. Traditional Lecture (6 hours)

MICRO 747. Advanced Bacteriology. This course will offer small group sessions that address the mechanisms of infection and host defense. Prerequisite: MICRO 701 and MICRO 725. Traditional Lecture (2 hours)

MICRO 750. Proposal in Microbiology & Immunology. An advanced course in which doctoral students prepare and defend a research grant proposal focused on their dissertation research. Traditional Lecture (1-3 hours)

MICRO 760. Medical Virology. This course is a section of the larger MEDICAL MICROBIOLOGY course (MICRO 701). Students OUTSIDE THE DEPARTMENT OF MICROBIOLOGY AND IMMUNOLOGY are not eligible to register for this course. Traditional Lecture (3 hours)

MICRO 761. Medical Immunology. This course is a section of the larger MEDICAL MICROBIOLOGY course (MICRO 701). Students OUTSIDE THE DEPARTMENT OF MICROBIOLOGY AND IMMUNOLOGY are not eligible to register for this course. Traditional Lecture (3 hours)

MICRO 762. Medical Bacteriology. This course is a section of the larger MEDICAL MICROBIOLOGY course (MICRO 701). Students OUTSIDE THE DEPARTMENT OF MICROBIOLOGY AND IMMUNOLOGY are not eligible to register for this course. Traditional Lecture (6 hours)
This multidisciplinary course will introduce students to scientific methods used for clinical translational research. The course will stress the importance of multidisciplinary approaches to solving clinical questions and will incorporate multiple examples of research discoveries that were advanced through multidisciplinary collaborations. This course will emphasize a variety of research study designs and approaches that involve quantitative research methods to study clinically relevant research questions and problems. Traditional Lecture (1 hour)

MSCI 730. Perspectives in Multidisciplinary Clinic. This multidisciplinary course will introduce students to scientific methods used for clinical translational research. The course will stress the importance of multidisciplinary approaches to solving clinical questions and will incorporate multiple examples of research discoveries that were advanced through multidisciplinary collaborations. This course will emphasize a variety of research study designs and approaches that involve quantitative research methods to study clinically relevant research questions and problems. Traditional Lecture (1 hour)

MSCI 731. Fundamentals of Population Health. This course will provide students with training in the language, theories, concepts, methods, measurement, analysis, and implementation of population health. Traditional Lecture (3 hours)

MSCI 732. Clinical Trial Applications. This course is an overview of all components necessary to develop and implement a clinical trial. Prerequisites: ID740B, ID741, MSCI722, ID709. Traditional Lecture (3 hours)

MSCI 733. Social and Behavioral Sciences Theories. The content and materials in this course provides a structured overview of social and behavioral science theories and their applications relevant to population and public health research and practice. The course is designed to introduce the concepts fundamental to the understanding of multi-level factors that influence human health behaviors. Traditional Lecture (3 hours)

MSCI 740. Drug Device and Development. This course will explain the regulatory processes for drug and device development. Traditional Lecture (1 hour)

MSCI 741. Mechanics of Ethical and Regulatory Iss. This course is designed to introduce students to the ethical and regulatory issues critical in the conduct of clinical research. Students will gain an understanding of the regulations and good clinical practice guidelines that govern research with the underlying goal being the acquisition of skills used by researchers to design and conduct quality research. Traditional Lecture (1 hour)

MSCI 742. Introduction to Comparative Effectiveness. This course will provide the basic framework to learn about comparative effectiveness research and will include discussion on both clinical and health policy outcomes. Traditional Lecture (1 hour)

MSCI 790. Grant and Scientific Writing. An introduction to scientific writing. Traditional Lecture (1 hour)


NSCI 701. Foundations of Neuroscience. This course provides a thorough overview of neuroscience over two semesters. It systematically covers neuroscience in an integrated fashion covering the following main topics: 1) Neuroanatomy and Cellular Neurobiology; 2) Molecular/Structural Biology of Ion Channels, Electrophysiology, Neural Potentials; 3) The Synapse; 4) Motor Systems; 5)Sensory Systems; 6) Developmental Neurobiology; 7) Regulatory Systems; 8) Neural Networks and Connectomics; 9) Neuropharmacology; 10) Neurobiology of Brain Disorders. The course also presents "technical lectures" that cover techniques/procedures, when and why they are used, assumptions made in the techniques, and final analyses made possible by the techniques. The course includes both didactic and primary literature-based content, and is the first required course in the Program in Neuroscience. Traditional Lecture (6 hours)

NSCI 708. Special Topics in Neuroscience. A small group faculty-led discussion course on selected topics in neuroscience. Course topics are offered each Summer semester by groups of faculty and students and faculty will discuss primary literature. Traditional Lecture (1-9 hours)

NSCI 710. Tutorials in Neuroscience. Tutorials cover specialized topics in neuroscience in depth, in a small group setting. Courses consist of intensive, directed reading and discussion and is intended to provide students with the opportunity to study specialized topics in neuroscience with faculty experts in that area. The objective for this course in this academic year is to study experimental design, scientific rigor, and use of biostatistical methods in neuroscience. Traditional Lecture (1-9 hours)

NSCI 720. Neuroscience Journal Club. A review of significant issues in neuroscience including literature review and discussion of recent data and news. Traditional Lecture (1 hour)

NSCI 721 A. Scientific Writing in Neuroscience. An introduction to scientific writing that includes preparation of abstracts for scientific meetings, presentations at meetings, preparation of a scientific manuscript for publication and, finally, preparing a grant proposal for extramural funding in the NIH style. Traditional Lecture (3 hours)

NSCI 721 B. Scientific Writing in Neuroscience (B). An introduction to scientific writing that includes preparation of abstracts for scientific meetings, presentations at meetings, preparation of a scientific manuscript for publication and, finally, preparing a grant proposal for extramural funding in the NIH style. Traditional Lecture/Lab (3 hours)

NSCI 790. Neuroscience Laboratory Survey. A survey of up to six active research laboratories in the Program in Neuroscience. The goal of these rotations is to expose the students to the breadth of research occurring in the Program in Neuroscience. Additionally, exposure to the
approaches and culture of multiple laboratories allows for the student to make an informed choice when selecting a dissertation mentor and advisory committee members. Traditional Lecture (3 hours)

NSCI 791. Senior Laboratory Rotations. These are intensive laboratory rotations intended for students to begin research in their planned dissertation laboratories. Thus, all three rotations can be within the same laboratory. However, rotations may also be conducted in up to three different laboratories, depending on the student’s training needs and interests. Traditional Laboratory (6-9 hours)

NSCI 798. Dissertation Research in Neuroscience. Traditional-EL Dissertation (1-9 hours)

PATH 700. Pathology Journal Club. A review of significant findings in pathology through discussion of the current peer-reviewed literature spanning general and systems pathology, as well as the medical practice of anatomic and clinical pathology. Review of current literature, discussion, and oral presentation. Traditional Lecture (1 hour)

PATH 721. General Pathology. Concepts of disease. This course extends over 2 semesters. The entire course must be completed to receive credit. Traditional Lecture (8 hours)

PATH 724. Autopsy Pathology. Techniques, interpretation and clinical correlation under close supervision of staff. Prerequisite: 721 Traditional Lecture (1-15 hours)

PATH 725. Surgical Pathology. Frozen section diagnosis, description of gross specimens, and interpretation of microscopic sections. Prerequisite: 721. Traditional Lecture (1-15 hours)

PATH 726. Cytopathology. Preparation of specimens, interpretation of smears, and attendance at cytology conferences and lectures. Prerequisite: 721. Traditional Lecture (1-15 hours)

PATH 731. Research in Pathology. Laboratory rotations and pre-dissertation research. Research activities performed under faculty guidance. Traditional Lecture (1-9 hours)

PATH 736. Immunogenetics. The major histocompatibility complex (MHC), generation of diversity in antibody synthesis, genetics of normal and pathological immunoglobulins, genetic antigenic variation in microorganisms and animals Traditional Lecture (1-9 hours)

PATH 741. Immunohematology. Blood group antigens and antibodies; their role in hemolytic disease and transfusion incompatibility reactions. Traditional Lecture (1-15 hours)

PATH 743. Pathology Seminar. Current research topics in experimental pathology. Traditional Lecture (1-15 hours)

PATH 746. Hemopathology. An introduction to basic principles of hemopathology including interpretation of complete blood counts, peripheral blood smears, histologic preparations, and flow cytometry in order to arrive at a specific hematologic diagnosis Traditional Clinical Rotation (3-15 hours)

PATH 747. Clinical Practice in Laboratory Medicine. Clinical Practice in Laboratory Medicine consists of areas of special topics and many include any of the core rotations (surgical pathology, autopsy, transfusion medicine, hematopathology, and cytopathology) or clinical chemistry, immunopathology, and microbiology. Traditional Clinical Rotation (3-15 hours)

PATH 748. Problems in Cancer Biology. This course will give a broad overview of the common signaling pathways involved in cancer while encompassing the updates in the field of molecular pathways. Traditional Lecture (1-6 hours)

PATH 798. Dissertation and Dissertation Research. Traditional Dissertation (1-9 hours)

PHARM 701. Seminar. Students are required to (1) attend presentations by others (both faculty and students) participating in the course and (2) make an oral presentation related to their own research or an assigned topic. For students in the pharmacology program, participation in pharmacology journal club is a requirement of this course. Pharmacology students must also participate in seminar during the spring semester as a requirement for PHARM 702. Traditional Lecture (1-9 hours)

PHARM 702. Recent Advance-Pharmacology & Toxicology. This course comprises reading, informal presentation and discussion of topics in pharmacology, toxicology and related disciplines from the current scientific literature. Critical evaluation of experimental design, data analysis and interpretation are emphasized. Traditional Lecture (1-9 hours)

PHARM 703. Orientation to Pharmacological Research. This course will introduce students to principles of laboratory research and good laboratory practice. The student will participate in discussions with each graduate faculty in the department concerning current research interests and ongoing research projects. Traditional Lecture (2 hours)

PHARM 722. Pharmacology and Therapeutics. Students are introduced to the principles underlying the use of pharmacological agents in medical practice. Concepts related to drug distribution, drug-receptor interaction and drug metabolism are considered. In addition, the mechanism of action, therapeutic effects, adverse side-effects and common clinical applications of various drugs and drug classes are presented through a combination of lectures and clinical correlations. Traditional Lecture (6 hours)

PHARM 723. Mechanisms of Drug Action. This course is offered in concert with Pharmacology and Therapeutics (PH722) and comprises assigned readings and discussions. Selected aspects of pharmacology are presented with emphasis on the mechanisms of drug action. Traditional Lecture (4 hours)

PHARM 724. Experimental Design and Methods. This is an overview of current methods in pharmacological research critical to the understanding of the literature and current research. Traditional Lecture (3 hours)

PHARM 726. Fundamental Pharmacology. A basic pharmacology course in which principles underlying the actions of drugs are presented, including pharmacokinetics, drug-receptor interactions, and drug metabolism. In addition, mechanisms of action, therapeutic effects, adverse effects and therapeutic indications are noted for major classes of drugs and for commonly used drugs within each class Traditional Lecture (6 hours)

PHARM 780. CNS Pharmacology. Drug actions at neuronal targets, the blood-brain barrier and special pharmacokinetics of centrally acting drugs, and the pharmacotherapy of the CNS and neurological disorders are among the topics covered. Traditional Lecture (3 hours)

PHARM 781. Molecular Toxicology. This is a reading and discussion-based class. The molecular mechanisms of several toxicant classes is covered. Emphasis is placed on the effects of xenobiotics on cellular processes, including biochemical reactions and signaling pathways. Traditional Lecture (2 hours)

PHARM 782. Drug Abuse. This course describes drugs that are abused, biological aspects of abuse, patterns of abuse, and theories of drug tolerance and dependence. Traditional Lecture (2 hours)

PHARM 784. Circulatory Pharmacology. This course involves a study of normal circulatory mechanisms and functions and how various drugs and toxic substances modify them. Traditional Lecture (2 hours)

PHARM 785. Principles of Modern Drug Design. This course addresses the basic principles of the modern drug discovery and validation process, with emphasis on applications in cancer therapy. The course begins with the identification and characterization of disease-specific molecular targets using genetic and biochemical techniques. The second section describes the selection of lead drugs through high-throughput screening assays, combinatorial chemistry, and computer-assisted rational drug design. The final section covers preclinical and clinical trials and the potential use of database analysis to ensure that the drugs are safe and effective, and that the chosen therapeutic regimen will yield the best outcome for any given patient. Traditional Lecture (2 hours)
PHN 705. Writing Proposals. Students perform research in the laboratory of a faculty member. Students are required to make a 20-30 presentation concerning the rotation [including the general premise, experimental approach and results; the latter two may be actual or anticipated] to the general departmental faculty at the completion of the rotation. Traditional Lecture (1-9 hours)

PHN 708. Quantitative Research Designs. Focuses on the theoretical basis of performing a physical assessment on the individual throughout the life span. Students will explore issues related to data collection, sampling, statistical versus clinical significance and outcomes evaluation. Traditional Lecture (2 hours)

PHN 733. Research Design & Methods for Adv Nurse. (Online and Hybrid) Focuses on understanding research designs and methods as they impact research utilization. Students will explore issues related to data collection, sampling, statistical versus clinical significance and outcomes evaluation. Traditional Lecture (2 hours)

PHN 777. Advanced Health Assessment. This course focuses on the theoretical basis of performing a physical assessment on the individual throughout the life span. Students will acquire advanced knowledge and skills necessary to perform physical assessments. The emphasis is on mastering interviewing, history taking, and advanced physical assessment skills. Traditional Lecture (3 hours)

PHN 780. Special Topics. Elective course to provide the student with additional study to support research topic development. Traditional Lecture (1-4 hours)

PHARM 786. Pharmacology of Synaptic Transmission. The course focuses on the mechanisms of synaptic transmission in autonomic ganglia and at peripheral neuroeffector junctions. Emphasis is placed on the pre- and post-synaptic processes regulating neurotransmitter at these peripheral synapses. The roles of synaptic proteins, and classical and non-classical transmitters are explored in detail. As time permits, clinical examples of the effects of failures in peripheral synaptic transmission are presented. Traditional Lecture (2 hours)

PHARM 790. Special Topics in Pharmacology & Toxicology. This course may cover any area of interest to at least one student and one faculty member. Traditional Lecture (1-9 hours)

PHARM 791. Scientific Communication in Pharmacology. An introduction to scientific writing that includes preparation of abstracts for scientific meetings, presentations at meetings, and a grant proposal for extramural funding in the NIH style. The goal for the latter is to prepare students to write and submit a predoctoral fellowship application to the NIH or a private foundation. Traditional Lecture (3 hours)

PHARM 792. Research in Pharmacology and Toxicology. Focuses on the theoretical basis of performing a physical assessment on the individual throughout the life span. Students will explore issues related to data collection, sampling, statistical versus clinical significance and outcomes evaluation. Traditional Lecture (2 hours)

PHARM 798. Dissertation and Dissertation Research. Design and performance of research leading to a Ph.D. Traditional Lecture (1-9 hours)


PHN 701. Seminar (Journal Club). Serves as a forum for nursing scholars to both enhance and affirm individual scholarly activities. Includes opportunities for individual students to present a variety of research articles and proposals. Traditional Lecture (1-9 hours)

PHN 701-1. Seminar (Journal Club). Traditional Lecture (1-9 hours)

PHN 701-2. Seminar (Journal Club). Traditional Lecture (1-9 hours)

PHN 701-3. Seminar (Journal Club). Traditional Lecture (1-9 hours)

PHN 702. Pathophysiological Phenomena. A focused study of specific nursing phenomena in pathophysiological nursing care. Students present and evaluate current research on selected topics. Traditional Lecture (2 hours)

PHN 705. Writing Proposals. Preparatory course for the PhD comprehensive examination that examines development of the problem statement through analyses of quantitative and qualitative research methodologies under the guidance of a faculty mentor. Traditional Lecture (4 hours)

PHN 706. Philosophy of Science. Focuses on the development of science in the Western world. The nature of what constitutes science and ways of knowing and thinking as they relate to the development of science will be addressed. Emphasis is placed on the process of analysis. Traditional Lecture (3 hours)

PHN 707. Phenomena in Nursing Research. This course is a focused review of specific nursing phenomena (e.g., caring, coping, clinical outcomes). Students present and evaluate current research on selected topics. Traditional Lecture (2 hours)

PHN 708. Quantitative Research Designs. This course examines quantitative designs most applicable to the discipline of nursing. The course emphasizes the practice issues related to the conceptual, empirical and analytical components of research plans as they are influenced by sample size, setting, number and time of measurements. Traditional Lecture (3 hours)

PHN 709. Qualitative Research Designs. Examines the qualitative research designs most applicable to the discipline of nursing. Issues and critical analysis of traditional and emerging designs are discussed. Emphasizes the practice of qualitative research. Traditional Lecture (3 hours)

PHN 710. Research Practicum. Allows the student to focus on individual area of study which supports the development of the dissertation proposal. Traditional Practicum/Internship (1-6 hours)

PHN 711. Data Collection and Analysis. Focuses on methods of data collection and analysis. Selected data collection methods will be examined. Selected analyses for various data sets will be studied and the graduate student will carry out an analysis of data sets. Traditional Lecture (3 hours)

PHN 712. Writing for Funding. Examines the essential components of a funding/grant proposal and identifies sources of funding. Graduate student will identify potential private or government funding sources appropriate for their research interests. Traditional Lecture (2 hours)

PHN 713. Laboratory Methods. Focuses on methods of data collection and analysis in the biological/physiological lab setting. Traditional Lecture (3 hours)

PHN 714. Theory Construction and Testing. This course focuses on the analysis of existing theories as the basis for synthesis, construction, and testing of middle range theory for expanding the scientific base of the discipline of nursing. Traditional Lecture (3 hours)

PHN 715. Survey Design and Analysis. This course is designed to prepare students with the skills to conduct survey research and analyze survey data. It includes sampling design, post-survey data processing, and complex survey data analysis using SPSS Complex Samples. The course will be taught along with in-class labs using ongoing surveys as the case studies. It is assumed that students have taken Biostatistics I and have basic skills of using SPSS. Traditional Lecture (2 hours)

PHN 716. Basic Science Laboratory Techniques. This course survey allows students to have hands-on experience with a variety of laboratory techniques. Objective, quantitative measures applicable to nursing research will be explored. Traditional Laboratory (2 hours)

PHN 717. Directed Research. Allows the student, under faculty direction, to focus on areas of study in specific areas of research. Supports the student’s efforts to clarify individual research focus. Traditional Lecture (1-4 hours)

PHN 733. Research Design & Methods for Adv Nurse. (Online and Hybrid) Focuses on understanding research designs and methods as they impact research utilization. Students will explore issues related to data collection, sampling, statistical versus clinical significance and outcomes evaluation. Traditional Lecture (2 hours)

PHN 737. Advanced Physiology/Pathophysiology. (Hybrid) This course provides an understanding of human physiological and pathophysiological processes. A human body systems approach is used applying concepts in biochemistry and cell biology as they influence health and illness. Topics include Cell Biology, Cancer Immunity and Inflammation, Genetics and the Integumentary, Musculoskeletal, Reproductive, Pulmonary, Renal, Cardiovascular, Endocrine, Gastrointestinal and Nervous Systems. (Theory) Traditional Lecture (2 hours)

PHN 766. Clinical Pharmacotherapeutics. (Online) This course provides a foundation and clinical application of pharmacotherapeutic interventions commonly prescribed for healthy and ill individuals across the life span. Emphasis is placed on pharmacokinetic and pharmacodynamic principles along with integration of the use of these products including variations for selected special populations specific to the clinical track of study and client characteristics. This online course is delivered utilizing synchronous and asynchronous distance learning modalities. Traditional Lecture (3 hours)

PHN 777. Advanced Health Assessment. This course focuses on the theoretical basis of performing a physical assessment on the individual throughout the life span. Students will acquire advanced knowledge and skills necessary to perform physical assessments. The emphasis is on mastering interviewing, history taking, and advanced physical assessment skills. Traditional Lecture (3 hours)

PHN 780. Special Topics. Elective course to provide the student with additional study to support research topic development. Traditional Lecture (1-4 hours)

PHN 780-1. Special Topics 1. Traditional Lecture (1-4 hours)

PHN 780-2. Special Topics 2. Traditional Lecture (1-4 hours)
PHN 780-3. Special Topics 3. Traditional Lecture (1-4 hours)

PHN 791. Dissertation Research Proposal. In consultation with their mentors and advisory committees, students will write and successfully defend a PhD dissertation proposal in which they describe the problem and research question(s), the background and significance, and the research design. Traditional Dissertation (1-3 hours)

PHN 798. Dissertation and Dissertation Research. In consultation with their mentors and advisory committees, students will write a PhD dissertation in which they describe the findings and importance of their research project. Traditional Dissertation (1-9 hours)

PHYSIO 701. Medical Physiology. A course providing an in-depth study of the functions of the body with special emphasis on the relationships of the different organs to each other. Traditional - EL Lecture (12 hours)

PHYSIO 702. Physiological Concepts. A course designed to provide initial exposure to laboratory research and study of literature in various areas of physiology. Traditional Lecture (1-9 hours)

PHYSIO 704. Molecular Physiology. A course designed to teach how state of the art approaches in molecular biology can be applied to cardiovascular and renal physiology. This course is structured as a laboratory format with some reading and lecture. Traditional Lecture/Lab (2 hours)

PHYSIO 705. Seminar. Graduate students will prepare, present and attend weekly seminars. Traditional Lecture (1-9 hours)

PHYSIO 707. Research in Physiology. A course designed to provide hands-on exposure to laboratory research prior to selection of a dissertation project. Traditional Laboratory (1-9 hours)

PHYSIO 715. Endocrinology. A course covering the historical, biochemical and physiological aspects of the endocrine system. Traditional Lecture (2 hours)

PHYSIO 717. Circulatory Physiology. A reading and conference course that emphasizes regulation of cardiac output, body fluid volumes and arterial pressures. Traditional Lecture (7 hours)

PHYSIO 725. Fundamental Physiology. A fundamental course designed to provide students with knowledge of the basic functions of the cells, tissues, organs and organ systems, and how they interrelate to accomplish the many and diverse functions of the human body. The course is intended for students whose physiology is not their primary area of study. Also listed as Dent 625. Traditional - EL Lecture (8 hours)

PHYSIO 727. Physio Applications of Molecular Biology. A course designed to introduce students to the physiological application of molecular biology approaches such as real-time PCR, Western Blot, in vivo gene transfer & knockdown, transgenic rodent production, and in vitro and in vivo imaging. Traditional Lecture (3 hours)

PHYSIO 728. Scientific Communications in Physiology. Scientific Communications is designed to provide students with basic tools needed for writing scientific research papers and grant proposals, and for giving effective PowerPoint presentations. Traditional Lecture (2 hours)

PHYSIO 731. Renal and Body Fluid Physiology. A seminar course that includes critical study of research methods, comparative renal physiology and literature on classical and contemporary principles of renal physiology and pathophysiology. Traditional Lecture (7 hours)

PHYSIO 734. Pathophysiology. This course will integrate clinical and basic sciences and will include basic case presentations and discussion of the molecular and physiological basis of common human diseases. Traditional Lecture (2 hours)

PHYSIO 735. Special Topics. The course will consist of any combination of lecture, one-on-one (or group) discussion, student presentation and/or written assignments on various areas of physiology. Traditional Lecture (1-9 hours)

PHYSIO 744. Simulation of Physiological Mechanisms. Introduction to mathematical analysis of physiological phenomena. Topics include ordinary differential equations, numerical methods for solving differential equations, elements of digital computer programming in high-level languages and the use of simulation packages and appropriate demonstrations. Traditional Lecture (3 hours)


PPP 790. Special Topics. This course provides a forum for review of graduate-level study skills, time-management, and interpersonal academic interactions for students in the Professional Portal Program who are interested in progressing to professional training in medicine or dentistry. Group discussions, individual guidance and presentations from expert guest lecturers are featured elements of this course. Traditional - EL Independent Study (1-9 hours)

**FACULTY**

Adair, Thomas, PhD; Professor – Physiology and Biophysics

Adcock, Kim, PharmD; Professor – Clinical Investigation

Akerly, Brian J., PhD; Associate Professor – Microbiology and Immunology

Alexander, Barbara, PhD; Professor – Physiology and Biophysics

Annett, Robert, PhD; Professor – Clinical Investigation

Ashour, Ayman, MD; Associate Professor - Pathology

Auchus, Alexander, MD; Professor - Neuroscience

Bain, Jennifer, DMD, PhD; Associate Professor – Biomedical Materials Science

Barr, Fredrick “Rick”, MS, MD; Professor – Clinical Investigation

Barrett, Gene R., MD; Associate Professor – Clinical Anatomy

Batra, Ranjan, PhD; Associate Professor – Clinical Anatomy

Beech, Bettina, DrPH, MPH; Professor – Clinical Investigation

Bender, Kaye, PhD; Professor – Nursing

Bengten, Eva M., PhD; Professor – Microbiology and Immunology

Bidwell, Lee, PhD; Associate Professor – Neuroscience; Associate Professor – Experimental Therapeutics and Pharmacology; Assistant Professor – Cell and Molecular Biology

Bofill, James, MD; Professor – Biomedical Sciences-Maternal Fetal Medicine track

Booz, George, PhD; Associate Professor – Experimental Therapeutics and Pharmacology

Borges, Nicole, DPhil; Professor – Clinical Anatomy

Broome, Hanna, PhD; Assistant Professor – Cell and Molecular Biology

Brown, David R., PhD; Professor - Cell and Molecular Biology

Calhoun, Ron, DDS, MD; Associate Professor – Clinical Anatomy

Cardozo Yanes, Licy, PhD; Cell and Molecular Biology

Chade, Alejandro R., MD; Professor – Physiology and Biophysics

Chastain, Elizabeth, MD; Assistant Professor - Pathology

Chen, Jian-Xiong, MD; Professor – Experimental Therapeutics and Pharmacology

Chinchar, Victor “Greg”, PhD; Professor – Microbiology and Immunology

Christian, Robin, DNP; Associate Professor - Nursing

Coffey, Scott, PhD; Professor Emeritus - Neuroscience

Conway, Marianne L., MD; Assistant Professor – Clinical Anatomy

Coolen, Lique, PhD; Professor – Neuroscience; Professor - Physiology and Biophysics

Cornelius, Denise, PhD; Assistant Professor- Experimental Therapeutics and Pharmacology

Correa, John J., PhD; Professor - Cell and Molecular Biology

Cui, Dongmei, MD, PhD; Assistant Professor – Clinical Anatomy

Cunningham, Mark, Mark, PhD; Assistant Professor- Experimental Therapeutics and Pharmacology

Daley, William P., MD; Professor – Pathology; Professor – Clinical Anatomy

Davey, Debra, RN; Professor -Nursing
Spradley, Frank, PhD; Assistant Professor – Physiology and Biophysics
Stec, David, PhD; Professor – Physiology and Biophysics
Stewart, Mary W., PhD, RN; Professor - Nursing
Stockmeier, Craig, PhD; Professor - Neuroscience
Stray, Stephen, PhD; Associate Professor - Microbiology and Immunology
Swiatlo, Edwin, MD, PhD; Professor - Microbiology and Immunology
Tandon, Ritesh, PhD; Associate Professor – Microbiology and Immunology
Tang, Shao-Ching, MD, PhD; Professor - Experimental Therapeutics and Pharmacology
Tanney, Keith, MD, PhD; Professor – Neuroscience: Professor – Clinical Anatomy
Topaloglu, Kemal, PhD; Associate Professor - Neuroscience
Vallender, Eric, PhD; Associate Professor - Neuroscience
Vetter, Douglas E., PhD; Associate Professor - Neuroscience
Vig, Parminder J.S., PhD; Professor – Neuroscience; Professor - Cell and Molecular Biology Biochemistry
Walker, Jean T., PhD, RN; Professor - Nursing
Wallace, Kedra, MS, PhD; Associate Professor – Neuroscience; Associate Professor - Clinical Investigation
Walters, Bradley, PhD; Assistant Professor - Neuroscience
Wang, Junming, PhD; Associate Professor – Neuroscience; Associate Professor - Pathology
Warren, Susan, PhD; Professor – Clinical Anatomy; Professor - Neuroscience
Warrington, J. Paula, PhD; Assistant Professor – Neuroscience
Wijewardane, Johnnie Sue, PhD, APRN, FNP-BC, FAANP - Associate Professor – Nursing
West, Nancy, MS, PhD; Assistant Professor
Wilkerson, Robin, PhD, RN; Professor - Nursing
Williams, Jan, M., PhD; Associate Professor – Experimental Therapeutics and Pharmacology
Williams, Renee, PhD, RN; Professor - Nursing
Williamson, R. Scott, PhD; Assistant Professor – Biomedical Materials Science
Wilson, James G., MD; Professor – Physiology and Biophysics
Wilson, Melanie R., PhD; Professor – Microbiology and Immunology
Winters, Karen, PhD, RN; Professor - Nursing
Wirschell, Maureen, PhD; Assistant Professor - Biochemistry
Xu, Kelli, PhD; Assistant Professor – Clinical Anatomy
Yee, Kathleen, Assistant Professor – Clinical Anatomy
Zhang, Lei, PhD, MSc, MBA; Associate Professor – Nursing
Zhu, Hong, PhD; Professor - Neuroscience
Zhou, Wu, PhD; Professor – Neuroscience
Zhou, Jia, PhD; Professor – Experimental Therapeutics and Pharmacology
school of nursing

The University of Mississippi
Medical Center
## 2019-2020 Academic Calendar

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<tr>
<th>Month</th>
<th>Day</th>
<th>Event</th>
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<tr>
<td>April</td>
<td>8</td>
<td>Monday: Registration begins for 2019-2020 summer term</td>
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<tr>
<td>May</td>
<td>12</td>
<td>Friday: Last day to submit an application for August 2019 degree</td>
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<tr>
<td>May</td>
<td>14</td>
<td>Tuesday: $50 late registration fee for 2019-2020 summer term effective today</td>
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<tr>
<td>May</td>
<td>23</td>
<td>Thursday: 2019 Traditional BSN Pinning ceremony</td>
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<tr>
<td>May</td>
<td>24</td>
<td>Friday: 2019 Commencement</td>
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<td><strong>SUMMER TERM</strong></td>
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<tr>
<td>May</td>
<td>14</td>
<td>Tuesday: Orientation and registration for new RN to BSN students</td>
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<tr>
<td>May</td>
<td>15</td>
<td>Wednesday: Orientation and registration for new Traditional BSN, RN to MSN, MSN, and PMN students</td>
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<tr>
<td>May</td>
<td>16</td>
<td>Thursday: Day Two Orientation and registration for new Traditional BSN students</td>
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<tr>
<td>May</td>
<td>27</td>
<td>Monday: Memorial Day holiday observed</td>
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<tr>
<td>May</td>
<td>28</td>
<td>Tuesday: First day of summer term</td>
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<tr>
<td>June</td>
<td>7</td>
<td>Friday: Last day to register or to add a course</td>
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<td>June</td>
<td>10</td>
<td>Monday: Last day to withdraw from a course or from school without receiving a withdrawal grade and to receive a tuition refund</td>
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<tr>
<td>June</td>
<td>19</td>
<td>Wednesday: Registration begins for 2019-2020 fall semester</td>
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<td>July</td>
<td>4</td>
<td>Thursday: Independence Day holiday observed</td>
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<td>July</td>
<td>19</td>
<td>Friday: 2019 Oxford Accelerated BSN Pinning ceremony</td>
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<tr>
<td>August</td>
<td>29</td>
<td>Monday: $50 late registration fee for 2019-2020 fall semester effective today</td>
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<tr>
<td><strong>FALL SEMESTER</strong></td>
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<tr>
<td>August</td>
<td>6</td>
<td>Tuesday: Orientation and registration for Accelerated BSN students (Oxford campus)</td>
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<td>August</td>
<td>7</td>
<td>Wednesday: Orientation for PhD students</td>
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<td>August</td>
<td>7</td>
<td>Wednesday: Orientation and registration for RN to BSN students</td>
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<tr>
<td>August</td>
<td>7</td>
<td>Wednesday: Deadline for completion of General Orientation</td>
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<tr>
<td>August</td>
<td>8</td>
<td>Thursday: Orientation and registration for new MSN, PMN, and DNP students</td>
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<td>August</td>
<td>12</td>
<td>Monday: First day of fall semester</td>
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<td>August</td>
<td>12</td>
<td>Monday: $100 late registration fee for 2019-2020 fall semester effective today</td>
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<td>August</td>
<td>16</td>
<td>Friday: Last day to register for fall semester</td>
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<td>August</td>
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<td>Friday: Last day to add a course</td>
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<tr>
<td>August</td>
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<td>Friday: Last day to submit an application for December 2019 degree</td>
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<td>August</td>
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<td>Thursday: Last day to withdraw from a course or from school without receiving a withdrawal grade and to receive a tuition refund</td>
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<tr>
<td>September</td>
<td>2</td>
<td>Monday: Labor Day holiday observed</td>
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<td>September</td>
<td>3</td>
<td>Tuesday: Classes resume</td>
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<tr>
<td>November</td>
<td>4</td>
<td>Monday: Registration begins for 2019-2020 spring semester</td>
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<td>November</td>
<td>25-29</td>
<td>Monday-Friday: Fall break</td>
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<tr>
<td>December</td>
<td>2</td>
<td>Monday: Classes resume</td>
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<td>December</td>
<td>13</td>
<td>Friday: 2019 Jackson Accelerated BSN Pinning ceremony</td>
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<tr>
<td>December</td>
<td>14</td>
<td>Saturday: End of fall semester</td>
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<td>December</td>
<td>23</td>
<td>Monday: $50 late registration fee for 2019-2020 spring semester effective today</td>
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<td>SPRING SEMESTER</td>
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<td><strong>February</strong></td>
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<td><strong>March</strong></td>
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<td>Monday-Friday</td>
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<td><strong>April</strong></td>
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<td><strong>May</strong></td>
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HISTORY
The School of Nursing was authorized as a baccalaureate program by an act of the Mississippi legislature in 1948. Established as the Department of Nursing, it achieved the status of a separate school in 1958. The graduate program in nursing was established in 1970. A doctor of philosophy (PhD) in nursing program began in 1997 and a doctor of nursing practice (DNP) program was established in 2009. The baccalaureate, master’s, and DNP programs are accredited by the Commission on Collegiate Nursing Education (CCNE). Functioning as a part of the University of Mississippi Medical Center, the School of Nursing assumes the responsibility for providing the people of Mississippi with registered nurses of high professional competence and for raising the professional and educational standards of the nurses already practicing in Mississippi. The School of Nursing is housed in the Christine L. Oglevee Building on the northwest side of the campus. The School of Nursing is a professional school functioning within the general framework and policies of the University of Mississippi Medical Center. It reflects the purpose of the parent university and the Medical Center in its educational services for the State of Mississippi.

MISSION
The mission of the School of Nursing is to develop nurse leaders and improve health within and beyond Mississippi through excellence in education, research, practice, and service. Core values of the School of Nursing integral to this mission are respect, integrity, diversity, excellence, and accountability.

PROGRAMS AND CERTIFICATES
The School of Nursing serves approximately 800 students in the following programs and certificates.
Bachelor of Science in Nursing
- Traditional
- Accelerated
- Registered Nurse to Bachelor of Science in Nursing (Online Program)
Registered Nurse to Master of Science in Nursing
- Adult-Gerontology Acute Care Nurse Practitioner
- Adult-Gerontology (Primary Care) Nurse Practitioner (Online Program)
- Family Nurse Practitioner (Online Program)
- Family Psychiatric/Mental Health Nurse Practitioner (Online Program)
- Nurse Educator (Online Program)
- Nursing and Health Care Administrator (Online Program)
Master of Science in Nursing
- Adult-Gerontology Acute Care Nurse Practitioner
- Adult-Gerontology (Primary Care) Nurse Practitioner (Online Program)
- Family Nurse Practitioner (Online Program)
- Family Psychiatric/Mental Health Nurse Practitioner (Online Program)
- Neonatal Nurse Practitioner
- Nurse Educator (Online Program)
- Nursing and Health Care Administrator (Online Program)
- Primary/ACute Care Pediatric Nurse Practitioner (Dual Role)
Post-Master’s in Nursing
- Adult-Gerontology Acute Care Nurse Practitioner
- Adult-Gerontology (Primary Care) Nurse Practitioner (Online Program)
- Family Nurse Practitioner (Online Program)
- Family Psychiatric/Mental Health Nurse Practitioner (Online Program)
- Neonatal Nurse Practitioner
The University of Mississippi School of Nursing offers a Traditional BSN Program on the Jackson campus at the University of Mississippi Medical Center. An Accelerated Baccalaureate Nursing Program option is offered on the Jackson campus and on the University of Mississippi campus in Oxford for applicants who hold a baccalaureate degree in another field. The RN to BSN program is offered online. Most tracks in the RN to MSN program, the Master of Science in Nursing Program (MSN), and the Post-Master's certificate are offered through distance learning in online and hybrid course delivery. The other tracks primarily use face-to-face course delivery. The Doctor of Nursing Practice Program (DNP) primarily utilizes face-to-face course delivery options, with some courses offered online or through hybrid course delivery. Information about the Doctor of Philosophy in Nursing Program (PhD) is included in the School of Graduate Studies in the Health Sciences section of the Bulletin.

ADMISSIONS
The selection process for admission to the School of Nursing begins in the Undergraduate and Graduate Admission and Progression Committees. Recommendations are made to the dean for admission to the School of Nursing. (See admission criteria found under each specific program in the Bulletin.)

Selection of applicants is made on a competitive basis, without regard to race, color, religion, sex, age, disability, marital status, national origin, sexual orientation, genetic information, or veteran status. For admission purposes, the School of Nursing at the University of Mississippi Medical Center gives preference to residents of Mississippi, as defined by Miss. Code §§ 37-103-7, 37-103-13 and IHL Policy 610. The School of Nursing may choose not to accept applications from students who cannot demonstrate residency as defined by Miss. Code § 37-103-7 and 37-103-13.

APPLICATION PROCEDURE
Undergraduate and graduate applicants must apply online. All correspondence regarding admission should be addressed to the Office of Student Records and Registrar, University of Mississippi Medical Center, 2500 North State Street, Jackson, MS 39216-4505. A nonrefundable application fee of $25 must accompany each application. All transcripts and documents submitted in support of an application become the property of the University of Mississippi Medical Center and cannot be returned or forwarded to another school or individual. Applications are accepted for most programs beginning July 1 of the year prior to the desired year of enrollment. Applications for the Accelerated BSN program on the Jackson campus are accepted beginning January 1 each year.

Applications are reviewed by the Admissions Committee during the month following the deadline.

ADMISSION DEADLINES
Admission is contingent upon successful completion of prerequisite courses. If the applicant is accepted and fails to enroll or is not accepted, a new application must be submitted for consideration in the next application cycle. Accepted applicants who wish to defer enrollment due to unplanned or unavoidable circumstances must petition the associate dean for a deferral of enrollment. Deadlines for applications are:

Traditional BSN – Summer admission – January 15
Accelerated BSN –
- Fall admission - Oxford campus – February 15
- Spring admission - Jackson campus – September 1
RN to BSN –
- Fall admission – May 1
- Spring admission – October 15
- Summer admission – February 15
RN to MSN – Summer admission – February 15
MSN –
- Fall admission* – March 31
- Spring admission* – October 15
- Summer admission* – February 15

*NOTE: Nurse Practitioner tracks in the MSN program only accept admissions for the fall semester.

Post-Master's – Deadlines same as MSN (check with track director for appropriate semester to enter)
DNP - Fall admission – March 31
PhD - Information about application to the PhD in Nursing program is included in the School of Graduate Studies in Health Sciences section of the Bulletin.
OTHER TYPES OF ADMISSIONS

Freshman Early Entry Program
The Freshman Early Entry program is a joint offering of the University of Mississippi School of Nursing, University of Mississippi, and other participating senior colleges/universities to provide an early entry route into the Traditional Baccalaureate Nursing program. Applications to the Freshman Early Entry program are accepted in the fall semester of the freshman year until the November 1 deadline date. For detailed information regarding this program and participating colleges and universities, please contact the School of Nursing Office of Recruitment.

Admission Criteria for Freshman Early Entry Program
The minimum requirements for admission to the Freshman Early Entry program are:

- A complete application;
- A cumulative high school GPA of at least 3.5 on a 4.0 scale;
- An ACT score of 25 or above*;
- A personal interview and a writing sample may be required.

In order to retain status in the Freshman Early Entry program, the following conditions must be met:

- Continuous enrollment as a full-time student at the University of Mississippi or other participating institutions in each regular semester session must be maintained.
- All required courses must be taken at the University of Mississippi or other participating institutions in the sequence defined by the curriculum. Elective courses may be taken at other institutions.
- A minimum overall GPA of 3.0 on all courses AND minimum overall GPA of 3.0 on all required courses through the fall semester prior to the scheduled summer enrollment in the upper division nursing program must be maintained.
- A minimum grade of C in each prerequisite course is required.

RN to MSN Early Entry Program
The RN to MSN Early Entry program (RN to MSN EE) is a joint offering of the University of Mississippi School of Nursing and participating community college associate degree nursing (ADN) programs. For detailed information regarding this program and participating community colleges, please contact the School of Nursing Office of Recruitment.

There are two application cycles for the RN to MSN EE program. Students are accepted after the first semester of their ADN program. The application deadline for students who started their nursing program in the fall is February 15. The application deadline for students who started their nursing program in the spring is August 31.

Admission Criteria for the RN to MSN Early Entry Program
Entry into the RN to MSN Early Entry program is offered to associate degree nursing students through a competitive selection process. Applicants who wish to be considered for early entry status must be enrolled in a participating community college and meet the following minimum criteria:

- A complete application;
- An ACT score of 21 or above (unless the applicant holds a master's degree);
- A minimum overall grade point average (GPA) of 3.0 on all college courses AND a minimum overall GPA of 3.0 on all nursing courses through the first semester of full-time study in the ADN program;
- A minimum grade of C in each prerequisite course;
- Endorsement from the community college nursing program director or designee attesting to the applicant’s potential for graduate study;
- Fall admits to the ADN program must be currently enrolled in or have already completed 42 credit hours – 14 hours of which must be math and science courses - of the total of 62 hours of RN to MSN prerequisite coursework.
- Spring admits to the ADN program must be currently enrolled in or have already completed 25 credit hours - 7 hours of which must be math and science courses - of the total 62 hours of RN to MSN prerequisite coursework.

Progression and Retention Criteria for Students in the RN to MSN Early Entry Program
In order to retain status as an RN to MSN Early Entry student, the following conditions must be met:

- Must maintain continuous enrollment in the participating ADN program.
- Must take all required prerequisites at the participating ADN program in the sequence defined by the plan of study;
- Must maintain an overall cumulative GPA of 3.0 AND an overall nursing GPA of 2.5 or higher;
- Must have a minimum grade of C in each required prerequisite course and nursing course.
- Failure to adhere to each of these conditions will result in dismissal from the RN to MSN EE program.

Matriculation into Master’s Program for RN to MSN Early Entry applicants
Upon completion of the ADN program and receiving the associate degree in nursing, students who meet the additional admission criteria for the RN to MSN program listed below will be directly admitted into the RN to MSN program. Additional admission criteria include:

- Completion of all prerequisite courses with a minimum grade of C in each course;
- Minimum cumulative GPA of 3.0 on a 4.0 scale;
- Minimum score of 3.5 on the analytical portion of the Graduate Record Examination (GRE);
- New ADN graduates must successfully complete the NCLEX-RN® examination and become licensed as a registered nurse (RN) by the end of their first semester of RN to MSN course work;
- Students in the Early-Entry RN-MSN program must have one year of clinical experience as a registered nurse before taking any clinical courses in the RN-MSN program.

Track Selection: Students declare track preference in the spring prior to beginning the RN-MSN program. Track selection is competitive.

BSN-DNP Early Entry (Post-Baccalaureate)
*Admission to the Post-Baccalaureate DNP Early Entry Program is currently suspended
The Early Entry Post-Baccalaureate DNP (BSN-DNP EE) option provides selected Accelerated BSN students with early entry into the Post-Baccalaureate DNP program. Students apply for early entry after acceptance into the Accelerated BSN program and are notified of acceptance into the program prior to or at the beginning of their Accelerated BSN coursework.
Progression and Retention Criteria for Students in the BSN-DNP Early Entry Program

Students in the BSN-DNP Early Entry program declare track preference in the 2nd semester of the Accelerated BSN program. Track selection is

Track Selection

Students in the BSN-DNP Early Entry program declare track preference in the 2nd semester of the Accelerated BSN program. Track selection is competitive.

DNP Early Entry Program (Post-Master’s)

The DNP Early Entry (DNP EE) option permits students admitted to the School of Nursing MSN program to progress to the DNP program. Students progress seamlessly into the DNP course work upon completion of the MSN program. The DNP course work can be completed in full-time study over a minimum of two years or in about three years of part-time study. Admission into the Post-Master's DNP Early Entry program can occur after completion of all first semester courses of the MSN program. The DNP Early Entry deadline for students who have completed their first semester MSN courses is February 15.

Admission Criteria for the DNP Early Entry program

Early entry into the DNP program is offered to outstanding MSN students through a competitive selection process. Applicants who wish to be considered for early entry status must meet the following minimum criteria:

- A complete application;
- An acceptable Graduate Record Examination (GRE) Score, including a score of 3.5 or higher on the analytical section;
- A minimum cumulative GPA of 3.2 through the first semester of full-time study in the MSN program;
- Three letters of recommendation, at least one from a practice supervisor and at least one from a doctoral-prepared faculty member attesting to the applicant's potential for doctoral study;
- Pre-admission interview with DNP faculty at the School of Nursing.

Progression and Retention Criteria for Students in the DNP Early Entry Program

To retain status as a DNP EE student, the following conditions must be met:

- Maintain continuous enrollment in the MSN program;
- Maintain an overall cumulative GPA of 3.2. Any grade less than a C in the MSN program will result in dismissal from the DNP EE program.

Matriculation into Post-Master’s DNP Program for DNP EE Applicants

Upon completion of the MSN program and receiving the MSN degree, DNP EE students who meet the admission criteria for the DNP program listed below will be directly admitted into the DNP program:

- Minimum cumulative GPA of 3.2 on a 4.0 scale; Please note: all grades, including failing grades and grades on repeated courses, are used to calculate the cumulative GPA;
- A score of 3.5 or higher on the analytical section of the GRE;
- Must successfully complete the NCLEX-RN® examination for licensure as a Registered Nurse by the end of the first semester of the BSN-DNP program;
- Approval by the DNP director.

Non-Degree Seeking Students (NDSS)

Individuals who have not been admitted to a program in the School of Nursing may be considered for admission to the University of Mississippi Medical Center as a student with non-degree status for enrollment in course work. A maximum of nine hours of credit may be taken in this status, and courses with a minimum grade of B may be applied to a School of Nursing program. Individuals may also enroll in a course in the School of Nursing if they desire to take courses for personal or professional development. A written request for enrollment in the specific course must be submitted to the director of nursing in order to be considered and the applicant must complete all NDSS admission requirements prior to enrollment. A written request for enrollment in the specific course must be submitted to the director of nursing in order to be considered and the applicant must complete all NDSS admission requirements prior to enrollment.

Conditional Admit Students (CAS)

Applicants who do not meet all requirements for admission to a School of Nursing program may be considered for conditional admission. Students admitted in this category are limited to two courses the first semester and must earn a B or higher in those courses in order to continue in the program.

Visiting Scholars

Applicants holding terminal degrees or who are engaged in thesis or dissertation research may apply to the University of Mississippi School of Nursing for admission as visiting scholars rather than students. Visiting scholars must be approved by the program in which research is to take place. Scholars may use the library and research facilities and sit in on classes with the consent of the instructor. Although fees may be charged...
for use of computers or laboratory items, tuition and other fees are not assessed. Applications will be reviewed by the associate dean. Applicants will be accepted based on availability of space in the course and permission of the instructor. Students enrolled as visiting scholars will not be considered candidates for a degree. Students wishing to pursue a degree candidacy should consult the appropriate section of the Bulletin.

**TRANSFER OF CREDIT**

Students in the School of Nursing may request transfer of credits from other academic institutions to meet some specified program requirements. Transfer of credit requires approval from the associate dean for academic affairs. The transfer of credit process begins in the Office of Student Records and Registrar. Students should complete the transfer of credit process, including receipt of the official transcript in the Office of Student Records and Registrar verifying successful completion of the course as soon as the course is completed and the grade is available. The deadline for completion of the transfer process, however, is the last day of classes in the semester which the student is graduating. Courses transferred to the School of Nursing must have been taken at a college accredited by one of the regional accrediting agencies and, if the courses are from another school of nursing, the school must be accredited by CCNE or ACEN. Currently enrolled students who wish to take a required course outside of the University of Mississippi School of Nursing must have permission from their track director in advance. There is no guarantee that courses taken without permission will transfer and apply to the School of Nursing degree.

**Academic Residency Requirements for the BSN Degree**

The Traditional BSN program requires a minimum of 44 credit hours of residence. The Accelerated BSN program requires all credit hours in nursing to be earned in residence in the School of Nursing. The RN to BSN program requires a minimum of 30 credit hours in residence.

**Baccalaureate Nursing Transfer Students**

Students who wish to transfer to the School of Nursing from other baccalaureate nursing programs must contact the associate dean for academic affairs. Students must meet the prerequisite course requirements for the baccalaureate nursing program, must meet degree and residence credit hour requirements, and must spend the equivalent of one academic year in residence. Placement in the program will be determined after review of course syllabi by the Undergraduate Curriculum Committee in collaboration with the Undergraduate Admission and Progression Committee. Only nursing courses with a grade of B or higher are considered for transfer. The associate dean notifies the registrar and the applicant of the decision.

**RN to MSN Transfer Students**

Students must meet the prerequisite course requirements for the respective MSN track, must meet degree and residence credit hour requirements, and must spend the equivalent of one academic year in residence. Students may transfer a maximum of 13 credit hours with approval from the associate dean. Only courses with a grade of B or higher are considered for transfer.

**Master’s in Nursing and Doctor of Nursing Practice Transfer Students**

MSN and DNP students may transfer up to 50% of the total credit hours required for the DNP program or for the specific track in which the student is enrolled for the MSN degree with a minimum grade of B in each course and with the approval of the associate dean. Students must take the equivalent of one academic year of full time course work in the School of Nursing.

**PhD in Nursing Transfer Students**

PhD in Nursing students who wish to transfer to UMMC must contact the director of the PhD Nursing program.

**AMERICANS WITH DISABILITY ACT (ADA)**

The School of Nursing ADA policy is found in the Student Handbook on the SON web site.

**DEGREE REQUIREMENTS**

All candidates for a baccalaureate degree from the University of Mississippi School of Nursing must meet the following core requirements: 6 hours of English composition, 3 hours of college algebra, quantitative reasoning or higher level math, 6 hours of natural science, 9 hours of humanities and fine arts, and 6 hours of social or behavioral science.

Candidates for the degree of Bachelor of Science in nursing must have completed the prescribed curriculum with an overall School of Nursing GPA of 2.0 or higher and have successfully completed prescribed standardized exams administered at the end of the program. Students are certified for graduation by the dean. Transfer students who spend only one year in residence must attend the year in which the degree requirements are completed. The School of Nursing reserves the right to withhold a degree of any student deemed unsuitable for the practice of nursing.

**Graduation With Honors**

The School of Nursing awards baccalaureate degrees in nursing with honors for excellence in academic achievement. A graduating Accelerated or Traditional BSN student must have completed all nursing coursework at the School of Nursing in order to be eligible to graduate with honors. A graduating RN to BSN student must have completed a minimum of 30 credit hours at the School of Nursing in order to be eligible for consideration to graduate with honors. Degrees are awarded summa cum laude (3.90-4.0), magna cum laude (3.75-3.89), and cum laude (3.50-3.74). For Traditional and Accelerated BSN graduates, the GPA is determined only on the work completed in the School of Nursing. For RN to BSN graduates, the GPA is determined using a combination of the GPA for entering coursework and for work completed in the School of Nursing. MSN students achieving the top three cumulative grade point averages will be selected for graduation with honors each year: summa cum laude, magna cum laude and cum laude. MSN students must have completed all courses for the degree at the School of Nursing to be eligible for consideration for Latin Honors.

The Sally McDonnell Barksdale Honors College (SMBHC), offered on the University of Mississippi Oxford campus, allows highly motivated students to develop their own scholarly research interests. Students in the baccalaureate nursing program enrolled in the Honors College at the University of Mississippi have the opportunity to become involved with the research pursuits of the School of Nursing faculty and may complete their research project while completing the BSN program requirements. Students who successfully complete the requirements of the Honors College are honored at a commissioning ceremony before the spring commencement. Detailed information about the Barksdale Honors College can be found on the University of Mississippi website.

**Ambassador Program**

The Ambassador Program provides opportunities for undergraduate students who demonstrate high academic achievement to serve as official student representatives of the School of Nursing. Selected during the third semester of the Traditional BSN program, these student leaders participate in recruitment events, provide campus tours to prospective students, lead orientation groups and serve as mentors to incoming students. Through their activities and assignments, Ambassadors meet course requirements for a leadership elective and receive special recognition at the school’s annual Honors Day.
ACADEMIC POLICIES AND REGULATIONS

All applicants must submit a tuberculin skin test and evidence of immunity to certain communicable diseases (i.e., MMR). The student is responsible for all costs involved. Once admitted to the School of Nursing, annual tuberculin skin tests are required and may be obtained from UMMC Employee and Student Health. If a tuberculin test is obtained from another health care provider, the student must provide evidence of valid test results to UMMC Employee and Student Health annually.

Influenza Vaccination

All students must be vaccinated annually against influenza in advance of the flu season unless they are eligible for and have an approved medical contraindication or an approved religious restriction. Proof must be provided to UMMC Employee and Student Health annually.

Hepatitis B

Students admitted to the School of Nursing must initiate at least the first injection in the Hepatitis B immunization series prior to registering for the first course taken. Evidence of immunization is submitted to the Office of Employee and Student Health upon admission. The remaining immunizations in the series are available from Employee and Student Health at the Medical Center. The student must complete the series as prescribed to continue enrollment in the program. The student must also provide Employee and Student Health at the Medical Center evidence of complete Hepatitis B immunization if the series is completed by another health care provider.

CPR Certification

Students are required to submit evidence of Cardiopulmonary Resuscitation certification (CPR) as a BLS Healthcare Provider (American Heart Association) to the School of Nursing. Students in the Traditional and Accelerated BSN programs must show evidence of CPR certification by orientation preceding the first semester of the program. Students in the RN to BSN, RN to MSN, MSN, FNP, and post-baccalaureate DNP programs must show evidence of CPR certification prior to beginning any clinical, practicum, or residency courses. This certification must be maintained throughout enrollment in the School of Nursing if the student is enrolled in clinical or practicum courses. Note: This requirement is program specific and students enrolled in the Nursing and Health Care Administrator track, Post-Master’s DNP or the PhD in Nursing program are NOT required to meet this requirement.

Health Insurance

Health insurance is mandatory for all students enrolled at UMMC. Health Insurance and disability insurance are available through the University of Mississippi Medical Center.

Liability Insurance

All students are required to have professional liability insurance in place during all clinical, practicum, and residency experiences. Please note: All nurse practitioner students must purchase nurse practitioner insurance and must have it in place during all clinical, practicum, and residency experiences.

Licensure

All students, except students enrolled in the pre-licensure undergraduate nursing program, are required to hold a current, unrestricted RN license in Mississippi or in one of the Compact States. Out-of-state students in non-Compact States who are not practicing in Mississippi must also hold current and unrestricted licensure in the state in which they are practicing. Verification of a current and unrestricted license is required annually. Students must notify the School of Nursing immediately of any licensure restrictions or changes that occur after admission to the school of nursing. Failure to do so in a timely manner may result in dismissal.

Background Checks

Mississippi law requires all health care workers, including students, to complete criminal history background checks through UMMC or another approved health care facility. Contact Human Resources for approval of non-UMMC background checks. All School of Nursing students are required to successfully complete a criminal history background check, including fingerprinting, prior to final acceptance into the program and are required to notify the associate dean for academic affairs immediately of any arrests or convictions that occur after application to or admission to the School of Nursing. A felony conviction may affect a graduate’s eligibility to be licensed or certified.

IRB Certification

The Institutional Review Board (IRB) at the University of Mississippi Medical Center requires that all faculty, staff and students involved in human subjects research complete an IRB tutorial. The tutorial is designed to meet national, state and institutional requirements for training in human subject protection. It is a self-directed web-based educational program in the ethics of human subjects research and IRB procedures.

Service Learning

The University of Mississippi School of Nursing values service learning as a necessary aspect of education and development. Service projects provide opportunities for faculty, staff, and students to demonstrate the professional values through value-based behavior. School of Nursing students complete eight hours of service learning in community settings annually and submit verification of these hours to the School of Nursing Office of Student Affairs and Service Learning.
OTHER COMPLIANCE REQUIREMENTS
The University has additional compliance requirements that students must meet on an annual basis.

Students who fail to maintain School of Nursing compliance requirements will not be allowed to participate in clinical, practicum, or residency activities, which will result in an unexcused absence.

Course Audit
To audit a course, a student must obtain approval from the course coordinator and the associate dean. The student must pay related tuition, fees, and expenses prior to beginning the course.

Attendance/Excessive Absence
Attendance is required at all scheduled classes, laboratories, conferences, seminars, clinical experiences, testing situations, and other course activities. Excessive absence, defined as absence greater than 15 percent of the hours within any one course, regardless of the cause, will be sufficient reason to consider a student as academically deficient. Students who have excessive unexcused absences in a class/clinical will receive a grade of F for the course. Registration for a course makes the student responsible for attending class until the course is completed or until, with the associate dean's permission, the registrar authorizes withdrawal from that course. Attendance for online courses is determined by participation in required course activities as specified in the course syllabus.

Excused Absences
Students may be excused from class for personal illness, a death in the immediate family, or other extenuating circumstances which are individually evaluated by the course coordinators. When a student must be absent from a required experience, arrangements should be made with the course coordinator prior to the scheduled experience. If prior arrangements are not made, the absence will be considered unexcused. Following any absence, the student is responsible for contacting all course coordinators the day of return to school. Each student is responsible for content presented in class, for obtaining course related materials, for any information obtained through course requirements, and for being informed about announcements made or posted. Requirements for attendance in specific classes and clinical experiences are at the discretion of the faculty and clearly stated in the course syllabi. In the event that absences are permitted, the following policy applies: If a student is permitted to have an excused absence from a required experience, the course coordinator determines if a make-up experience is needed for the student to meet the course objectives. In the event that an unexcused absence occurs, failure to attend clinical experiences or classes does not constitute an official withdrawal.

Release Following Illness
Students returning to school following illness may be required to submit verification from the health care provider permitting them to engage in clinical and class activities without limitations. Students who miss three or more consecutive days will be required to obtain a release from the treating health care provider to return to clinical and course work and submit it to the office of the associate dean for academic affairs.

Lateness to Class
It is a professional expectation that students arrive to class and are seated at the time class begins to avoid interruption to the learning environment. The consequences for late arrivals to class are determined by the course faculty.

Examinations
Undergraduate students must have a weighted test average and an overall course average of 76 or higher to pass the course. All students will take tests at the time and place designated by the instructor. Books or other written materials are not allowed during testing unless specifically permitted by the instructor. In the event a student is unable to take the examination at the time designated, the student must notify the course coordinator prior to test administration or the absence may be unexcused and the course faculty may elect not to give a make-up examination. The student must contact the course coordinator within 24 hours after return to reschedule the exam. The rescheduling and the testing method are at the discretion of the course faculty. If the student fails to contact the course coordinator within 24 hours, the student may receive a zero for the exam.

Standardized Examinations
Students in the Traditional and Accelerated Baccalaureate Programs are required to take nationally normed tests throughout the curriculum in order to progress in the program. Any student who fails to achieve the minimum required score on any of these standardized examinations within any semester (except the last) may be required to register for and complete a one-credit hour remediation course during the next semester and may be required to enroll in the Academic Achievement Program (AAP) through the Office of Academic Affairs. In the last semester of the curriculum, students are required to make a satisfactory score on a comprehensive exam prior to being certified for graduation. Students are responsible for the costs of these examinations.

UNDERGRADUATE STANDARDS FOR SCHOLASTIC PERFORMANCE
To be eligible for graduation, a baccalaureate student must achieve a grade of not less than 76 in each course, and must have a cumulative GPA of 2.0 or higher. Undergraduate students must have a cumulative School of Nursing GPA of 2.0 or higher in order to graduate. Recommendations regarding promotion, graduation, required remedial work, or dismissal are made by the associate dean.

Grading
The School of Nursing employs a numerical grading system based on 0-100. Evaluation of 300- and 400-level courses will be expressed according to the letter system listed below.

<table>
<thead>
<tr>
<th>Grade</th>
<th>Description</th>
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<tr>
<td>A</td>
<td>Excellent 100-92</td>
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<tr>
<td>B</td>
<td>Good 91-84</td>
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<tr>
<td>C</td>
<td>Satisfactory 83-76</td>
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<tr>
<td>D</td>
<td>Less than satisfactory 75-70</td>
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<tr>
<td>F</td>
<td>Failure below 70</td>
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<tr>
<td>P</td>
<td>Pass (Credit given but no quality points awarded)</td>
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<tr>
<td>I</td>
<td>Incomplete</td>
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<tr>
<td>W</td>
<td>Withdrawn</td>
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<tr>
<td>X</td>
<td>Audit</td>
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A student must achieve a grade of 76 or higher in each course and must satisfactorily complete all requirements stated in the syllabus for each course to become eligible for progression. A grade of Incomplete is reported when the student has not fulfilled the course requirements. A grade of Incomplete is not an expectation but rather a privilege that is extended in unusual circumstances by the course coordinator. The course coordinator determines the time allowed for the student to remove the Incomplete grade. The Incomplete grade is converted to a grade of F if not removed within 12 months from the time it was assigned.

The grade F is given if the student has failed based on the evaluation of required work and course objectives. Any required course in which the student has received a grade that is less than satisfactory D or F) must be repeated either at the University of Mississippi School of Nursing or, with permission of the dean, at another college or university. A minimum grade of B is required on any course repeated at another college or university.
University. Both the first grade and the grade received when the course was repeated are calculated in the School of Nursing overall grade point average (GPA) for BSN students.

Change of Grade
A course instructor may change a reported grade only if the original grade was incorrectly assigned due to clerical or computational error, or if a student meets the requirements for the removal of an Incomplete grade.

Graduate Standards for Scholastic Performance
Graduate students must achieve a cumulative School of Nursing grade point average of 3.0 in order to graduate. Recommendations regarding promotion, graduation, required remedial work, or dismissal are made by the associate dean.

Grading
The School of Nursing employs a numerical grading system based on 0-100. In certain courses, a mark of P is given to indicate that a student has received graduate credit, but has been assigned no quality point grade in the course. However, in courses approved for a mark of P, instructors may assign the quality point grade of F. The instructor issues a final grade based on the evaluation of the student’s work and achievements of the course objectives. Evaluation of 500-level and higher courses will be expressed according to the letter system listed below.

MSN and DNp
A  Excellent 100-90  P  Pass (Credit given but no quality points awarded)
B  Good 89-80  I  Incomplete
C  Satisfactory 79-70  W  Withdrawn
F  Fail below 70  X  Audit

A student must achieve a grade of 70 or higher in each graduate course and must satisfactorily complete all requirements stated in the syllabus for each course to become eligible for progression. A grade of Incomplete is reported when the student has not fulfilled the course requirements. A grade of Incomplete is not an expectation but rather a privilege that is extended in unusual circumstances by the course coordinator. The course coordinator determines the time allowed for the student to remove the Incomplete grade. The Incomplete grade is converted to a grade of F if not removed within 12 months from the time it was assigned.

Change of Grade
A course instructor may change a reported grade only if the original grade was incorrectly assigned due to clerical or computational error, or if a student meets the requirements for the removal of an Incomplete grade.

Undergraduate and Graduate Progression Policies
Final grades in completed courses are available through the student portal at the end of each academic semester. The associate dean will notify students of actions taken after grades are reviewed. The registrar reserves the right to withhold transcripts and diplomas until all account holds are removed.

Leaves of Absence (LOA)
The School of Nursing requires that all students be enrolled every semester or be on an approved Leave of Absence unless there is no course offered in the student's plan of study for the semester. Students who do not meet this requirement will be academically withdrawn. Students may be granted a leave of absence for a period of time not to exceed a total of one year for legitimate health, personal, military or other appropriate reasons.

In case of a request for a medical leave of absence, the School of Nursing may obtain an independent verification through referral from Employee and Student Health at the Medical Center. Prior enrollment in the School of Nursing is required for a student to be granted a leave of absence. Acceptance students who have signed the letter of intent but who have never enrolled are not eligible for a leave of absence.

Because of the intensity of the curricula, the phasing of the courses and the rapid changes in nursing knowledge, a student may be required to restart courses from the beginning upon returning from leave. Traditional and Accelerated students are required to complete a Re-entry Skills Validation upon return from Leave of Absence.

To be granted a leave of absence, the student must:

- be in good academic standing,
- notify the associate dean in writing of the request for leave of absence,
- obtain approval from the associate dean, and
- inform the associate dean, in writing, of intentions regarding future enrollment.

Students who fail to return to the academic program within the specified time will be withdrawn from the program. If the student has courses in progress at the time the leave of absence is granted, a letter grade of F may be assigned to these courses. A student on leave of absence will not be assigned any academic or clinical responsibilities. Upon return from leave of absence, the student will re-enroll and will pay all tuition and fees appropriate for the period of re-enrollment. No leave of absence will be granted without all appropriate prior approvals.

Withdrawal
Registration for a course makes the student responsible for attending class until the course is completed or until the student withdraws from the course. Failure to comply will result in recording failing grades in all courses in which the student is registered. Approved withdrawals, if completed on or before the last day specified by the academic calendar, will not be recorded on the student’s record. Withdrawal authorized after this date will be recorded as W through the 10th week of the fall and spring semesters and the 6th week of the summer semester. Withdrawals authorized after this date will be recorded as W if the student is passing the course at the time of withdrawal; a grade of F will be recorded if the student is failing.

No withdrawals will be granted during exam week. A maximum of two course withdrawals are allowed in the baccalaureate programs. Exception: If a student has to withdraw from a course that has one or more co-requisites within the same semester, the student will be allowed to withdraw from the co-requisite classes.

Progression
Grades and progress of each student are reviewed by the associate dean at the end of each grading period. Students who do not meet the established criteria will be notified. Progression in the baccalaureate programs requires a minimum cumulative GPA of 2.0 in all required nursing courses. Graduate students must have a minimum cumulative overall GPA of 3.0 in order to graduate.

- If a student makes a grade of D or F in a course, the course may be repeated once provided the overall GPA is a 2.0. Students who receive a grade of C or better in a course are not permitted to repeat the course.
• If a student repeats a failed nursing course and does not make a grade of C or better, the student will be dismissed from the program. Students dismissed from the program will be notified by the dean of the School of Nursing.
• Only one nursing course may be repeated. If a student receives a D or F in a second nursing course, the student will be dismissed from the program.
• Traditional students who are on an Alternate Plan of Study due to grades are required to complete a Re-entry Competency Evaluation of skills prior to enrollment in a clinical course.
• Students who receive one F grade in a clinical course may be automatically dismissed from the program.
• Students who have two or more incomplete grades will not be allowed to progress until the incompletes are removed.
• A grade of Unsatisfactory (U) will be assigned for any clinical day during which the student fails to meet minimum professional expectations for the day. If the student receives two unsatisfactory grades in the same clinical course, she/he will receive an F for the course. Clinical faculty reserve the right to assign a U to the student for failure to meet any portion of the required clinical expectations.
• A student must satisfactorily complete all requirements stated in the syllabus for each course to be eligible for progression. A grade of Incomplete is reported when the student has not fulfilled the course requirements, including Satisfactory/Unsatisfactory assignments.

A grade of Incomplete is not an expectation but rather a privilege that is extended in unusual circumstances by the course coordinator. The course coordinator determines the time allowed for the student to remove the Incomplete grade. The Incomplete grade is converted to a grade of F if not removed within 12 months from the time it was assigned.

Progression - Accelerated BSN Program
Any student entering the Accelerated BSN 12 month program option must be successful in all courses within a semester. Failure to successfully complete each course within each semester will result in dismissal from the program. If a student chooses to withdraw from a course, this same principle will apply. The student will have the option (if they choose) to reapply for a spot in the next admission cycle for the prospective site (Oxford or Jackson).

Required Revalidation Skills Checkoff
Students who have been out of a clinical course for more than one year are required to perform a revalidation skills checkoff prior to re-entering classes or clinical. The revalidation is necessary to insure that the student has retained the knowledge, skills, and abilities to perform safe patient care for the semester to which they are returning. The student will be provided a list of required skills to be assessed and will also be provided opportunities to practice these skills prior to the revalidation skills checkoff. The student should make contact with the assistant dean one month prior to the beginning of the entering semester so arrangements for the checkoff can be made.

Probation
A baccalaureate student is placed on probation when the nursing cumulative GPA at the end of any semester is less than 2.0. Students in the BSN Program may not be on probation for more than 15 semester hours of required course work. A remedial plan of study is initiated by the academic advisor for any student placed on probation. Graduate students are placed on probation when the cumulative GPA is less than 3.0.

Dismissal
A student may not be permitted to continue enrollment when:

Undergraduate programs:
• The student receives a second failing grade (D or F) in a nursing course; or
• The student has received a grade of F and the student’s overall GPA is less than 2.0 on all course work completed in the School of Nursing; or
• Any behavior is determined to be unprofessional, unethical, unsafe, or illegal or when performance is unsuitable for the practice of nursing; or
• The student violates UMMC code of conduct or compliance policies which are subject to disciplinary action, up to and including dismissal.

Graduate programs:
• The student receives a second failing grade (F) in a nursing course; or
• The student receives a grade of F and the student’s overall GPA is less than 3.0 on all course work completed in the School of Nursing; or
• The student receives one F grade in a clinical course; or
• Any behavior is determined to be unprofessional, unethical, unsafe, or illegal or when performance is unsuitable for the practice of nursing; or
• The student violates UMMC code of conduct or compliance policies which are subject to disciplinary action, up to and including dismissal.

A student may be dismissed from school without having been placed on probation. Students dismissed from the program for academic reasons and/or unprofessional behavior may appeal the dismissal by following the appeals process. The specific appeals procedure for academic and disciplinary action dismissals is found in the School of Nursing Student Handbook. In the event of an appeal of a dismissal, the student may not continue to attend class, participate in any clinical student practice, and/or represent the School of Nursing in any capacity until the appeal process has been concluded.

Re-admission
A student who has been dismissed from the School of Nursing may apply for admission no sooner than one year after being dismissed from the program. Re-admission is considered on a case-by-case basis. If re-admitted, the associate dean, program director, or admissions committee will design a plan of study based upon the applicant’s individual needs.

OFFICE OF STUDENT AFFAIRS AND SERVICE LEARNING
The School of Nursing Office of Student Affairs and Service Learning provides information, resources, and support to nursing students and prospective students through non-academic advisement, career guidance, enrollment management, orientation, recruitment, tutorial information, student leadership programs, community outreach, and special events.

Counseling
Academic and career counseling is available through School of Nursing faculty, Student Affairs, administrative staff, and the University of Mississippi Medical Center Office of Academic Support Services. Mental health counseling is available through appropriate professionals at the
University of Mississippi Medical Center and through contracts with other agencies through the Life Synch Student Assistance program. Associate deans, program directors, and the director of student affairs can assist students in locating such services as needed.

STUDENT ORGANIZATIONS

Associated Student Body
The Associated Student Body is composed of designated administrators, student body officers, and presidents of other student organizations who meet to exchange information and plan activities affecting student life.

Nursing Student Body Government
The Nursing Student Body Government is composed of students elected by their peers in accordance with the Nursing Student Body (NSB) constitution. The NSB Government plans student activities, fundraisers, and philanthropic activities for students in the School of Nursing with the guidance of the faculty advisor and director of student affairs.

Professional Student Organization
University Chapter, Mississippi Association of Student Nurses, is affiliated with the National Student Nurses' Association and gives the student an opportunity to participate in the professional activities of the organization.

TUITION AND FEES

Note: Tuition and fees listed below are for the 2019-20 academic year. All amounts are subject to change pending information from the Institutions of Higher Learning (IHL). Please contact the Department of Student Accounting for more information.

Undergraduate Programs*
Pending IHL approval, tuition for the Undergraduate Programs is $4364.50 per semester, based on enrollment of 12 or more hours. The hourly rate is $363.66 per semester hour. An additional $8434.50 per semester is charged to non-residents. Non-resident students taking less than a full-time load will pay a non-resident fee of $702.87 per semester hour, in addition to tuition and required fees.

Fees are charged to various programs as follows:

Traditional BSN students will be charged a HESI testing fee of $750.00 with their first semester tuition, and a lab fee of $250.00 with their second semester.

Accelerated BSN students will be charged a $3000.00 Professional fee each semester, in addition to tuition. Students on the Oxford campus will be charged an activity fee of $250.00 with their first semester tuition.

Online programs: Students enrolled in online programs will be charged a $150.00 distance learning fee each semester. Non-resident tuition will not be charged for students in online programs. Please look up your program in the bulletin to determine if it is an online program.

Graduate Programs*
Pending IHL approval, tuition for the Graduate Programs is $4364.50 per semester, based on enrollment of 9 or more hours. The hourly rate is $484.88 per semester hour. An additional $8434.50 per semester is charged to non-residents. Non-resident students taking less than a full-time load will pay a non-resident fee of $937.16 per semester hour, in addition to tuition and required fees.

Fees are charged as follows:

RN to MSN students will be charged a one-time lab/sim/standardized test fee of $250.00 with their first semester tuition.

Post Baccalaureate DNP students will be charged a one-time lab/sim/standardized test fee of $250.00 with their first semester tuition.

MSN and Post Masters Nursing students will be charged a one-time lab/sim/standardized test fee of $250.00 with their first semester tuition.

Online programs: Students enrolled in online programs will be charged a $150.00 distance learning fee each semester. Non-resident tuition will not be charged for students in online programs. Please look up your program in the bulletin to determine if it is an online program.

*Tuition and fees are subject to change pending information from the Institutions of Higher Learning (IHL). Please contact the department of Student Accounting at (601) 984-1060 for further information.

Expenses
In addition to tuition, students should be prepared to spend a minimum of $1,500 per academic year for necessary books, instruments, uniforms, malpractice insurance and travel. Students are responsible for transportation and living expenses during the course of study. Each student must have a computer and software which meets program specifications. The computer and software are covered in the financial aid package for qualifying students. Laptop computers are required in the traditional and accelerated BSN, RN to MSN, MSN, and post-MSN programs.

Standardized exams are administered throughout the BSN program to assess students' strengths and comprehension. Costs for the first take of these exams are included in the standardized testing fee package. Students are required to pay the additional cost for any retakes of the standardized exams. For an overview of the total cost of attendance, please visit the financial aid web page.

Refunds
See schedule for refunds in the General Information section of the Bulletins. For the most up-to-date information on tuition and fees, please visit the Office of Student Accounting website. For information regarding billing, payment, tuition refund and financial aid refund, please visit the website.

Financial Aid
The Office of Student Financial Aid encourages students to complete the required application(s) as early as possible to ensure they receive maximum consideration for financial aid. For more information, please visit the website.

SCHOLARSHIPS and AWARDS*

The Thomasson Family Nursing Scholarship, established in 2004, is awarded to a junior student with demonstrated academic excellence and financial need who plans to work in Mississippi upon graduation. Preference is given to students who have responsibility to care for a young family or who have a family member deployed in the military.

The Nursing Education Loan/Scholarship Program (NELS) makes scholarships available to BSN, RN to BSN, RN to MSN, MSN, DNP, and PhD students who wish to advance their academic status. Applicants must be residents of Mississippi, or have resided in the state for at least one year. Loan to service obligation can be discharged on the basis of one year's service in professional nursing for one year of loan received. Applications are available beginning in January and are awarded on a first come basis for the following fall. Further information may be obtained from the Board of Trustees of State Institutions of Higher Learning, P.O. Box 2336, Jackson, MS 39225-2336. IHL website.

The E. H. Summers Foundation Scholarships were established in 1977 by Mrs. E. H. Summers of Eupora, MS, to provide scholarship assistance for students from Webster, Montgomery, Attala, Carroll, and Choctaw counties who are enrolled at the University of Mississippi Medical Center.
The Alma O. Brothers and Virginia L. Cora Endowed Scholarship in Nursing, established in 2013 to honor in perpetuity the late Alma O. Brothers, nurse and mother of Dr. Virginia Cora, and Virginia Cora, PhD, UMMC School of Nursing alumna and Emeritus Professor, and to provide a scholarship to deserving nursing students at the University of Mississippi Medical Center. This scholarship is reserved for graduate students in the Adult-Gerontology Nurse Practitioner or Psychiatric/Mental Health Nurse Practitioner tracks within the Master of Science in Nursing program.

The Dean’s Scholarship is awarded annually to an incoming doctoral student to recruit individuals who demonstrate distinguished potential for improving the health of Mississippians through nursing at the highest level of scholarship.

The Mississippi Baptist Hospital/Gilfoy School of Nursing Scholarship, established in 2000, is awarded to a doctoral nursing student who is in good standing and has a grade point average of 3.0 or higher.

The Leigh Anne Ward and Bobbie G. Ward Endowed Scholarship in Nursing, established in 2011 to honor in perpetuity School of Nursing alumna Bobbie G. Ward and her daughter, Leigh Anne Ward, provides financial assistance to deserving students preparing for a career in nursing. It is awarded to a senior or Accelerated BSN student with an interest in pediatrics or medical surgical nursing.

The Jo-Ann McCallum Vandergriff Nursing Scholarship Endowment, established in 2016 by Mr. William and Jo-Ann Vandergriff. This scholarship is awarded to graduate student nursing seeking a Master of Science in nursing whose primary focus is in the area of family medical care.

The Dr. Kaye Bender Endowed Fund provides a scholarship for doctoral nursing students, with a specific focus on population health. Priority is given to PhD students.

The Regions Bank Scholarship, established in 1968, is awarded annually to a junior student with excellence in academic, clinical, and overall performance and with documented financial need.

The Hearin Scholarship Fund, established in 1988, offers full tuition scholarships to outstanding undergraduate students selected on the basis of academic record and documented financial need. This is a service scholarship and requires the student serve 30 months to five years (depending on length of the scholarship) as a full-time nurse in Mississippi immediately following graduation.

The Dr. Jeff Hollingsworth Memorial Scholarships are awarded to traditional undergraduate nursing students who are selected on the basis of academic record and have financial need. Preference is given to students from Hinds, Rankin, Madison, and Lauderdale counties.

The Pearl & Otis Walters Scholarship is presented annually to nursing student(s) with outstanding academic achievement who intend to practice in smaller Mississippi towns and communities.

The Edwin N. Rubenstein Scholarship, established in 1998, is awarded annually to a senior student who has demonstrated the most overall improvement from the junior to senior year.

The Ollie Schillig Memorial Scholarship Fund was established in 1984 through a gift to the Medical Center from the Schillig Trust. Miss Schillig, a native of Port Gibson, was a noted concert singer. At least one scholarship is available each year to an undergraduate student in the School of Nursing. All recipients must be in good academic standing, and preference is given to those students who intend to practice in smaller Mississippi towns and communities.

The Trustmark National Bank Scholarship, established in 1988, is presented to an undergraduate student with outstanding performance in nursing of children as demonstrated by excellence in academic, clinical, and overall performance.

Vicki Randle Bee Student Nurse of the Year Scholarship was established in 2006 by Alon Bee in memory of his wife, Vicki Randle Bee. The recipient is chosen by fellow senior students, and selection is based on the individual exhibiting nursing qualities valued by the School of Nursing.

The R. J. Scribner Scholarship was established in 2002. This scholarship is given to a full-time undergraduate nursing student based on academic excellence and who resides north of Highway 82. The recipient agrees to work or live in Mississippi for 24 months. Students may apply through the office of Student Financial Aid.

The William Randolph Hearst Endowment Scholarship Fund, established in 2010 by the William Randolph Hearst Foundation, is an endowed scholarship awarded as a recruitment scholarship to an ethnic minority student who is a U.S. citizen and Mississippi resident seeking a traditional undergraduate nursing degree in the School of Nursing, who has demonstrated financial need, and has a pre-entry GPA of 3.0 or above. Although a recruitment scholarship, it is awarded upon successful completion of the first semester in the School of Nursing.

The Orr-Russwurm Memorial Scholarship Fund was established in 1993 in memory of Dr. and Mrs. William Robert and Helene Mays Orr, Helen Peasall Orr, Stuart Peasall Orr, Dr. and Mrs. William Clark and Florence Russwurm. The scholarship is designated for a student in the School of Medicine, School of Nursing, School of Health Related Professions, School of Dentistry, or any other school that may be created in the future at the University of Mississippi Medical Center. The recipient must be planning a full- or part-time career in Christian missionary work. For more information about this scholarship, please contact the UMMC Office of Student Financial Aid.

The Frances Marie Dean Scholarship in Nursing was established in 2006 by the Estate of Frances Marie Dean. The recipient is a nursing student at the University of Mississippi Medical Center.

The McCarty Company Scholarship Fund was established in 2011 by the Create Foundation. The scholarship is awarded to a third-semester student in the School of Nursing who is 22 years of age or older, who demonstrates financial need, and who has community and volunteer involvement.

The Jessie Lynn Bidwell Memorial Scholarship was established in 2011 by Josie and Gene Bidwell in memory of their infant daughter. This scholarship is awarded to an undergraduate student who has successfully completed his/her junior year and who exemplifies caring, compassion, and respect for children and their families. The recipient must also be in good academic standing in the School of Nursing.
The Amber M. Arnold Nursing Scholarship was established in 2010 by Amber Arnold. This scholarship is awarded to an undergraduate in the School of Nursing who is a single parent, demonstrates financial need, is a Mississippi resident and a citizen of the United States, and who has a minimum GPA of 3.0.

The UMCC 50th Anniversary Scholarship was established in 2005 and derived from the UMCC "Promises Kept" campaign. This scholarship is centered on academics, character, and performance. It rotates annually among the schools.

The Susanne Marie Pruett Memorial Scholarship in Nursing was established in 2009 to honor the late Susanne Marie Pruett, a University of Mississippi Medical Center research and PICU/ICU staff nurse, by providing financial assistance to deserving students pursuing a career in the area of intensive care nursing.

The Laura C. Blair Endowed Scholarship in Nursing was established in 2009 to honor in perpetuity Laura C. Blair, a University of Mississippi Medical Center alumna, by providing scholarships to nursing students. The recipient must be a U.S. citizen and Mississippi resident and seeking a nursing degree in the School of Nursing.

The Patricia Dyre Kimble Scholarship in Nursing, established in 2008, is an academic scholarship awarded to a student in the School of Nursing who demonstrates financial need, is in good academic standing, and has a genuine desire to pursue a rewarding and challenging career in nursing. The recipient must be a U.S. citizen and Mississippi resident.

Florence E. King Endowed Scholarship in Nursing, established in 2013, is awarded to a student enrolled in the Master of Science in Nursing and Health Care Administrator track. The student must be a U.S. citizen, have financial need, and be pursuing excellence in academic performance. The student awarded must plan to pursue a career in hospital administration immediately upon completion of the MSN degree requirements.

The Christine L. Oglevee Memorial Award, sponsored by the Nursing Alumni Chapter and the School of Nursing, is presented annually at commencement to a graduating senior from the traditional BSN program who is chosen by the faculty as the most outstanding student in the class. The recipient's name is engraved on a plaque which hangs in the School of Nursing.

The Yvonne Pressgrove Bertolo Award was established in 1986 with a gift from Yvonne and Bob Bertolo of Natchez. Mrs. Bertolo is an alumna of the School of Nursing. Junior students or those who have completed the junior year, who are from Mississippi or any other SREB state, who have a minimum grade point average of 3.50 who actively participate in extracurricular school and campus activities, and who demonstrate qualities of character, commitment, and leadership which exemplify ideal behavior are eligible for consideration of the scholarship.

The James T. Baird Memorial Scholarship, established in 2000, offers full tuition scholarship each year to an undergraduate Accelerated Program student in the School of Nursing. All recipients must be in good academic standing and have financial need. Students must have a commitment to practice in Mississippi.

The Allie Mae Fletcher Memorial Scholarship Award was established in 2004 in memory of the grandmother of Dr. Audwin B. Fletcher. This book award is presented to a nurse practitioner student who is of African-American descent. The recipient must be in good standing and preference is given to those students who intend to practice in smaller Mississippi towns or communities.

The Bernice M. Gamblin Memorial Scholarship was established in 2007 in memory of Bernice M. Gamblin, an aunt of Dr. LaDonna Northington, Dr. Monica Northington and Hiawatha Northington II. This scholarship is presented to an undergraduate student in good academic standing, with a caring attitude and an interest in working with adult clients with cancer.

The Richard N. Graves Award is presented at commencement to the registered nurse senior who is chosen by the faculty as the most outstanding registered nurse student in the class.

The Doris W. Gray Award, established in 1985, is awarded annually to the undergraduate student with outstanding performance in maternity nursing as demonstrated by excellence in academic, clinical, and overall performance.

The Eliza Pillars Registered Nurses Association Annual Award recognizes African-American undergraduate nursing student(s) with outstanding academic achievement.

The Class of 1965 Award, established in 2000, is presented annually to a third-semester junior or first-semester senior who is full time, in good academic standing, and demonstrates financial need.

The Duncan McCormac Memorial Scholarship award, established in 2000, is presented annually to a third-semester junior or first-year graduate student who is full time, in good academic standing and demonstrates the characteristics most admired in the conduct of the art and science of nursing.

Mississippi Blood Services Award is available to a full-time student in the graduate nursing program. Students must have a 3.0 GPA or higher.

The F.A. Davis Undergraduate Book Award, established in 1998, is presented to a junior nursing student in recognition of his/her scholastic excellence.

The Mississippi Hospital Association Nurse Executive Award, established in 1998, is presented to the graduate student who demonstrates outstanding academic achievement and creativity in developing the nurse executive role in the health delivery system.

The Bess C. Blackwell Nurse Executive Award, established in 1996, is presented to the graduate student who demonstrates overall excellence as a nurse executive.

The Bess C. Blackwell Scholarship in Nursing, established in 2008, is presented annually to an undergraduate nursing student who is a member of a group of underrepresented populations based on GPA, letters of recommendation, and personal statement on desire to pursue a career in nursing.

The Janet Y. Harris Scholarship in Nursing, established in 2008, is presented annually to a graduate (master's or doctoral) nursing student whose focus of study/role is nurse administrator or nurse executive. The student must be an active member of local, state, or national professional nursing associations and demonstrate excellence in coursework and practicum.

The Rosie Lee Calvin Nurse Educator Award, established in 1996, is presented to the graduate student who displays overall excellence as a nurse educator.

The Elizabeth Ann Coleman Nurse Clinician Award, established in 1996, is presented to a graduating nurse clinician student with the highest academic GPA and who proves overall excellence as a nurse practitioner.

The Minta Uzodinma Community Nurse Award, established in 1998, is presented annually to the graduate student who demonstrates outstanding commitment to improve the health of the public.

The Jay Waits Graduate Student of the Year Award was established in 1986. The School of Nursing and the Nursing Alumni Chapter co-sponsor this award and present it annually to a graduate student who, in the judgment of the graduate faculty, exhibits leadership, clinical and academic excellence.
The Elsevier Science Graduate Book Award, established in 1998, is presented to a doctoral student who is in good academic standing, enrolled in the human experiences health care track, and demonstrates interest in qualitative research.

Sigma Theta Tau Outstanding Academic Performance Awards, established in 1986, are presented annually to a graduate student and undergraduate student in recognition of superior academic achievement, and activities reflecting the purposes of Sigma Theta Tau.

Sigma Theta Tau Carraway Family Scholarship, established in memory of Charles Morgan Carraway, is awarded to an outstanding undergraduate student selected by the Theta Beta Chapter of the International Nursing Honor Society.

The University of Mississippi Medical Center Student Nurses Association Outstanding Junior Award is presented to the most active junior member of the University Chapter of MASN.

The University of Mississippi Medical Center Student Nurses Association Outstanding Senior Award is presented to a senior student who has been active in MASN and has been a member of the University Chapter of MASN for two years.

Lippincott Undergraduate Book Award, established in 1998, is presented to an undergraduate student in recognition of scholastic excellence.

Lippincott Advanced Standing Book Award, established in 1998, is presented to an advanced standing student in recognition of scholastic excellence.

The Elsevier Science Graduate Book Award, established in 1998, is presented to a graduate student in recognition of scholastic excellence.

The Elsevier Science Doctoral Book Award, established in 1998, is presented to a doctoral student in recognition of scholastic excellence.

The Natural Medicines Comprehensive Database Recognition Award, established in 2001, is presented to the graduating MSN student who demonstrates promise in improving patient care, and shows an appreciation for scientific inquiry and an evidence-based approach to natural medicine. (This student is one who plans on completing a terminal degree in nursing or a related field.)

The Lorea May Honorary Nurse Award was established in 2009 by Dr. Marilyn Harrington in honor of her mother, Lorea May, who always desired to become a nurse but due to lack of finances was unable to attend nursing school. It is awarded to an African-American senior traditional student or an accelerated student who desires to enter the field of pediatrics.

Master Preceptor Recognition Award recognizes a preceptor who has demonstrated outstanding performance in her/his role as a preceptor for a nursing student(s). The preceptor functions as a resource person, facilitator, clinical role model, educator, and consultant to the student. A Master Preceptor is one that has made extraordinary effort to help nursing students bridge the gap between classroom theory and clinical practice.

The Helen Reeves Turner, MD, PhD Scholarship, established in 2013, is awarded each year to a deserving student from one of the Medical Center schools. The recipient of this award, selected by the dean or her designee, exemplifies Dr. Turner’s outstanding attributes of leadership, education, and service.

* Students must meet specific scholarship and award criteria and may need to complete an application. Eligibility does not guarantee scholarship or award. Scholarships are awarded as funds allow.

LOANS

The Caldwell Loan Fund, established in 1962 by Mrs. Annie C. Caldwell of Hazlehurst, provides interest-free loans to undergraduate nursing students on the basis of need.

The Federal-State Loan Programs, in which the Medical Center participates, are administered through the UMMC Office of Student Financial Aid. Application information is outlined in the Student Financial Aid Disbursement Policies section under General Information. For more information about this loan program, please contact the UMMC Office of Student Financial Aid.

The George C. and Laura B. McKinstry Scholarship/Loan Fund was established in 1973 by Dr. McKinstry in memory of his father and mother to provide low-interest loans to full-time needy students in the School of Nursing.

The Christine L. Oglevee Memorial Loan Fund, supported by gifts from alumni, is a source for loans available on an as-needed basis. Funds are available to students with good scholastic records in the graduate and undergraduate programs of the School of Nursing. Please contact the Office of Student Affairs for more information.

The Mississippi Institutions of Higher Learning makes available the Nursing Education Loan Scholarship Program (NELS) for junior, senior, and graduate students who are pursuing a baccalaureate or higher degree in nursing. Visit the website http://riseupms.com/state-aid/ or call 1-800-327-2980 for more information.

Mississippi Resident Tuition Assistance Grant (MTAG) application should be mailed directly to the college or university where the student will be attending. All recipients must be enrolled in a full-time plan of study and in good academic standing. Information can be obtained by writing the Mississippi Office of State Student Financial Aid, 3825 Ridgewood Road, Jackson, MS 39211-6453, or by visiting its website.

WORK STUDY

Students who wish to participate in a work-study program should contact the UMMC Office of Student Financial Aid located in the Verner S. Holmes Learning Resource Center.

HONORS

The Marshal of the Class for Commencement is a graduating senior selected by the faculty based on GPA, commitment, and service to the senior class, the School of Nursing, and the University of Mississippi Medical Center.

The Dean’s List is recognition for undergraduate students who demonstrate superior academic achievement. Eligibility is based on successful completion of a full-time course load while taking all required courses in a regular plan of study in the preceding semester in the School of Nursing with a semester average of 3.50 or above.

Who’s Who Among Students in American Universities and Colleges is a national compendium which recognizes seniors and graduate students for outstanding achievement.

Sigma Theta Tau, Theta Beta Chapter, is the School of Nursing Honor Society, established in 1982, and chartered as the Theta Beta Chapter of Sigma Theta Tau, International Honor Society of Nursing, on January 20, 1986. Membership in the society is by invitation extended to undergraduate and graduate nursing students, nursing faculty, and professional nurses who have shown superior scholarship, leadership, and nursing achievement.

Phi Kappa Phi Chapter is the National Honor Society of Phi Kappa Phi which was founded in 1897, and the University of Mississippi Chapter was chartered in May 1959. To qualify for membership, undergraduates must be seniors with high standards of scholarship and character. Graduate students and students in professional schools must have distinguished records.
THE UNIVERSITY OF MISSISSIPPI MEDICAL CENTER

THE NURSING ALUMNI GUARDIAN SOCIETY
The society is a special organization sponsored by the nursing alumni at the University of Mississippi Medical Center to encourage extraordinary giving by nursing alumni, friends, and faculty of the School of Nursing. The gifts, representing either current or deferred contributions, may be restricted or undesignated. The membership of the society holds the responsibility of ensuring that available funds are distributed to the School of Nursing as well as serving as trustee for specially designated charitable programs.

BACCALAUREATE PROGRAM
Three options are available for students wishing to pursue the Baccalaureate of Science in Nursing degree: the Traditional BSN program, the Accelerated BSN program, and the RN to BSN program. The RN-BSN program is classified as online.

Purpose
The purpose of the baccalaureate program is to prepare nurses for entry-level professional practice and provide a solid foundation for graduate study.

BACCALAUREATE PROGRAM OUTCOMES
1. Integrate knowledge and skills from the liberal arts, sciences, nursing, and other disciplines into professional nursing practice.
2. Apply knowledge and skills of organizational and systems leadership, quality improvement, and patient safety to improve patient care outcomes in diverse populations and health care settings.
3. Integrate current evidence from nursing research and other credible sources into professional nursing practice.
4. Integrate information management and patient care technologies into the delivery and evaluation of high-quality, safe, and patient-centered care in a variety of health care settings.
5. Apply knowledge of health care policy, finance, and regulatory environments to professional nursing practice.
6. Demonstrate effective inter- and intra-professional communication and collaboration skills in the delivery of evidence-based, patient-centered care across health care environments.
7. Implement strategies to facilitate health promotion, disease prevention, and health restoration of individuals, families, and populations across the lifespan.
8. Assume accountability for professional values and behaviors.
9. Deliver comprehensive patient- and population-centered care that reflects baccalaureate generalist nursing practice across the health-illness continuum and health care environments.

ADMISSION CRITERIA
The minimum criteria to be considered for admission to the baccalaureate nursing program are outlined under each specific program option. Admission consideration to the undergraduate program is made by the Undergraduate Admission and Progression Committee based on evaluation of application data.

TRADITIONAL BACCALAUREATE PROGRAM
Admission Criteria
1. A complete application;
2. An ACT score of 21 or above;
3. A cumulative GPA of at least 2.5 on a 4.0 scale. (Hours from all previously attempted undergraduate course work are used in calculating the cumulative GPA.) The GPA in required prerequisite course work will also be considered in the admission process;
4. Completion of required prerequisite courses with a minimum of grade C in each course. Applicants may apply for admission when the number of prerequisite courses completed, plus those on the plan of study, equals 62 credit hours. All prerequisite courses (62 credit hours) must be completed before beginning the nursing program;
5. A personal interview and an on-site writing sample may be required.

In unusual instances, the Undergraduate Admission and Progression Committee may consider applicants who do not meet the admission criteria.

PREREQUISITE COURSES
The lower division is comprised of the following courses, which are prerequisites for the upper division of the baccalaureate program. The 62 credit hours of prerequisite courses include:

Natural Sciences and Mathematics: (26 credit hours) Science survey courses or courses for non-science majors are not acceptable for transfer credit. Anatomy and Physiology courses taken more than 10 years ago will not be accepted for transfer credit.

Required Courses
- General Chemistry I with lab (4 hours)
- Science with lab – Suggested courses: Biological Science with lab, Chemistry II with lab, Genetics (4 hours), Environmental Science with lab
- Microbiology – One course with a laboratory (4 hours)
- Human Anatomy and Physiology – Two courses in sequence with labs which include the study of structure and function of the human body (8 hours)
- College Algebra or higher level math (3 hours)
- Statistics – Must include an introduction to descriptive and inferential statistics, including measures of central tendency, variability, correlation, t tests, z tests, ANOVA, chi-square, hypothesis testing, p levels and confidence intervals (3 hours)

Psychosocial Sciences: (18 credit hours)

Required Courses
- General Psychology (3 hours)
- Introductory Sociology (3 hours)
- Human Growth and Development through the Life Cycle (3 hours):
  a. In a senior college, Developmental Psychology, to include development from infancy through old age;
  b. In a junior or community college, Human Growth and Development, to include development from infancy through old age.
- Nutrition (3 hours)
- Psychosocial Science electives (6 hours)
Suggested Elective Courses

Abnormal Psychology
Economics
History
Social Problems
Anthropology
Geography
Political Science

Humanities and Fine Arts: A minimum of six courses (18 credit hours)

Required Courses
English Composition (6 hours)
Humanities and Fine Arts Electives (9 hours)
Speech (3 hours)

Suggested Elective Courses

Art
Literature
Drama Music
Foreign Languages
Philosophy
History
Survey of Religion
Journalism

Unacceptable Courses
None of the required courses listed, described, or recommended above may be met by the following: courses in physical training, military science, dogmatic religion; mathematics or science designed for non-science majors; or course credit granted without college level testing.

TRADITIONAL BSN PROGRAM PLAN OF STUDY

The following plan of study is for students who are admitted to the Traditional BSN Program. Plans of study may differ based on faculty and clinical resources and necessary curriculum changes. Students will be given the most recent plans of study by their academic advisor upon enrollment. Traditional BSN students are limited to 6 credit hours of electives within the program, excluding N409 (Clinical Nursing Elective) and N322 (Strategies for Success), if required.

SEMIESTER I - SUMMER
N 302 Health Assessment Throughout the Life Span 3
N 307 Pathophysiology 4

SEMIESTER II - FALL
N 300 Introduction to Health Promotion 3
N 303 Introduction to Pharmacotherapeutics 3
N 304 Introduction to Professional Nursing and Evidence-Based Practice 2
N 309 Foundations of Nursing Practice 5

SEMIESTER III - SPRING
N 444 Adult Health I 6
N 427 Child-Adolescent Nursing 5
N 428 Nursing Research 3

SEMIESTER III - SUMMER
N 409 Clinical Nursing Elective (optional) 3
N 322 Strategies for Success (may be required based on standardized examination score) 2

SEMIESTER IV - FALL
N 460 Adult Health II 6
N 426 Maternal-Newborn Nursing 5
N 439 Population Based Nursing 3

SEMIESTER V - SPRING
N 310 Behavioral Nursing 4
N 435 Nursing Synthesis and Practicum 4
N 449 Nursing Management in Health Care Systems 4
N 482 Seminar 2

TOTAL HOURS 62

ACCELERATED BACCALAUREATE NURSING PROGRAM

The purpose of the Accelerated Baccalaureate Program is to prepare nurses at an accelerated pace for entry-level professional practice and to provide a solid foundation for graduate study. The accelerated program is a continuous curriculum designed for students who have a prior baccalaureate degree in another field. Students complete a continuous 3-semester, 12-month curriculum. Students in the Oxford campus program are admitted annually for fall semester entry. Students on the Jackson campus program are admitted annually for spring semester entry. All students must complete 62 hours of prerequisite course credits prior to entering the program. Students in the accelerated program may integrate with students in the traditional BSN program for some learning activities. A problem based and/or team based learning methodology is used for course delivery in the Accelerated BSN program option.

Admission Criteria

Admission to the Accelerated Baccalaureate Program is based on evaluation of the following by the Undergraduate Admission and Progression Committee:

1. a complete application;
2. baccalaureate degree from a college accredited by one of the regional accrediting agencies (applicants must hold the degree before beginning the Accelerated BSN program);
3. an ACT score of 21 or above;
4. a cumulative overall GPA of 3.0 or above on a 4.0 scale (Hours from all previously attempted undergraduate course work are used in calculating the cumulative GPA.)

Applicants who are admitted to the Accelerated BSN Program must complete pre-admission counseling with School of Nursing faculty. Students must enroll in full-time study in the Accelerated BSN program option. Because of the accelerated pace of the curriculum, students are strongly encouraged NOT to work while in the program.

PREREQUISITES
The prerequisite courses are the same as listed for the Traditional BSN program.

ACCELERATED BSN PROGRAM OPTION PLAN OF STUDY
The following plans of study are for students admitted to the Accelerated BSN Program. The curriculum design utilizes a problem-based learning methodology for course delivery. Plans of study may differ based on faculty and clinical resources and necessary curriculum changes. Students will be given the most recent plan of study upon enrollment.

FALL ADMISSION PLAN OF STUDY – OXFORD CAMPUS

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<tbody>
<tr>
<td>N 412-1</td>
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<td>N 497</td>
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<td>N 433-3</td>
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**TOTAL HOURS** 48

SPRING ADMISSION PLAN OF STUDY – JACKSON CAMPUS

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<td>N 436</td>
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<td>N 433-3</td>
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**TOTAL HOURS** 48

RN to BSN PROGRAM (Post-RN and Dual Enrollment Program)

Purpose
The purpose of the RN to BSN program is to provide associate degree and diploma RNs a flexible program of study that will allow them to continue to meet work and other obligations while pursuing baccalaureate education. The program of study consists of 62 credit hours of lower division prerequisites and 30 credit hours of upper division nursing courses. All prerequisite hours must be completed prior to entering the program. After successful completion of N 421 (Transitions and Trends in Professional Nursing), students will be awarded 34 hours of validation credit, applicable toward hours required for the BSN degree, for other nursing courses (taken in an associate or diploma program) equitable to UMMC School of Nursing courses. Students must complete 30 hours as a student enrolled in the School of Nursing. Graduates of the RN to BSN
program will meet the standards and program outcomes for baccalaureate nursing education and receive the BSN degree. The RN to BSN program is classified as online.

A RN to BSN Dual Enrollment Program (DEP) is available to students enrolled in a participating community college. This program provides the opportunity for students pursuing the associate degree in nursing to simultaneously pursue the BSN from the School of Nursing through a dual enrollment route. Only students from partnering community colleges are eligible to participate. Admission to the DEP is competitive.

Prerequisite Courses (62 credit hours)
The lower division is comprised of the following courses, which are prerequisites for the upper division of the baccalaureate program.

Natural Sciences and Mathematics: (26 credit hours) Science survey courses or courses for non-science majors are not acceptable for transfer credit. Anatomy and Physiology courses should be taken within the last 10 years. However, applicants who have been in continuous nursing practice may request a waiver of this requirement from the associate dean.

Microbiology-(4 hours) one course with a laboratory
Human Anatomy and Physiology-(8 hours) two courses in sequence with labs which include the study of structure and function of the human body.
College Algebra or higher level math-(3 hours)
Statistics-(3 hours) must include an introduction to descriptive and inferential statistics, including measures of central tendency, variability, correlation, t tests, z tests, ANOVA, chi-square, hypothesis testing, p levels, and confidence intervals.
Natural Science or Math electives (8 hours) Courses in nutrition or in computer science may be used as Natural Science/Math electives.

Psychosocial Sciences: (18 credit hours)

General Psychology-(3 hours)
Introductory Sociology-(3 hours)
Human Growth and Development through the Life Cycle (3 hours):
  a. In a senior college, Developmental Psychology, to include development from infancy through old age; or
  b. In a junior or community college, Human Growth and Development, to include development from infancy through old age.

Psychosocial Science Electives-(9 hours)

Suggested Courses for Psychosocial Science Electives
Abnormal Psychology or other psychology courses
Anthropology
Economics
Geography
History
Political Science
Social Problems or other sociology courses
Nutrition

Humanities And Fine Arts: (18 credit hours)

English Composition-(6 hours)
Speech-(3 hours)
Humanities and Fine Arts electives-(9 hours)

Suggested Courses for Humanities and Fine Arts Electives
Art
Theatre
Philosophy
Journalism

Music
History

Drama
Foreign Languages
Survey of Religion

Unacceptable Courses
None of the required courses listed, described, or recommended above may be met by the following: courses in physical training, military science, or dogmatic religion; courses in mathematics or science designed for non-science majors; or course credit granted without college level testing.

RN to BSN (Post-RN) Admission Criteria
1. A completed application;
2. Completion of required prerequisite courses with a minimum grade of C in each course;
3. An associate degree or diploma in nursing from an accredited program (ACEN or CCNE), which included clinical practice courses in nursing;
4. A minimum cumulative GPA of 2.0 on a 4.0 scale (Hours from all previously attempted undergraduate course work are used in calculating the cumulative GPA);
5. Evidence of a current and unrestricted RN license to practice in the United States and licensure/privilege to practice in Mississippi;
6. New associate degree graduates must successfully complete the NCLEX-RN® examination and become licensed as a registered nurse (RN) by the end of their first semester of course work; and,
7. Official transcripts from all schools attended.

RN to BSN (Dual Enrollment Program) Admission Criteria
*Admission to the RN to BSN Dual Entry program is currently suspended
1. Currently enrolled in a participating ADN school;
2. Submission of a complete application:
   a. Students who have completed 42 of the 62 credit hours of required prerequisite courses will be eligible to apply one time during their second semester of enrollment in the ADN program.
   b. Students who have completed all 62 credit hours of prerequisite courses are eligible to apply one time during their first semester in the ADN program.
3. ACT score of 21 or above or previous bachelor's degree in any field from a regionally accredited university;
4. Minimum overall GPA of 3.0 on all college courses AND on all nursing courses through the first semester of full time study in the ADN program;
5. Minimum grade of C in each prerequisite course;
6. Completion of or currently enrolled in at least 42 of the 62 credit hours of required prerequisite courses for the BSN degree, including the following required courses:
   a. Human Anatomy and Physiology I and II with labs (8 hours)
   b. English Composition I and II (6 hours)
   c. College Algebra (3 hours)
   d. Human Growth and Development (3 hours)

All prerequisite courses must be completed prior to enrolling in any BSN-level nursing courses.

SUGGESTED RN to BSN PLAN OF STUDY

The following core and elective courses comprise the RN to BSN Plan of Study. Plans of study may differ based on faculty and clinical resources and necessary curriculum changes. Students will be given the most recent plan of study upon enrollment. All students must take N421 during their first semester and must take N461 during their final semester of study. To be considered full time, the student must be registered for at least 12 hours during a semester.

<table>
<thead>
<tr>
<th>Core Courses (26 credit hours) plus Electives (4 credit hours)</th>
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<tbody>
<tr>
<td>N 421-Transitions and Trends in Professional Nursing</td>
<td>2</td>
</tr>
<tr>
<td>N 408-1 -Health Promotion in Populations</td>
<td>2</td>
</tr>
<tr>
<td>N 406-Health Assessment</td>
<td>3</td>
</tr>
<tr>
<td>N 407-Pathophysiology</td>
<td>2</td>
</tr>
<tr>
<td>N 432-Introduction to Professional Writing</td>
<td>3</td>
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<tr>
<td>N 462-Professional Role Enactment</td>
<td>2</td>
</tr>
<tr>
<td>N 428-Nursing Research</td>
<td>3</td>
</tr>
<tr>
<td>N 528-Leadership and Management</td>
<td>2</td>
</tr>
<tr>
<td>N 431-Patient Safety and Quality Improvement</td>
<td>3</td>
</tr>
<tr>
<td>N 461-Management and Leadership Practicum</td>
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<td>Total</td>
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</table>

RN to MSN PROGRAM

Purpose
The purpose of the RN to MSN program is to provide associate degree and diploma RNs a flexible program of study that will allow them to continue to meet work and other obligations while pursuing graduate education. Graduates of the RN to MSN program will meet the standards and program outcomes for baccalaureate and master’s nursing education and receive the MSN degree. After successful completion of NS21-1 (Concepts of Professional Nursing Practice), students will be awarded 34 hours of validation credit, applicable toward hours required for the MSN degree, for other nursing courses (taken in an associate or diploma program) equitable to UMMC School of Nursing courses. The courses for most tracks are online or hybrid. The Family Nurse Practitioner (FNP) and the Adult-Gerontology Acute Care Nurse Practitioner (AGACNP) tracks may have some specialty courses that require meeting on the Jackson campus a maximum of four times during each semester. In addition, the first 45 clinical hours and an additional 200 clinical hours for the AGACNP track must occur at UMMC. The remaining 385 clinical hours may occur at UMMC or at another approved site with an approved preceptor. Graduates of all nurse practitioner tracks meet eligibility requirements for advanced practice certification by national certifying organizations and by the Mississippi Board of Nursing. Most tracks within the RN to MSN program are classified as online. The Adult Gerontological Acute Care Nurse Practitioner track is not classified as online.

Prerequisite Courses (62 credit hours)
The lower division is comprised of the following courses, which are prerequisites for the upper division of the RN to MSN program.

Natural Sciences and Mathematics: (26 credit hours) Science survey courses or courses for non-science majors are not acceptable for transfer credit. Anatomy and Physiology courses should be taken within the last 10 years. However, applicants who have been in continuous nursing practice may request a waiver of this requirement from the associate dean.

- Microbiology (4 hours) one course with a laboratory
- Human Anatomy and Physiology- (8 hours) two courses in sequence with labs which include the study of structure and function of the human body.
- College Algebra or higher level math-(3 hours)
- Statistics (3 hours) must include an introduction to descriptive and inferential statistics, including measures of central tendency, variability, correlation, t tests, z tests, ANOVA, chi-square, hypothesis testing, p levels, and confidence intervals.

Natural Science or Math electives (8 hours may be natural science or math electives). Courses in nutrition or in computer use may be used as Natural Science/Math electives.

Suggested Courses for Natural Science/Math Electives
- Any math higher than College Algebra
- Biology (for science majors)
- Chemistry (for science majors)
- Genetics
- Psychology courses
- Economics
- Political Science
- Geography
- Social Problems or other sociology courses
- History
- Nutrition

Psychosocial Sciences: (18 credit hours)

- General Psychology-(3 hours)
- Introductory Sociology-(3 hours)
- Human Growth and Development through the Life Cycle (3 hours):
  a. In a senior college, Developmental Psychology, to include development from infancy through old age; or
  b. In a junior or community college, Human Growth and Development, to include development from infancy through old age.

Psychosocial Science Electives-(9 hours)

Suggested Courses for Psychosocial Science Electives

- Abnormal Psychology or other psychology courses
- Economics
- Political Science
- Anthropology
- Geography
- Social Problems or other sociology courses
- History
- Nutrition
The University of Mississippi Medical Center

Humanities and Fine Arts: (18 credit hours)
- English Composition- (6 hours)
- Speech- (3 hours)
- Humanities and Fine Arts electives- (9 hours)

**Suggested Courses for Humanities and Fine Arts Electives**
- Art
- Drama
- Music
- Philosophy
- Survey of Religion
- Literature
- Theatre
- Foreign Languages

**History**
- Journalism

**Unacceptable Courses**
None of the required courses listed, described, or recommended above may be met by the following: courses in physical training; military science; courses in mathematics or science designed for non-science majors; course credit granted without college level testing; or courses taken from a college or university that was not accredited by a regional accrediting agency.

**Admission Criteria**
1. A completed application. Pre-application counseling is required;
2. Completion of required prerequisite courses with a minimum grade of C in each course;
3. An associate degree or diploma in nursing from a program that includes clinical practice courses in nursing, that is accredited by one of the regional accrediting agencies, and that holds professional accreditation by CCNE or ACCN;
4. A minimum cumulative GPA of 3.0 on a 4.0 scale;
5. One year of experience as a RN is required for all nurse practitioner tracks prior to beginning the program. Applicants for the Adult-Gerontology Acute Care Nurse Practitioner track must have at least one year experience as a RN in critical/emergency care prior to beginning the program;
6. Evidence of current unrestricted licensure (RN) to practice in the United States and licensure/privilege to practice in Mississippi;
7. New associate degree graduates must successfully complete the NCLEX-RN® examination and become licensed as a registered nurse (RN) by the end of their first semester of course work;
8. Preadmission Counseling (completed after the application is reviewed by the Graduate Admissions and Progression Committee);
9. Satisfactory scores on the Graduate Record Examination (GRE), including a score of 3.5 or higher on the analytical section; and,
10. Official transcripts from all schools attended.

**SUGGESTED PLANS OF STUDY**

**FAMILY NURSE PRACTITIONER**

**RN to MSN PLAN OF STUDY**

**SUMMER**

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<td>Concepts of Professional Nursing Practice</td>
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<td>N 533</td>
<td>Portal to Research Design and Methods</td>
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<tr>
<td>N 526</td>
<td>Portal to Advanced Health Assessment</td>
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<tr>
<td>N 538</td>
<td>Healthcare Leadership and Collaboration</td>
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**FALL**

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<td>Portal to Advanced Physiology/Pathophysiology</td>
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<td>N 527</td>
<td>Health Promotion in Populations</td>
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<td>N 610</td>
<td>Reproductive Health for Advanced Nursing Practice</td>
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<td>N 633</td>
<td>Research Design and Methods for Advanced Nursing Practice</td>
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<td>N 677</td>
<td>Advanced Health Assessment</td>
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<td>N 666</td>
<td>Clinical Pharmacotherapeutics</td>
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<td>N 531-1</td>
<td>Health IT and Patient Safety</td>
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<td>N 612</td>
<td>Therapeutic Management of the Pediatric Patient</td>
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**SUMMER**

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<td>Therapeutic Management in Primary Care I</td>
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<td>Practicum in Primary Care II (135 clinical hours)</td>
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<td>Role Development and Role Enactment for Advanced Role Practice in Nursing</td>
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# SCHOOL OF NURSING

## SPARK

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<td>N 652-1</td>
<td>Finance and Leadership in Health Care Systems</td>
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<td>Therapeutic Management in Primary Care Management III</td>
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<td>N 685-4</td>
<td>Practicum in Primary Care IV (225 clinical hours)</td>
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## NURSE EDUCATOR RN to MSN PLAN OF STUDY

### SUMMER

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<td>Portal to Research Design and Methods</td>
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<td>N 538</td>
<td>Healthcare Leadership and Collaboration</td>
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<td>N 527</td>
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<td>N 613</td>
<td>Foundations of Nurse Educator Role and Teaching Methods</td>
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<td>N 632</td>
<td>Discipline of Nursing</td>
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<tr>
<td>N 633</td>
<td>Research Design and Methods for Advanced Nursing Practice</td>
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### SPRING

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<tr>
<td>N 614-1</td>
<td>Nurse Educator Practicum (Practicum I) (90 clinical hours)</td>
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<td>N 637</td>
<td>Advanced Physiology/Pathophysiology</td>
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<td>N 666</td>
<td>Clinical Pharmacotherapeutics</td>
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### SUMMER

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<td>N 526</td>
<td>Portal to Advanced Health Assessment</td>
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<td>N 607-1</td>
<td>Health Policy and Population Health</td>
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<td>Educational Technology and Health Care Informatics</td>
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<td>N 620-1</td>
<td>Direct Care Role of the Nurse Educator (Practicum II) (90 clinical hours)</td>
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## Total Hours: 54

## ADULT-GERONTOLOGY ACUTE CARE NURSE PRACTITIONER

### RN to MSN PLAN OF STUDY

### SUMMER

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<td>Health Promotion in Populations</td>
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<td>N 600</td>
<td>Application and Interpretation of Adult-Gerontology Acute Care Diagnostic Modalities</td>
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<td>N 633</td>
<td>Research Design and Methods for Advanced Nursing Practice</td>
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<td>N 677</td>
<td>Advanced Health Assessment</td>
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### SPRING

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<td>Practicum in Adult-Gerontology Acute Care Nurse Practitioner I (45 clinical hours)</td>
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<td>N 637</td>
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### SUMMER

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<td>N 601-2</td>
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**THE UNIVERSITY OF MISSISSIPPI MEDICAL CENTER**
### Adult-Gerontology Acute Care Nurse Practitioner

#### Fall
- N 601-3 Practicum in Adult-Gerontology Acute Care Nurse Practitioner III (225 clinical hours) 5
- N 605-2 Adult-Gerontology Acute Care Assessment, Management, and Evaluation II 2
- N 632 Discipline of Nursing 2
- N 669 Role Development and Role Enactment for Advanced Role Practice in Nursing 3

#### Spring
- N 601-4 Practicum in Adult-Gerontology Acute Care Nurse Practitioner IV (225 clinical hours) 5
- N 607-1 Health Policy and Population Health 2
- N 652-1 Finance and Leadership in Health Care Systems 3

Total Hours: 61

### Nursing and Health Care Administrator

#### RN to MSN Plan of Study

**Summer**
- N 521-1 Concepts of Professional Nursing Practice 4
- N 533 Portal to Research Design and Methods 1
- N 530 Healthcare Leadership and Collaboration 2

**Fall**
- N 527 Health Promotion in Populations 2
- N 540 Portal to Fiscal and Operations Management 1
- N 632 Discipline of Nursing 2
- N 652-1 Finance and Leadership in Health Care Systems 3

**Spring**
- N 531-1 Health IT and Patient Safety 3
- N 633 Research Design and Methods for Advanced Nursing Practice 2
- N 641 Fiscal and Operations Management 3
- N 545 Portal to Organizational Leadership and Communication 2

Total Hours: 53

### Adult-Gerontology (Primary Care) Nurse Practitioner

#### RN to MSN Plan of Study

**Summer**
- N 521-1 Concepts of Professional Nursing Practice 4
- N 533 Portal to Research Design and Methods 1
- N 526 Portal to Advanced Health Assessment 1
- N 530 Healthcare Leadership and Collaboration 2

**Fall**
- N 524 Portal to Advanced Physiology/Pathophysiology 2
- N 610-2 Reproductive Health for Adult Practitioners 2
- N 633 Research Design and Methods for Advanced Nursing Practice 2
- N 677 Advanced Health Assessment 3
- N 527 Health Promotion in Populations 2

**Spring**
- N 637 Advanced Physiology/Pathophysiology 3
- N 666 Clinical Pharmacotherapeutics 3
- N 531-1 Health IT and Patient Safety 3
- N 607-1 Health Policy and Population Health 2
The University of Mississippi School of Nursing, located on the only health science campus in Mississippi, provides an excellent environment for learning. The School of Nursing shares the campus with six other professional schools: Medicine, Health Related Professions, Dentistry, Pharmacy, Population Health, and Graduate Studies in the Health Sciences. The School of Nursing graduate program is affiliated with several courses that require meeting on the Jacks on campus several times during the semester, primarily on weekends. Contact the track director for information about specific courses. In addition, the first 45 clinical hours and an additional 200 clinical hours for the AGACNP track must occur at UMMC. The remaining 385 clinical hours may occur at UMMC or at another approved site with an approved preceptor.

**FAMILY PSYCHIATRIC MENTAL HEALTH NURSE PRACTITIONER**

**RN to MSN PLAN OF STUDY**

**SUMMER**
- N 521-1: Concepts of Professional Nursing Practice (4 hours)
- N 526: Portals to Research Design and Methods (1 hour)
- N 528: Disciplinary Foundations of Nursing (2 hours)
- N 529: Issues and Trends in Advanced Nursing Practice (3 hours)

**FALL**
- N 524: Informatics and Health Care Technology (2 hours)
- N 527: Advanced Physiological and Pharmacological Foundations (2 hours)
- N 528: Practicum in Clinical Management of Adults and Older Adults I (270 clinical hours) (4 hours)
- N 529: Practicum in Clinical Management of Adults and Older Adults II (3 hours)

**SPRING**
- N 530: Finance and Leadership in Health Care Systems (3 hours)
- N 531: Clinical Practice of Advanced Role Practice in Nursing (2 hours)
- N 532: Advanced Health Assessment (1 hour)

**MASTER OF SCIENCE IN NURSING**

The University of Mississippi School of Nursing, located on the only health science campus in Mississippi, provides an excellent environment for learning. The School of Nursing shares the campus with six other professional schools: Medicine, Health Related Professions, Dentistry, Pharmacy, Population Health, and Graduate Studies in the Health Sciences. The School of Nursing graduate program is affiliated with several hundred hospitals, community health centers, health departments, private practice and community clinics, and schools, affording the student extensive opportunity for interdisciplinary collaboration in clinical practice and research.

Classrooms at all sites are equipped with distance learning technology. The courses for most tracks are offered online or in a hybrid format. Online courses meet synchronously or asynchronously and may require attendance at proctored examination or lab experiences. Hybrid courses require the student to be on campus up to four times during the semester. The Family Nurse Practitioner, Neonatal Nurse Practitioner, Primary/Acute Care Pediatric Nurse Practitioner, and the Adult-Gerontology Acute Care Nurse Practitioner tracks may have some specialty courses that require meeting on the Jackson campus several times during the semester, primarily on weekends. Contact the track director for information about specific courses. In addition, the first 45 clinical hours and an additional 200 clinical hours for the AGACNP track must occur at UMMC. The remaining 385 clinical hours may occur at UMMC or at another approved site with an approved preceptor.
The University of Mississippi School of Nursing has eight tracks leading to the Master of Science in Nursing degree: Nurse Educator, Nursing and Health Care Administrator, Family Nurse Practitioner, Adult-Gerontology Acute Care Nurse Practitioner, Adult-Gerontology (Primary Care) Nurse Practitioner, Family Psychiatric Mental Health Nurse Practitioner, Neonatal Nurse Practitioner, and Primary/Acute Care Pediatric Nurse Practitioner (dual role). Preparation for advanced practice roles includes core content in research, informatics, finance and leadership, quality improvement, health policy, and theoretical foundation of the discipline. In addition, each track has specialized courses appropriate for the role. Part-time study is available. Candidates who successfully complete the program are awarded the Master of Science in Nursing degree. Graduates of all nurse practitioner tracks meet eligibility requirements for advanced practice certification by national professional organizations and by the Mississippi Board of Nursing. To be considered full-time, the graduate student must be registered for at least 9 hours during the semester. The following MSN tracks are classified as online: AGNP, FNP, NED, NHCA, and PMHNP.

Purpose
The purposes of the master’s program are to: 1) prepare baccalaureate nurses for advanced practice and 2) provide a solid foundation for additional graduate study.

MASTER’S PROGRAM OUTCOMES

Background for Practice from Sciences and Humanities
Clinical Prevention and Population Health for Improving Health

Master’s Level Nursing Practice
1. Apply broad, organizational, patient-centered, ethical, and culturally responsive concepts into daily practice.
2. Demonstrate theoretical knowledge from nursing and other disciplines to advanced role practice in nursing for analysis of clinical problems, illness prevention, and health promotion strategies.
3. Utilize quality processes to evaluate outcomes of aggregates and monitor trends in healthcare.

Organizational and Systems Leadership
Quality Improvement and Safety
4. Analyze the impact of systems on patient outcomes.
5. Demonstrate leadership in providing quality cost-effective care, with management of human, fiscal, and physical resources.

Translating and Integrating Scholarship into Practice
6. Apply translational research in the practice setting through problem identification, systematic inquiry, and continuous improvement processes.

Informatics and Healthcare Technologies
7. Utilize current technologies to deliver, enhance, and document care across multiple settings to achieve optimal outcomes.

Health Policy and Advocacy
8. Articulate change within organizational structures of various health care delivery systems to impact policy, financing, and access to quality health care.

Interprofessional Collaboration for Improving Patient and Population Health Outcomes
9. Lead and coordinate interdisciplinary teams across care environments to reduce barriers, facilitate access to care, and improve health outcomes.

APPLICATION PROCEDURE
All correspondence regarding admission should be addressed to the Office of Student Records and Registrar, The University of Mississippi Medical Center, 2500 North State Street, Jackson, MS 39216-4505. A nonrefundable application fee of $25 must accompany each application. All transcripts and documents submitted in support of an application become the property of the University of Mississippi Medical Center and cannot be returned or forwarded to another school or individual. Applications are accepted beginning July 1 of the year prior to the desired year of enrollment and continue until the deadline for the particular term of attendance. Applicants who are enrolled in the final semester of a baccalaureate nursing program may be considered.

ADMISSION CRITERIA
Admission to the master’s program is based on evaluation of the following by the Graduate Admission and Progression Committee.
1. A complete application;
2. Baccalaureate degree in nursing from an institution that is accredited by a regional accrediting body, that holds professional accreditation by CCNE or ACEN, and which included upper division theory and clinical practice courses in nursing;
3. A cumulative GPA of 3.0 or higher on a 4.0 scale;
4. Undergraduate or graduate level statistics course;
5. One year of experience as an RN is required for all nurse practitioner tracks prior to beginning the program. Applicants for the Adult-Gerontology Acute Care Nurse Practitioner track must have at least one year of experience as an RN in critical/emergency care prior to beginning the program. Applicants for the Neonatal Nurse Practitioner Program must have at least one year of clinical experience as an RN prior to beginning the Neonatal Nurse Practitioner track and 2 years of NICU clinical experience as an RN before taking any clinical courses. Applicants for the Pediatric Nurse Practitioner Program must have at least one year of clinical experience as an RN in pediatrics prior to beginning the program and 2 years of pediatric clinical experience as an RN before taking any clinical courses.
6. Evidence of current unrestricted licensure (RN) to practice in the United States and licensure/privilege to practice in Mississippi;
7. Satisfactory scores on the GRE, including a score of 3.5 or higher on the analytical section;
8. Official transcripts from all schools attended;
9. Graduates of foreign schools whose academic language is not English: The Test of English as a Foreign Language (TOEFL) exam is required to demonstrate competence in written and spoken English;
10. Pre-admission counseling, (completed after the application is reviewed by the graduate admission and progression committee). Preference is given to applicants with recent full-time experience relevant to the selected track. In unusual instances, the Graduate Admission and Progression Committee may consider applicants who do not meet the admission criteria. The School of Nursing reserves the right to offer programs based on the number of acceptable applicants admitted. When a program is not offered due to limited enrollment, the applicant will be notified and other admission options will be explored.

Residence
Depending upon the MSN track, a minimum of one academic year of course work with continuous residence is required. The total number of hours must be equivalent to a full-time plan of study for two or three semesters.
Time Limit for Degree Requirements
All requirements for the MSN degree must be completed within a six-year time span.

SUGGESTED PLANS OF STUDY

ADULT-GERONTOLOGY (Primary Care) NURSE PRACTITIONER
The Adult-Gerontology (Primary Care) Nurse Practitioner track (AGNP) provides graduate students and/or currently practicing advanced practice nurses with specialization in the care of adults and older adults. The curriculum prepares the student to: 1) integrate the principles of aging, health, and specialized advanced practice nursing into evidence-based clinical management of adults, their families, and communities of diverse cultures in rural settings; 2) demonstrate comprehensive assessments, planning, and interventions with the complex health care problems of adults and older adults and their caregivers in a variety of rural health care settings; and 3) use critical thinking and decision-making skills in evidence-based clinical management of wellness, prevention, maintenance, common symptoms and syndromes, and common illnesses affecting adults and older adults and their families in rural settings. The clinical component consists of a minimum of 630 hours of guided experience in select areas under the mentorship of an advanced practice nurse or a physician.

PLAN OF STUDY

FALL
N 632 Discipline of Nursing 2
N 677 Advanced Health Assessment 3
N 652-1 Finance and Leadership in Health Care Systems 3
N 610 -2 Reproductive Health for Adult Practitioners 2

SPRING
N 637 Advanced Physiology/Pathophysiology 3
N 633 Research Design and Methods for Advanced Nursing Practice 2
N 666 Clinical Pharmacotherapeutics 3

SUMMER
N 627-4 Clinical Management of Adults and Older Adults I 2
N 628-4 Practicum in Clinical Management of Adults and Older Adults I (180 clinical hours) 4
N 617 Informatics and Health Care Technology 1
ID 630 Health Care Quality Improvement 3

FALL
N 669 Role Development and Role Enactment for Advanced Role Practice in Nursing 3
N 627-5 Clinical Management of Adults and Older Adults II 3
N 628-5 Practicum in Clinical Management of Adults and Older Adults II (180 clinical hours) 4

SPRING
N 607-1 Health Policy and Population Health 2
N 627-6 Clinical Management of Adults and Older Adults III 2
N 628-6 Practicum in Clinical Management of Adults and Older Adults III (270 clinical hours) 6

Total Hours 48

FAMILY NURSE PRACTITIONER
The Family Nurse Practitioner track (FNP) is designed to prepare nurses to deliver primary health care to adults and families. The didactic curriculum provides students with advanced knowledge and skills in biophysiological science, pharmacotherapeutics, primary care concepts, advanced assessments, and diagnostic skills as a basis for clinical practice. The clinical component consists of a minimum of 630 hours of guided experience under the mentorship of an advanced practice nurse or a physician. Plans of study are designed by faculty with individual consideration given to students' goals and geographic locations.

PLAN OF STUDY

FALL
N 632 Discipline of Nursing 2
N 677 Advanced Health Assessment 3
N 610 Reproductive Health for Advanced Nursing Practice 3

SPRING
N 637 Advanced Physiology/Pathophysiology 3
N 633 Research Design and Methods for Advanced Nursing Practice 2
N 612 Therapeutic Management of the Pediatric Client 2
N 685-1 Practicum in Primary Care I (90 clinical hours) 2
N 666 Clinical Pharmacotherapeutics 3

SUMMER
N 682-1 Therapeutic Management in Primary Care I 2
N 685-2 Practicum in Primary Care II (135 clinical hours) 3
ID 630 Health Care Quality Improvement 3
N 617 Informatics and Health Care Technology 1
**ADULT–GERONTOLOGY ACUTE CARE NURSE PRACTITIONER**

The Adult-Gerontology Acute Care Nurse Practitioner track (AGACNP) is designed to prepare nurses to deliver acute and/or critical care to adult and older adult clients in a variety of settings. The didactic curriculum will provide students with advanced knowledge and skills in biophysiological science, pharmacotherapeutics, acute and/or critical care concepts, advanced assessments and diagnostic skills as a basis for clinical practice. The clinical component consists of a minimum of 630 hours of guided experience in select areas under the mentorship of an advanced practice nurse or a physician. Plans of study are designed by faculty with individual consideration given to students’ goals and geographic locations.

**PLAN OF STUDY**

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<td>N 600 Application and Interpretation of Adult-Gerontology Acute Care Diagnostic Modalities</td>
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**NEONATAL NURSE PRACTITIONER**

The Neonatal Nurse Practitioner (NNP) is prepared to deliver comprehensive care to pre-term and full-term infants. The curriculum emphasizes advanced nursing care of newborns and infants from birth through the first two years of life. The spectrum of health from promotion of wellness to management of acute and chronic illness in a variety of settings is incorporated into the program. The clinical component consists of a minimum of 630 hours of guided experience in select settings under the mentorship of an advanced practice nurse or a physician.

**PLAN OF STUDY**

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### PRIMARY/ACUTE CARE PEDIATRIC NURSE PRACTITIONER (DUAL ROLE)

The dual role Primary/Acute Care Pediatric Nurse Practitioner (PACPNP) is prepared to provide advanced care in both primary and acute care settings. The curriculum emphasizes advanced nursing care of infants, children, and adolescents with acute and complex health disorders. The spectrum of health from promotion of wellness to management of acute and chronic illness in a variety of settings is incorporated into the program. The clinical component consists of a minimum of 990 hours of guided experience in select settings under the mentorship of an advanced practice nurse or a physician.

#### PLAN OF STUDY

##### FALL

<table>
<thead>
<tr>
<th>Course Code</th>
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<th>Credits</th>
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<tbody>
<tr>
<td>N 632</td>
<td>Discipline of Nursing</td>
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<tr>
<td>N 633</td>
<td>Research Design and Methods for Advanced Nursing Practice</td>
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</tr>
<tr>
<td>N 652-1</td>
<td>Finance and Leadership in Health Care Systems</td>
<td>3</td>
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<tr>
<td>N 677</td>
<td>Advanced Health Assessment</td>
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<tr>
<td>N 660</td>
<td>Focus on Advanced Nursing Practice Specialization – Pediatrics</td>
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##### SPRING

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<tbody>
<tr>
<td>N 637</td>
<td>Advanced Physiology/Pathophysiology</td>
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<tr>
<td>N 666</td>
<td>Clinical Pharmacotherapeutics</td>
<td>3</td>
</tr>
<tr>
<td>N 612-1</td>
<td>Therapeutic Management of the Pediatric Client</td>
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<tr>
<td>N 661-1</td>
<td>Practicum for Pediatrics I (180 clinical hours, primary care)</td>
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##### SUMMER

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<tr>
<td>ID 630</td>
<td>Health Care Quality Improvement</td>
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<tr>
<td>N 629-1</td>
<td>Advanced Neonatal Nursing</td>
<td>3</td>
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<tr>
<td>N 634-1</td>
<td>Practicum I – Neonatal Nurse Practitioner I (90 clinical hours)</td>
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<tr>
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<tr>
<td>N 629-2</td>
<td>Advanced Neonatal Nursing II</td>
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<tr>
<td>N 634-2</td>
<td>Practicum II – Neonatal Nurse Practitioner II (135 clinical hours)</td>
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##### SPRING

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<tr>
<td>N 607-1</td>
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<td>N 629-3</td>
<td>Advanced Neonatal Nursing III</td>
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<td>N 634-3</td>
<td>Practicum III – Neonatal Nurse Practitioner III (135 clinical hours)</td>
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##### SUMMER

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<td>N 634-4</td>
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### FAMILY PSYCHIATRIC MENTAL HEALTH NURSE PRACTITIONER

The Family Psychiatric Mental Health Nurse Practitioner (PMHNP) is prepared to provide advanced mental health care. The curriculum assists students to develop skills for independent and interdependent decision-making and direct accountability for clinical judgment. The required skills include comprehensive physical and mental health assessment, diagnosis, and psychosocial and pharmacological interventions. The graduate will be able to participate in and use research, help to develop and implement health policy, implement educational programs, and provide case management and consultation in his/her area of expertise.

#### PLAN OF STUDY

##### FALL

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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<td>Discipline of Nursing</td>
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<tr>
<td>N 652-1</td>
<td>Finance and Leadership in Health Care Systems</td>
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<td>N 677</td>
<td>Advanced Health Assessment</td>
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<td>Health Policy and Population Health</td>
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<td>N 612-4</td>
<td>Therapeutic Management of the Pediatric Client IV (critical care)</td>
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<tr>
<td>N 661-4</td>
<td>Practicum for Pediatrics IV (180 clinical hours)</td>
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##### SUMMER

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<tr>
<td>N 661-5</td>
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SPRING
N 637  Advanced Physiology/Pathophysiology  3
N 633  Research Design and Methods for Advanced Nursing Practice  2
N 666  Clinical Pharmacotherapeutics  3

SUMMER
N 686-1  Practicum in Clinical Assessment of Persons with Mental Health Problems I – Family (180 clinical hours)  4
N 687-1  Clinical Assessment of Persons with Mental Health Problems I – Family  2
N 617  Informatics and Health Care Technology  1
ID 630  Health Care Quality Improvement  1

FALL
N 669  Role Development and Role Enactment for Advanced Role Practice in Nursing  3
N 687-2  Clinical Management of Individuals with Mental Health Problems II – Family  3
N 686-2  Practicum in Clinical Management of Individuals with Mental Health Problems II – Family (180 clinical hours)  4

SPRING
N 607-1  Health Policy and Population Health  2
N 687-3  Clinical Management of Families and Groups with Mental Health Problems III  2
N 686-3  Practicum in Clinical Management of Families and Groups with Mental Health Problems III – (270 clinical hours)  6

Total Hours  46

NURSE EDUCATOR
A nurse prepared at the master’s level in the Nurse Educator track (NED) is able to serve important functions as an expert health agency educator and as a faculty member in a nursing education program. To achieve this goal, the Nurse Educator track provides the graduate learner with the knowledge, skills, and abilities of specialty nursing practice. The Nurse Educator curriculum provides the learner with a foundation to pursue doctoral education. All track-specific courses are offered online. Others are online or hybrid courses.

PLAN OF STUDY
FALL
N 677  Advanced Health Assessment  3
N 632  Discipline of Nursing  2
N 652-1  Finance and Leadership in Health Care Systems  3
N 613  Foundations of Nurse Educator Role and Teaching Methods  3

SPRING
N 637  Advanced Physiology/Pathophysiology  3
N 614-1  Nurse Educator Practicum I (90 clinical hours)  2
N 666  Clinical Pharmacotherapeutics  3
N 607-1  Health Policy and Population Health  2
N 633  Research Design and Methods for Advanced Nursing Practice  2

SUMMER
N 615-1  Educational Technology and Health Care Informatics  3
ID 630  Health Care Quality Improvement  3
N 620-1  Direct Care Role of the Nurse Educator Practicum II (90 clinical hours)  2

FALL
N 616-1  Curriculum and Program Development and Evaluation  3
N 625  Nurse Educator Practicum III (180 clinical hours)  4

Total Hours  38

NURSING AND HEALTH CARE ADMINISTRATOR
The Nursing and Health Care Administrator track (NHCA) provides a comprehensive study of concepts, theories, and research for effective management of health care systems. Students immerse themselves in courses that provide experiential learning in finance, management, organization administration, policy, and strategic management. The program culminates in a full-time-equivalent residency in which students integrate practice, theory, and research with a senior administrator in health care. The plan of study is flexible and can be adapted to student needs during the year. The residency and accompanying directed study are the final components of the program, and the student may enroll in these during spring, summer, or fall terms. Part-time and full-time plans of study are available.

PLAN OF STUDY
FALL
N 632  Discipline of Nursing  2
N 644  Human Resource Management  3
N 658  Strategic Management  3
N 652-1  Finance and Leadership in Health Care Systems  3
### POST-MASTER’S (PMN) CERTIFICATE

The Post-Master’s certificate is designed for registered nurses who already hold a master’s degree in nursing and who seek academic preparation in a new specialty or subspecialty area of advanced nursing practice. Post-Master’s certificate students may apply for any of the specialty options offered by the School of Nursing. Theory and clinical experiences focus on the role selected by the student and are congruent with the student’s long-term career goals. The curriculum consists of supportive science and clinical specialty courses. Each certificate is designed to be in compliance with national certification requirements including required support courses, didactic specialty courses, and clinical hours. Students who complete the Post-Master’s Nurse Practitioner tracks are academically eligible for national certification by professional organizations and for state certification by the Mississippi Board of Nursing. Post-Master’s plans of study are individualized based on previous course work. Students are required to complete all specialty courses and any support courses not previously completed. Based on individual review of MSN coursework, Post-Master’s certificate students are not required to complete MSN core courses (see the previous section on MSN curriculum for the BSN-prepared RN for a listing of courses for each specialty area). The following PMN tracks are classified as online: AGNP, FNP, NED, NHCA, and PMHNP.

### POST-MASTER’S CERTIFICATE OUTCOMES

**Background for Practice from Sciences and Humanities**

**Clinical Prevention and Population Health for Improving Health**

**Master’s Level Nursing Practice**

1. Apply broad, organizational, patient-centered, ethical, and culturally responsive concepts to daily practice.
2. Demonstrate theoretical knowledge from nursing and other disciplines to advanced role practice in nursing for analysis of clinical problems, illness prevention, and health promotion strategies.
3. Utilize quality processes to evaluate outcomes of aggregates and monitor trends in healthcare.

**Organizational and Systems Leadership**

**Quality Improvement and Safety**

4. Analyze the impact of systems on patient outcomes.
5. Demonstrate leadership in providing quality cost-effective care, with management of human, fiscal, and physical resources.

**Translating and Integrating Scholarship into Practice**

6. Apply translational research in the practice setting through problem identification, systematic inquiry, and continuous improvement processes.

**Informatics and Healthcare Technologies**

7. Utilize current technologies to deliver, enhance, and document care across multiple settings to achieve optimal outcomes.

**Health Policy and Advocacy**

8. Articulate change within organizational structures of various healthcare delivery systems to impact policy, financing, and access to quality health care.

**Interprofessional Collaboration for Improving Patient and Population Health Outcomes**

9. Lead and coordinate interdisciplinary teams across care environments to reduce barriers, facilitate access to care, and improve health outcomes.

### APPLICATION PROCEDURE

All correspondence regarding admission should be addressed to the Office of Student Records and Registrar, The University of Mississippi Medical Center, 2500 North State Street, Jackson, MS 39216-4505. A nonrefundable application fee of $25 must accompany each application. All transcripts and documents submitted in support of an application become the property of the University of Mississippi Medical Center and cannot be returned or forwarded to another school or individual. Applications are accepted beginning July 1 of the year prior to the desired year of enrollment and continue until the deadline for the particular term of attendance.

### ADMISSION CRITERIA

Admission to a Post-Master’s track is based on the following by the Graduate Admission and Progression Committee.

1. A complete application;
2. Master’s degree in nursing from an institution that is accredited by a regional accrediting body and that holds professional accreditation by CCNE or ACEN;
3. A cumulative GPA of 3.0 or higher on a 4.0 scale;
4. Undergraduate or graduate level statistics course;
5. One year of experience as a RN is required for all nurse practitioner tracks prior to beginning courses. Applicants for the Adult-Gerontology Acute Care Nurse Practitioner track must have at least one year experience as a RN in critical/emergency care prior to beginning courses;
6. Evidence of current unrestricted licensure (RN) to practice in the United States and licensure/privilege to practice in Mississippi;
7. Official transcripts from all schools attended;

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**THE UNIVERSITY OF MISSISSIPPI MEDICAL CENTER**

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**TABLE:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Total Hours</th>
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<tbody>
<tr>
<td>N 641</td>
<td>Fiscal and Operations Management</td>
<td>3</td>
</tr>
<tr>
<td>N 607-1</td>
<td>Health Policy and Population Health</td>
<td>2</td>
</tr>
<tr>
<td>N 633</td>
<td>Research Design and Methods for Advanced Nursing Practice</td>
<td>2/7</td>
</tr>
<tr>
<td>ID 630</td>
<td>Health Care Quality Improvement</td>
<td>3</td>
</tr>
<tr>
<td>N 646</td>
<td>Organizational Leadership and Communication</td>
<td>3</td>
</tr>
<tr>
<td>N 640</td>
<td>Project Management (or another approved elective)</td>
<td>3</td>
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<tr>
<td>N 659</td>
<td>Residency in the Nursing and Health Care Administrator Role (525 clinical hours)</td>
<td>7</td>
</tr>
<tr>
<td>N 696</td>
<td>Directed Study in Management Research</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Total Hours</td>
<td>37</td>
</tr>
</tbody>
</table>
1. Individuals seeking admission to the DNP program must meet the following requirements:
   a. Completed application;
   b. Graduate GPA of 3.2 on a 4.0 scale for the Post-Master’s DNP program or a cumulative (undergraduate and graduate) GPA of 3.2 on a 4.0 scale if applying for the post-baccalaureate DNP;
   c. Satisfactory scores on the Graduate Record Exam (GRE), including a score of 3.5 or higher on the analytical section.
   d. Previous degree: For Post-Baccalaureate applicants, a BSN is required; Post-Master’s applicants must hold a BSN degree and a master’s degree in nursing or related field; Note: Applicants interested in pursuing a Nurse Practitioner track in the DNP program must complete the post-baccalaureate DNP application, regardless of whether they have a MSN degree.
   e. Evidence of an unrestricted/unencumbered nursing license as a registered nurse in the United States or one of its territories and be eligible for licensure in Mississippi. May and December BSN graduates who are applying to the Post-Baccalaureate DNP must successfully complete NCLEX-RN® and be licensed as a RN prior to the program’s start date. August BSN graduates must successfully complete NCLEX-RN® and be licensed during the first semester of the Post-Baccalaureate DNP program. Once admitted, students must be licensed/privileged as a RN in Mississippi and must maintain a current and unrestricted RN license.
   f. One year of professional nursing experience is required.
   g. Completion of at least one research course and one statistics course at the undergraduate or graduate level.
   h. Informal personal statement submitted with application addressing the following:
      • Why are you seeking admission to the DNP program?
      • What practicum inquiry project do you plan to pursue in the program?
      • Which faculty member(s) do you wish to provide you with mentorship in the DNP program?
      • What are your goals in the program?
      • What are your long-range career goals?
      • What are your qualifications and readiness for the program?
      • Why are you seeking admission to the University of Mississippi Medical Center School of Nursing program and why do you think this program is best suited to your goals?
   i. Three letters of reference;
   j. Curriculum vitae or professional resume;

2. For applicants who earned course work/degrees from institutions outside the United States:
   a. Completion of the Test of English as a Foreign Language (TOEFL) for graduates of foreign schools whose academic language was not English. The minimum required score is:
      • TOEFL-Internet Based Test (IBT): 79 or higher
      • TOEFL-Paper Based Test (PBT): 550 or higher
   b. Other documents required by UMMC and local, state, and federal authorities;
   c. Transcripts must be evaluated in a course-by-course report from World Education Services (WES) or the Commission on Graduates of Foreign Nursing Schools (CGFNS).

3. Computer literacy requirement - Fluent use of computers. Applicants should be familiar with the use of basic computing including, but not limited to, the internet, search engines, browsers, instructional computer systems (Canvas), and publicly available research databases (PubMed, CINAHL, Psych, etc.).
DNP PROGRAM OUTCOMES

1. Develop and manage innovative health services to improve access, quality, and health outcomes.
2. Enhance the culture of safety in health systems through the application of information technologies and evidenced-based practice.
3. Translate practice inquiry to improve health services delivery for diverse populations.
4. Provide leadership for multidisciplinary teams through analysis of critical indicators and/or health systems to improve health status.
5. Design culturally competent health services for vulnerable populations.
6. Translate theoretical knowledge into practice to improve health outcomes.
7. Examine, implement, and evaluate the modification of evidenced-based health services, health systems, and health policies.
8. Develop and test new models of care that address the complex health needs of individuals, families, and rural populations.

DNP SYSTEMATIC REVIEW/SCHOLARLY PROJECT
Each DNP student is required to implement evidence based healthcare through the completion of a systematic review, using the Joanna Briggs methodology, and a scholarly project. After completion of a systematic review, students will identify and carry through a project, such as pilot study, a quality improvement project, a consulting project, or program implementation. A systematic review secondary reviewer and a scholarly project committee guide the student through identification of a clinical question, acquisition and appraisal of the best evidence, and project planning, implementation, and evaluation.

RESIDENCY EXPERIENCE
Residency experiences afford the student the opportunity to develop and synthesize the knowledge and skills required to demonstrate doctoral level competency in a specialized nursing practice area. The residency requirement for the DNP program meets the AACN requirement of 1,000 clinical hours. The number of hours required for students in the Post-Master’s DNP program depends on the transferable clinical hours from the student’s master’s education. The clinical practice hours include those required to complete the Systematic Review/DNP Scholarly Project. Students in the Post-Baccalaureate DNP plan of study will obtain a minimum of 1,000 clinical hours in the program.

POST-BACCALAUREATE DNP PLAN OF STUDY - Nursing and Health Care Administrator

| FALL       | N 632 | Discipline of Nursing          | 2 |
|           | N 652-1 | Finance and Leadership in Health Care Systems | 3 |
|           | DNP 720 | Biostatistics I                | 3 |
| SPRING    | N 607-1 | Health Policy and Population Health | 2 |
|           | N 633 | Research Design and Methods for Advanced Nursing Practice | 2 |
|           | N 641 | Fiscal and Operations Management | 3 |
|           | DNP 700 | Clinical Applied Epidemiology  | 3 |
| SUMMER    | ID 730 | Health Care Quality Improvement (75 clinical hours) | 3 |
|           | N 646 | Organizational Leadership and Communication | 3 |
|           | DNP 703 | Population Health            | 3 |
| FALL      | N 644 | Human Resource Management     | 3 |
|           | N 658 | Strategic Management          | 3 |
|           | DNP 740 | Project Management (75 clinical hours) | 3 |
|           | DNP 701 | Theoretical Foundations for Advanced Nursing Practice | 3 |
| SPRING    | DNP 704 | Leadership in Health Systems  | 3 |
|           | DNP 707 | Health Care Finance           | 3 |
|           | DNP 702-1 | Transforming Advanced Nursing Practice (75 clinical hours) | 3 |
| SUMMER    | DNP 706 | Evaluation Approaches, Models and Methods | 3 |
|           | DNP 705 | Practice Inquiry I            | 1 |
|           | DNP 712 | Scholarly Project (75 clinical hours) | 1 |
| FALL      | DNP 708 | Practice Inquiry II           | 1 |
|           | ID 718 | Health Policy and the Health Care System | 3 |
|           | DNP 712 | Scholarly Project (150 clinical hours) | 2 |
| SPRING    | DNP 759 | Residency in the Doctor of Nursing Practice Role (525 clinical hours) | 7 |
|           | DNP 712 | Scholarly Project (150 clinical hours) | 2 |
| Total Hours |       |                               | 68 |
| Total Clinical Hours |   |                               | 1125 |
### POST-BACCALAUREATE DNP PLAN OF STUDY - Adult-Gerontology Acute Care NP

#### FALL
- N 632: Discipline of Nursing (2)
- N 652-1: Finance and Leadership in Health Care Systems (3)
- DNP 720: Biostatistics I (3)
- N 677: Advanced Health Assessment (3)

#### SPRING
- DNP 700: Clinical Applied Epidemiology (3)
- N 607-1: Health Policy and Population Health (2)
- N 633: Research Design and Methods for Advanced Nursing Practice (2)
- N 637: Advanced Physiology/Pathophysiology (3)
- N 666: Clinical Pharmacotherapeutics (3)

#### SUMMER
- DNP 703: Population Health (3)
- DNP 706: Evaluation Approaches, Models, and Methods (3)
- ID 730: Health Care Quality Improvement (75 clinical hours) (3)

#### FALL
- N 600: Application and Interpretation of Acute Care Diagnostic Modalities (2)
- DNP 740: Project Management (75 clinical hours) (3)
- ID 718: Health Policy and the Health Care System (3)
- DNP 701: Theoretical Foundations for Advanced Nursing Practice (3)

#### SPRING
- N 601-1: Practicum in Adult-Gerontology Acute Care Nurse Practitioner (45 clinical hours) (1)
- DNP 707: Health Care Finance (3)
- DNP 702-1: Transforming Advanced Nursing Practice (75 clinical hours) (3)

#### SUMMER
- N 605-1: Adult-Gerontology Acute Care Assessment, Management, and Evaluation I (2)
- N 601-2: Practicum in Adult-Gerontology Acute Care Nurse Practitioner II (135 clinical hours) (3)
- DNP 705: Practice Inquiry I (1)
- DNP 712: Scholarly Project (75 clinical hours) (1)

#### FALL
- N 605-2: Adult-Gerontology Acute Care Assessment, Management, and Evaluation II (2)
- N 601-3: Practicum in Adult-Gerontology Acute Care Nurse Practitioner III (225 clinical hours) (5)
- DNP 769: Role Development and Role Enactment for Advanced Role Practice in Nursing (1)
- DNP 708: Practice Inquiry II (1)
- DNP 712: Scholarly Project (150 clinical hours) (2)

#### SPRING
- N 601-4: Practicum in Adult-Gerontology Acute Care Nurse Practitioner IV (225 clinical hours) (5)
- DNP 704: Leadership in Health Systems (3)
- DNP 712: Scholarly Project (150 clinical hours) (2)

**Total Hours: 79**

**Total Clinical Hours: 1230**

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### POST-BACCALAUREATE DNP PLAN OF STUDY - Adult-Gerontology NP

#### FALL
- DNP 720: Biostatistics I (3)
- N 632: Discipline of Nursing (2)
- N 652-1: Finance and Leadership in Health Care Systems (3)
- N 677: Advanced Health Assessment (3)

#### SPRING
- N 607-1: Health Policy and Population Health (2)
- N 633: Research Design and Methods for Advanced Nursing Practice (2)
- N 637: Advanced Physiology/Pathophysiology (3)
- N 666: Clinical Pharmacotherapeutics (3)

#### SUMMER
- DNP 703: Population Health (3)
- DNP 706: Evaluation Approaches, Models, and Methods (3)
- ID 730: Health Care Quality Improvement (75 clinical hours) (3)
### POST-BACCALAUREATE DNP PLAN OF STUDY - Family NP

**FALL**
- N 632  Discipline of Nursing  
- N 652-1  Finance and Leadership in Health Care Systems  
- DNP 720  Biostatistics I  
- N 677  Advanced Health Assessment  

**SPRING**
- N 607-1  Health Policy and Population Health  
- N 633  Research Design and Methods for Advanced Nursing Practice  
- N 637  Advanced Physiology/Pathophysiology  
- DNP 700  Clinical Applied Epidemiology  
- N 666  Clinical Pharmacotherapeutics  

**SUMMER**
- DNP 703  Population Health  
- DNP 706  Evaluation Approaches, Models, and Methods  
- ID 730  Health Care Quality Improvement (75 clinical hours)  

**FALL**
- N 610  Reproductive Health for Advanced Nursing Practice  
- DNP 740  Project Management (75 clinical hours)  
- ID 718  Health Policy and the Health Care System  
- DNP 701  Theoretical Foundations for Advanced Nursing Practice  

**SPRING**
- N 612  Therapeutic Management of the Pediatric Patient  
- N 685-1  Practicum in Primary Care (90 clinical hours)  
- DNP 702-1  Transforming Advanced Nursing Practice (75 clinical hours)  
- DNP 707  Health Care Finance  

**SUMMER**
- N 682-1  Therapeutic Management in Primary Care I  
- N 685-2  Practicum in Primary Care II (135 clinical hours)  
- DNP 705  Practice Inquiry I  
- DNP 712  Scholarly Project (75 clinical hours)  

Total Hours: 82
Total Clinical Hours: 1230
### FALL

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<td>Therapeutic Management in Primary Care II</td>
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<tr>
<td>N 685-3</td>
<td>Practicum in Primary Care III (180 clinical hours)</td>
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<tr>
<td>DNP 769</td>
<td>Role Development and Role Enactment for Advanced Role Practice in Nursing</td>
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<td>DNP 708</td>
<td>Practice Inquiry II</td>
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</tr>
<tr>
<td>DNP 712</td>
<td>Scholarly Project (150 clinical hours)</td>
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### SPRING

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<td>N 685-4</td>
<td>Practicum in Primary Care IV (225 clinical hours)</td>
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<tr>
<td>DNP 704</td>
<td>Leadership in Health Systems</td>
<td>3</td>
</tr>
<tr>
<td>DNP 712</td>
<td>Scholarly Project (150 clinical hours)</td>
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**Total Hours**: 84  
**Total Clinical Hours**: 1230

### POST-BACCALAUREATE DNP PLAN OF STUDY - Psychiatric/Mental Health NP

#### FALL

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
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<tbody>
<tr>
<td>N 632</td>
<td>Discipline of Nursing</td>
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<tr>
<td>N 652-1</td>
<td>Finance and Leadership in Health Care Systems</td>
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<tr>
<td>DNP 720</td>
<td>Biostatistics I</td>
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<tr>
<td>N 677</td>
<td>Advanced Health Assessment</td>
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#### SPRING

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<tr>
<th>Course Code</th>
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<tbody>
<tr>
<td>N 607-1</td>
<td>Health Policy and Population Health</td>
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<tr>
<td>DNP 700</td>
<td>Clinical Applied Epidemiology</td>
<td>3</td>
</tr>
<tr>
<td>N 633</td>
<td>Research Design and Methods for Advanced Nursing Practice</td>
<td>2</td>
</tr>
<tr>
<td>N 637</td>
<td>Advanced Physiology/Pathophysiology</td>
<td>3</td>
</tr>
<tr>
<td>N 666</td>
<td>Clinical Pharmacotherapeutics</td>
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#### SUMMER

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<tbody>
<tr>
<td>DNP 703</td>
<td>Population Health</td>
<td>3</td>
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<tr>
<td>DNP 706</td>
<td>Evaluation Approaches, Models and Methods</td>
<td>3</td>
</tr>
<tr>
<td>ID 730</td>
<td>Health Care Quality Improvement (75 clinical hours)</td>
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#### FALL

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<tbody>
<tr>
<td>ID 718</td>
<td>Health Policy and the Health Care System</td>
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<tr>
<td>DNP 740</td>
<td>Project Management (75 clinical hours)</td>
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</tr>
<tr>
<td>DNP 701</td>
<td>Theoretical Foundations for Advanced Nursing Practice</td>
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<tr>
<td>DNP 704</td>
<td>Leadership in Health Systems</td>
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<tr>
<td>DNP 707</td>
<td>Health Care Finance</td>
<td>3</td>
</tr>
<tr>
<td>DNP 702-1</td>
<td>Transforming Advanced Nursing Practice (75 clinical hours)</td>
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#### SUMMER

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<tbody>
<tr>
<td>N 687-1</td>
<td>Clinical Assessment of Persons with Mental Health Problems I – Family</td>
<td>2</td>
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<tr>
<td>N 686-1</td>
<td>Practicum in Clinical Assessment of Persons with MH Problems I – Family (180 clin hrs.)</td>
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<tr>
<td>DNP 705</td>
<td>Practice Inquiry I</td>
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<tr>
<td>DNP 712</td>
<td>Scholarly Project (75 clinical hours)</td>
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#### FALL

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<tbody>
<tr>
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<td>Clinical Assessment of Persons with Mental Health Problems II – Family</td>
<td>3</td>
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<tr>
<td>N 686-2</td>
<td>Practicum in Clinical Assessment of Persons with MH Problems II – Family (180 clin hrs.)</td>
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<tr>
<td>DNP 769</td>
<td>Role Development and Role Enactment for Advanced Role Practice in Nursing</td>
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<tr>
<td>DNP 708</td>
<td>Practice Inquiry II</td>
<td>1</td>
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<tr>
<td>DNP 712</td>
<td>Scholarly Project (150 clinical hours)</td>
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#### SPRING

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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>N 687-3</td>
<td>Clinical Management of Families and Groups with MH Problems III</td>
<td>2</td>
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<tr>
<td>N 686-3</td>
<td>Practicum in Clinical Management of Families &amp; Groups III (270 clinical hours)</td>
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<td>DNP 712</td>
<td>Scholarly Project (150 clinical hours)</td>
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**Total Hours**: 80  
**Total Clinical Hours**: 1230
POST-MASTER’S DNP PLAN OF STUDY

FALL
ID 718  Health Policy and the Health Care System  3
DNP 720  Biostatistics I  3
DNP 701  Theoretical Foundations for Advanced Nursing Practice  3

SPRING
DNP 700  Clinical Applied Epidemiology  3
DNP 704  Leadership in Health Systems  3
DNP 702-1  Transforming Advanced Nursing Practice (75 clinical hours)  3

SUMMER
ID 730  Health Care Quality Improvement (75 clinical hours)  3
DNP 703  Population Health  3
DNP 705  Practice Inquiry I  1
DNP 712  Scholarly Project (75 clinical hours)  1

FALL
DNP 706  Evaluation Approaches, Models and Methods  3
DNP 708  Practice Inquiry II  1
DNP 740  Project Management (75 clinical hours)  3
DNP 712  Scholarly Project (75 clinical hours)  1

SPRING
DNP 707  Health Care Finance  3
DNP 712  Scholarly Project (150 clinical hours)  2

SUMMER
DNP 712  Scholarly Project (75 clinical hours)  1

Total Hours  40
Total Clinical Hours  600

Variable: (The program requires a minimum of 5 hours of Scholarly Project. Additional Residency hours may be required depending on the number of transferrable clinical hours from the student’s master’s degree.)

PhD IN NURSING PROGRAM

The PhD program provides a strong foundation in theoretical and methodological content essential for the scholarly investigation of health care problems encountered in the practice of nursing. The program is designed to develop nurse researchers to generate and translate knowledge toward improving the health of individuals, families, communities and populations through the conduct of biologic, physiologic or experiential research in health and illness. The program of study and research is foundational to understanding client-centered health problems and developing the theoretical and experiential foundation necessary to initiate and coordinate clinical outcomes research.

Purpose
The purpose of the PhD in Nursing program is to prepare nurse researchers to generate and translate knowledge toward improving the health of individuals, families, communities, and populations.

Program Outcomes
Upon completion of the program, graduates will be prepared to:
- Design, conduct, direct, and disseminate research in nursing and allied health;
- Test and/or generate concepts, theories, and models for the advancement of nursing science and practice;
- Assume a leadership role in the generation and implementation of solutions for reduction of health disparities and improvement in health outcomes.

UMMC offers two entry points to the PhD in Nursing program: the Post-BSN and Post-Master’s. The Post-BSN option is designed to allow highly motivated and exceptional BSN graduates an accelerated and rigorous route to the PhD. Students in their last year of a BSN program or registered nurses who have earned a BSN and demonstrate potential for academic success and significant contributions to nursing may apply. The Post-Master’s option offers opportunities for registered nurses who hold a BSN degree and a graduate degree in nursing or a related field to gain the complementary knowledge and experiences requisite for scholarly pursuits in nursing and health-related fields.

Complete information about the PhD in Nursing program is included in the School of Graduate Studies in the Health Sciences section of the Bulletin.

COURSES OF INSTRUCTION

DNP 700. Clinical Applied Epidemiology. This course provides an overview of the basic epidemiological methods and study designs that may be used by advanced practice nurses to study the health of populations. This course will combine a focus on traditional and social epidemiology to examine how society and social organizations influence health and well-being of individuals and populations. In particular, this course will address the frequency, distribution, surveillance and tracking of disease as well as the social determinants of states of health in populations. The course will include new methods and new applications of already known epidemiological methods for elucidating the complex and sociocultural web within which health-disease phenomenon occurs. Online, Internet, or Web-based Lecture (2-3 hours)

DNP 701. Theoretical Foundations for Adv Nur Prac. This course examines relevant theories and models from nursing and related disciplines for applicability to advanced nursing practice. Role theory, learning theory, psychological theory, management theory, leadership theory, consultation models and collaborative models are analyzed for historical significance, relative scientific position and contemporary application for advanced nursing practice and practice inquiry. Systematic examination, evaluation and refinement of relevant theories and models enable the student to develop a conceptual model for practice within a relevant setting. Online, Internet, or Web-based Lecture (3 hours)

DNP 702. Transforming Advanced Nursing Practice. This course is designed to be the introductory course for the DNP student and will introduce the DNP from a historical perspective then address the three domains of advanced nursing practice, leadership and scholarship. This
course will focus on influencing practice patterns for populations, communities and health care systems, articulating the leadership role of
the DNP and embracing practice inquiry as fundamental. Online, Internet, or Web-based Lecture (3 hours)

**DNP 702-I. Transforming Advanced Nursing Practice.** This course is designed to be the introductory course for the DNP student and will introduce the DNP from a historical perspective then address the three domains of advanced nursing practice, leadership and scholarship. This course will focus on influencing practice patterns for populations, communities and health care systems articulating the leadership role of the DNP and embracing practice inquiry as fundamental. Online, Internet, or Web-based Lecture/Lab (3 hours)

**DNP 703. Population Health.** This course builds upon prior learning experiences related to community and population health and provides the student with an understanding of current concepts of population health, with a specific focus on multiple determinants of health of populations as well as health inequities. The course also includes concepts of public health, health promotion, environmental/occupational health, and population health policy development and evaluation. Students will consider various methods, tools and models for applying population health improvement concepts into various advanced practice roles such as in clinical settings; in integrated delivery systems; in formal population health improvement roles; and in policy development. The goal of the course is to provide the student with a basis for incorporating population health principles into their advanced nursing practice roles. Online, Internet, or Web-based Lecture (3 hours)

**DNP 704. Leadership in Health Systems.** This course focuses on nursing leadership, integrating theory and research as a basis for improvement of health systems and health outcomes. Emphasis is placed on strategic thinking, influence, negotiation and power strategies for effective leadership in health care delivery systems. Traditional Lecture (3 hours)

**DNP 705. Practice Inquiry I.** This course covers information systems and technology needed for establishing evidence-based practice models in clinical, educational, and administrative settings. The emphasis for this course is on the role of information technology and the use of data and the translation of research into practice. Students will develop skills needed for transferring data between heterogeneous systems. Online, Internet, or Web-based Lecture (1 hour)

**DNP 706. Evaluation Approaches, Models & Methods.** In this course, the student will examine evaluation approaches, models and methods and propose an appropriate evaluation plan for an identified clinical problem. Outcomes measurement, process improvement, program evaluation, outcome assessment, and program performance are studied. Traditional Lecture (3 hours)

**DNP 707. Health Care Finance.** This course provides students with an overview of the principal financial mechanisms in the U.S. health care industry and offer specific insights into the critical issues the industry currently faces. A feature of the course is the development of practical financial analysis skills that will provide students with a foundation for immediate application within the health care industry and a better understanding of course materials as presented. Training in use of these tools will include use of several of the most important financial tools and methodologies employed across the health care industry such as benefit/cost and cost effectiveness analysis, ratio analysis and others. This online course is delivered utilizing synchronous and asynchronous distance learning modalities. Online, Internet, or Web-based Lecture (3 hours)

**DNP 708. Practice Inquiry II.** This course builds upon the data management skills developed in Practice Inquiry I. This course focuses on developing a beginning level of understanding of the use of outcomes measurement frameworks and the use of outcome data in practice, educational, and administrative settings. Students select and analyze outcome measures, apply skills in data management, and evaluate data management processes for their individual projects. Online, Internet, or Web-based Lecture (1 hour)

**DNP 712. Scholarly Project.** In this course, the student identifies an inquiry area. A Secondary Reviewer works with the student throughout the systematic review process and may consult for the Scholarly Project. A two-member committee, for the Scholarly Project is appointed. The course focuses on inquiry identification, inquiry planning, implementation and evaluation of the inquiry in collaboration with a committee. The student integrates and applies appropriate theoretical and evidence-based literature and inquiry methods to achieve specified outcomes. Traditional Clinical Rotation (1-5 hours)

**DNP 720. Biostatistics I.** This course is designed to introduce the application of statistical methods to health sciences. Contents include descriptive statistics, some basic probability concepts, distribution, central limit theorem, hypothesis testing, and power and sample size calculation. Techniques of t-test, ANOVA, linear regression and correlation analysis will be taught along with in-class exercises using SPSS and other predictive analytics software. Traditional Lecture (3 hours)

**DNP 721. Biostatistics II.** This course is designed to concentrate on more advanced methods of statistical analysis including regression diagnostics and canonical correlation, logistic regression, factor analysis, path analysis, and structural equation modeling. The analysis technique will be taught along with in-class exercises using SPSS. It is assumed that students have taken Biostatistics I and have basic skills of using SPSS. Traditional Lecture (3 hours)

**DNP 740. Project Management.** In this course students learn the principles and fundamentals of project management necessary to achieve objectives in healthcare organizations. Special emphasis will be placed on the application of leadership skills, overcoming objections, achieving buy-in, conflict management, negotiation skills and working with diverse groups of individuals. Through case studies and various exercises, students will use tools and techniques to gain experience in single and multi-project management. This online course is delivered utilizing synchronous and asynchronous distance learning modalities. (75 clinical hours) Online, Internet, or Web-based Lecture (3 hours)

**DNP 759. Residency in the DNP Role.** The purpose of the residency is to provide structured clinical [field] experiences functioning as a DNP. The student will have an opportunity to apply the theories, principles and techniques learned in the didactic portion of the DNP program in a selected health system setting under the guidance of a clinical mentor and a faculty advisor. The residency allows the student to integrate advanced nursing practice, leadership and scholarship domains of the DNP role for the improvement of programs and systems of healthcare. The residency experience provides the student with a foundation to practice at the highest level of nursing practice. (75 clinical hours per credit hour) Traditional Practicum/Internship (1-7 hours)

**DNP 769. Role Dvlpmt & Enactment for Adv Role Pra.** In this role course, enactment of advanced role practice in nursing is studied. Seminars will focus on the continued development of knowledge for role development and implementation, advanced communication, and interventions with groups and communities. Online, Internet, or Web-based Lecture (1 hour)

**ID 500. Educator Institute.** This course is designed to strengthen the educator’s role through examination of issues and skills related to health provider education in Professional Schools and other health care settings. Students will use educational and learning theories to: 1. develop course content; 2. plan strategies for change in curriculum development; 3. demonstrate didactic and clinical instructional modalities; 4. conduct didactic and clinical evaluations. The course format consists of theoretical and practical application of content and allows the student to produce tangible and useful educational product. Traditional Lecture (1-3 hours)

**ID 600. Educator Institute.** This course is designed to strengthen the educator’s role through examination of issues and skills related to health provider education in Professional Schools and other health care settings. Students will use educational and learning theories to: 1. develop course content; 2. plan strategies for change in curriculum development; 3. demonstrate didactic and clinical instructional modalities; 4. conduct didactic and clinical evaluations. Traditional Lecture (1-3 hours)

**ID 670. Health Care Quality Improvement.** This course equips health professions students (medicine, nursing, health administration) with the ability and confidence to contribute to quality improvement in health care. Through seminar and field experiences, students will learn the
philosophy, knowledge and skills of continuous improvement, teamwork and interdisciplinary work, and apply these to improve patient-centered health care quality. This online course is delivered utilizing synchronous and asynchronous distance learning modalities. Online, Internet, or Web-based Lecture (3 hours)

**ID 700. Ethics in Research.** This course explores issues related to ethics in healthcare research conducted in a variety of settings. Principles of philosophy of science and select ethical theories are applied as a framework for critical ethical issues in healthcare research. Synchronous and asynchronous instruction. Traditional Lecture (2 hours)

**ID 718. Health Policy and the Healthcare System.** Provides students the opportunity to analyze health policies and economic issues as they relate to healthcare delivery systems. The complex arrangements and interactions among governmental, private-not-for-profit, and for-profit systems are explored within a context that includes economic, legal and socio-political and public perspectives. Synchronous and asynchronous instruction. Traditional Lecture (3 hours)

**ID 730. Health Care Quality Improvement.** This course equips health professions students (medicine, nursing, health administration) with the ability and confidence to contribute to continual improvement in health care. Through seminar and field experiences students will learn the philosophy, knowledge and skills of continuous improvement, teamwork, and interdisciplinary work, and apply these to improve patient-centered health care quality. (75 clinical hours) Online, Internet, or Web-based Lecture (3 hours)

**N 301. Gerontological Nursing.** This independent web-based nursing elective focuses on the care of older adults with acute chronic health problems. The focus is on preventive care, acute care and long term care in the community and institution settings. Online, Internet, or Web-based Lecture (3 hours)

**N 302. Health Assessment Throughout Life Span.** This introductory course focuses on health assessment across the life span. Students will acquire the requisite knowledge and skills necessary to perform health assessments. The emphasis is on developing interview, history taking, and basic physical assessment skills. Traditional Lecture/Lab (3 hours)

**N 303. Introduction to Pharmacotherapeutics.** This course presents principles of pharmacology and pharmacotherapeutics. Characteristics and uses of major drug groups and safe medication administration are discussed with emphasis on nursing management. Consideration is given to individual, age related, and generic responses with specific drugs. Traditional Lecture (3 hours)

**N 304. Intro to Prof Nurs & Evidence Based Prac.** This beginning professional course focuses on professional nursing roles, values, ethics and legal issues. It incorporates an introduction to evidence-based practice as well as emphasizing professional writing skills. Traditional Lecture (2 hours)

**N 307. Pathophysiology.** This didactic course builds on concepts and principles from the basic sciences. The emphasis of the course is on pathophysiologic responses to illness/disease. Physical, biochemical, microbial and genetic factors that alter homeostasis are examined. Traditional Lecture (4 hours)

**N 309. Foundations of Nursing Practice.** This didactic, laboratory, and clinical course begins preparing the student to function as a provider of care. Traditional Lecture/Lab (5 hours)

**N 310. Behavioral Nursing.** This didactic and clinical course focuses on the nursing care of clients with acute, chronic and complex mental health problems across the life span. Current trends, ethical and legal issues, political, economic and social issues that influence the health care of mental health clients and families are examined. Clinical practice is provided in a variety of settings including acute and community facilities. Traditional Lecture/Lab (4 hours)

**N 311. Health Care Quality Improvement.** This course equips health professions students (medicine, nursing, health administration) with the ability and confidence to contribute to continual improvement in health care. Through seminar and field experiences students will learn the philosophy, knowledge and skills of continuous improvement, teamwork, and interdisciplinary work, and apply these to improve patient-centered health care quality. (75 clinical hours) Online, Internet, or Web-based Lecture (3 hours)

**N 312. Directed Clinical Practice Elective.** This elective course is designed to assist the student in strengthening knowledge of nursing theory and critical thinking skills related to content included in the undergraduate curriculum. Emphasis will be placed on the development of effective study and test taking skills, utilizing personal and preferred learning styles. Test anxiety and other barriers to effective test performance will be identified and discussed. Students will develop and implement, in collaboration with faculty, an individualized plan of content remediation based on identified needs. Traditional Independent Study (1-2 hours)

**N 313. Health Promotion in Populations.** The course focuses on understanding the forces shaping community and global health patterns and the impact of these global processes on societies. Students will review strategies to assess, plan, implement, and evaluate population-focused programs for health promotion and disease prevention of individuals, families, groups, communities and populations. This online course is delivered utilizing synchronous and asynchronous distance learning modalities. Traditional Lecture (2 hours)

**N 314. Basic Health Assessment.** This course focuses on assessing the health of the individual. Students acquire basic knowledge and skills necessary to perform health assessments. Emphasis is placed on developing interviewing history taking, development of pedigrees, foundational assessment skills across the lifespan, and documentation. Traditional Lecture/Lab (2 hours)

**N 406. Health Assessment.** This web-based course focuses on the theoretical basis of performing an assessment on the individual throughout the life span. Students acquire knowledge and skills necessary to perform health assessments. Emphasis is placed on developing skills in interviewing, history taking, and health assessment. Online, Internet, or Web-based Lecture (2 hours)

**N 407. Pathophysiology.** This didactic web-based course builds on concepts and principles from the basic sciences. Emphasis is placed on normal and pathological responses to illness. A human body systems approach is used, applying concepts from cellular biological processes. Online, Internet, or Web-based Lecture (3 hours)

**N 408-1. Health Promotion in Populations.** The course focuses on understanding the forces shaping community and global health patterns and the impact of these global processes on societies. Students will review strategies to assess, plan, implement and evaluate population-focused programs for health promotion and disease prevention of individuals, families, groups, communities and populations. Online, Internet, or Web-based Lecture (2 hours)
N 409. Clinical Nursing Elective. This clinical elective course focuses on expanded application of the nursing process in a variety of settings. A limited number of students may be eligible for specialty experiences working with clinical preceptors in the Student Nurse Externship Program. Traditional Clinical Rotation (3 hours)

N 412-1. Professional Nursing Role Development I. This is a two part didactic course series addressing professional nursing development, which is designed to provide a foundational and conceptual context for provision of nursing care. The first course includes basic content on selected concepts for professional nursing practice. The second course expands on the concepts presented in the first course, allowing students the opportunity to apply concepts to embody the role of the professional nurse. Traditional Lecture (2 hours)

N 412-2. Professional Nursing Role Development II. This is a two part didactic course series addressing professional nursing development, which is designed to provide a foundational and conceptual context for provision of nursing care. The first course includes basic content on selected concepts for professional nursing practice. The second course expands on the concepts presented in the first course, allowing students the opportunity to apply concepts to embody the role of the professional nurse. Traditional Lecture (2 hours)

N 413-1. Health & Illness Across the Lifespan I. This three part didactic course series examines health and illness across the lifespan from infancy through senescence, including the childbearing cycle and mental health. Each course is taught using a conceptual approach and problem based learning methodology. Traditional Lecture (6 hours)

N 413-2. Health & Illness Across the Lifespan II. This three part didactic course series examines health and illness across the lifespan from infancy through senescence, including the childbearing cycle and mental health. Each course is taught using a conceptual approach and problem based learning methodology. Traditional Lecture (6 hours)

N 413-3. Health & Illness Across the Lifespan III. This three part didactic course series examines health and illness across the lifespan from infancy through senescence, including the childbearing cycle and mental health. Each course is taught using a conceptual approach and problem based learning methodology. Traditional Lecture (4 hours)

N 419. Special Topics in Nursing and Healthcare. This elective course enables the student to use learning experiences focused on selected topics in specialties and healthcare nursing to satisfy individual learning needs and interests. Online, Internet, or Web-based Independent Study (1-3 hours)

N 420. Independent Study. This elective course enables the student to use individually designed learning experiences focused on selected topics in nursing to satisfy individual learning needs and interests. Online, Internet, or Web-based Independent Study (1-3 hours)

N 421. Transitions and Trends in Professional Nursing. This bridge course between basic nursing education and advanced practice nursing education examines the following professional roles: provider of care, designer, manager, or coordinator of care and member of the profession. Within these roles, specific role components inherent to professional nursing practice are further explored: altruism, autonomy, human dignity, and integrity. This course must be taken during the first semester of the RN-BSN plan of study. Online, Internet, or Web-based Lecture (3 hours)

N 426. Maternal-Newborn Nursing. This didactic and clinical course focuses on nursing care for childbearing clients and their families. Emphasis is on health patterns occurring during pregnancy, birth, and the newborn period. Clinical practice experience is provided in a variety of settings. Traditional Lecture/Lab (5 hours)

N 427. Child-Adolescent Nursing. This didactic and clinical course focuses on nursing care of infants, children, and adolescents within the context of the family. Clinical learning experiences occur in a variety of settings including acute and ambulatory settings. Traditional Lecture/Lab (5 hours)

N 428. Nursing Research. This introductory course to the research process focuses on the study of the research process as a base for nursing practice. Emphasis is on critical analysis of published research studies with regard to implications for clinical nursing practice. Ethical concepts related to research are explored. Online, Internet, or Web-based Lecture (3 hours)

N 431. Patient Safety and Quality Improvement. This course provides an introduction to patient safety and health care quality improvement. Emphasis is placed on the role of the professional nurse in improving the quality of health care through designing, implementing, and evaluating evidence-based patient safety interventions and strategies. Online, Internet, or Web-based Lecture (2 hours)

N 432. Introduction to Professional Writing. This course provides students an opportunity to cultivate basic written communication skills necessary to express themselves professionally. The principles and practices examined in this class will assist the learner in responding effectively to professional writing scenarios. This course provides practice in the composition of traditional writing forms preparing the student for writing success in the professional and academic setting. Online, Internet, or Web-based Lecture (1-3 hours)

N 433-1. Interprofessional Education I. This interprofessional course is a three part series addressing the four interprofessional (IP) collaborative practice competency domains: values/ethics for interprofessional practice, roles/responsibilities, interprofessional communication, and teams and teamwork. Traditional Lecture/Lab (1 hour)

N 433-2. Interprofessional Education II. This interprofessional course is a three part series addressing the four interprofessional (IP) collaborative practice competency domains: values/ethics for interprofessional practice, roles/responsibilities, interprofessional communication, and teams and teamwork. Traditional Lecture/Lab (1 hour)

N 433-3. Interprofessional Education III. This interprofessional course is a three part series addressing the four interprofessional (IP) collaborative practice competency domains: values/ethics for interprofessional practice, roles/responsibilities, interprofessional communication, and teams and teamwork. Traditional Lecture/Lab (1 hour)

N 434-2. Clinical Practice II. This three part clinical practice course series is designed to provide the opportunity to acquire knowledge, skills, and attitudes required to apply the nursing process to the delivery of patient centered nursing care across the lifespan and in a variety of settings. Clinical across the series includes care of the adult, the neonate, the pediatric and adolescent, childbearing families and the patient with psychiatric/mental health concerns. Traditional Clinical Rotation (5 hours)

N 434-3. Clinical Practice III. This three part clinical practice course series is designed to provide the opportunity to acquire knowledge, skills, and attitudes required to apply the nursing process to the delivery of patient centered nursing care across the lifespan and in a variety of settings. Clinical across the series includes care of the adult, the neonate, the pediatric and adolescent, childbearing families and the patient with psychiatric/mental health concerns. Traditional Clinical Rotation (4-5 hours)

N 435. Nursing Synthesis and Practicum. This didactic and clinical practicum focuses on refinement of students’ clinical and leadership skills. Students synthesize knowledge and skills in client management with multiple clients in collaboration with an assigned preceptor. Emphasis is on refinement of clinical reasoning skills and decision making skills. Traditional Lecture/Lab (4 hours)

N 436. Scholarship for Evidence Based Practice. This is an introductory course focusing on the research process and scholarship as the basis for evidence based practice. Emphasis is placed on critical analysis of published research studies regarding credibility, quality, and implications for clinical nursing practice. Ethical concepts related to the research process are integrated throughout the course. Traditional Lecture (3 hours)
N 438. Essentials of Wound Care. This elective course is designed for the student with an interest in the management of acute and chronic wounds. This course provides the student with in-depth knowledge of wound care, including etiology, risk assessment, prevention, and treatment modalities utilizing current research findings and evidence based practice. Emphasis is placed on the use of the nursing process in all aspects of skin and wound care with specific focus on pressure ulcers, neuropathic ulcers, vascular insufficiency ulcers, surgical wounds and skin tears. Regulatory issues relating to skin and wound care are also explored. Online, Internet, or Web-based Lecture (2 hours)

N 439. Population-Based Nursing. Global trends for health promotion and disease prevention are examined. Students analyze healthcare policy issues and paradigmatic cases of ethical dilemmas in world health. Emphasis is on collaboration with others to advocate for improvement in the health of vulnerable populations and elimination of health disparities. Traditional Lecture/Lab (3 hours)

N 440. Politics, Policy and Nursing (Online). This course provides knowledge and understanding needed to participate as a professional nurse in health policy development, analysis and implementation. The influence of politics on the delivery of health care and nursing services will be explored. Focus will be placed on the recognition of social, economic and political determinants of health as well as evidence-based practices and policies that influence outcomes in vulnerable populations. The role of the professional nurse as a change agent in the political arena will be examined from a historical to contemporary perspective. Online, Internet, or Web-based Lecture (2 hours)

N 444. Adult Health I. This didactic and clinical course focuses on the nursing care of adults and elders with chronic and long-term health care problems. Emphasis is placed on the role of provider of care in acute and community settings. Professional nursing values are integrated in theory and clinical learning experiences. Traditional Lecture/Lab (6 hours)

N 449. Nursing Management in Health Care System. This course focuses on preparing students to acquire skills in nursing management. Application of leadership and management principles will be demonstrated within a variety of healthcare environments. Traditional Lecture/Lab (4 hours)

N 453. Exploration in Culture. This elective web-based course surveys cultural phenomena common to various ethnic groups. Online, Internet, or Web-based Lecture (3 hours)

N 454. Intrtrg Lab Values & Common Clin Tests. This course is a study of the background, meaning, and nursing implications of laboratory test results. The course will provide the student with the opportunity to understand the interrelationships between clinical laboratory test results and the disease process occurring in the patient. Laboratory values from hematology, clinical chemistry and urinalysis, and microbiology/immunology will be interpreted for infectious diseases, liver diseases, kidney diseases hematologic disorders, and metabolic disorders. Appropriate case studies will be used to illustrate clinical significance. This online course is delivered utilizing asynchronous distance learning modalities. Online, Internet, or Web-based Lecture (2 hours)

N 460. Adult Health II. This didactic and clinical course builds on the theoretical and clinical learning experiences of Adult Health I and focuses on the nursing care of adults and elders with complex health care problems. Emphasis is placed on the learner's developing role of provider and manager of care in acute and community settings. Traditional Lecture/Lab (6 hours)

N 461. Management and Leadership Practicum. This clinical laboratory course focuses on the development of the nurse as a manager of care. In the clinical laboratory, the learner applies theoretical concepts of management to the nurse manager's role in the actual work setting. The clinical experience provides the learner opportunities to demonstrate skills in using patient care technologies, information systems and communication devices that support safe nursing practices. The learner will evaluate data from many relevant sources to inform the delivery of care. Emphasis is placed on strategies to facilitate implementation of management role functions in a variety of organization environments. This course must be taken during the last semester of the RN-BSN plan of study. Traditional Practicum/Internship (3 hours)

N 462. Professional Role Enactment. This course focuses on the synthesis of professional nursing knowledge at the baccalaureate level. Emphasis is placed on continued professional development, and the accountability for professional values and behaviors. Students will develop and demonstrate skills that reflect self-reflection in the pursuit of practice excellence, lifelong learning, and professional content. Emphasis is enhanced to develop the professional role of the nurse as a member of the profession. Online, Internet, or Web-based Lecture (2 hours)

N 463. Ambassador Elective. This elective course is designed to nurture leadership development in academically talented students who are selected to participate in the Ambassador program. Students participate in a variety of SON and community service activities that foster personal and professional development, communication and peer mentoring skills. Traditional Lecture (1 hour)

N 466. Legal Issues in Nursing. This didactic web-based elective course is designed to assist the learner in exploring the influence of law, legal issues and ethics on professional nursing practice. Content includes basic liability concepts, professional standards of care, legal doctrines, legal documentation of the medical record and the Health Insurance Portability and Accountability Act. Online, Internet, or Web-based Lecture (1-3 hours)

N 482. Seminar. The emphasis of this course is the application of critical thinking for effective test taking to enhance performance on the NCLEX-RN. Traditional Lecture (2 hours)

N 497. Nursing Capstone. This course focuses on refinement of the student's clinical and leadership skills for practice as a nurse generalist. Emphasis is placed on clinical reasoning and decision-making. Traditional Lecture (2 hours)

N 498. Directed Study in Research. The course provides students practical knowledge of the components of the research process and the opportunity to participate in components of the research process under the direction of a graduate faculty member. Students enrolled in the Sally Barksdale Honors College may enroll in N498 to complete research and thesis hour requirements. Online, Internet, or Web-based Lecture (1-3 hours)

N 499H. Honors Research and Thesis. This course provides the student enrolled in the Sally McDonnell Barksdale Honors College the opportunity to conduct and defend thesis research in collaboration with a thesis advisor and committee members in the School of Nursing. The student will gain practical knowledge of the research process and the opportunity to participate in research under the direction of a nursing faculty member. May be repeated for a total of 6-9 hours. Online, Internet, or Web-based Thesis (1-3 hours)

N 521-1. Concepts of Professional Nurs Practice. This bridge course between basic nursing education and advanced practice nursing education examines the professional roles of provider of care, designer/manager/coordinator of care and member of the profession. Within these roles, specific role components inherent to professional nursing practice are explored. This course provides students' opportunity to master writing skills and to analyze professional writings to allow them to address relevant issues within today's healthcare delivery system. This online course is delivered utilizing asynchronous distance learning modalities. Online, Internet, or Web-based Lecture (4 hours)

N 524. Portal to Adv Physiology/Pathophysiology. This course provides an introduction to advanced physiology and pathophysiology. It facilitates seamless transition for the RN-MSN student into the master's level Advanced Physiology/Pathophysiology. Course content includes an introduction to cell biology and genetics with a focus on application of the content to disease processes. Specific cellular and molecular...
mechanisms underlying the pathophysiological processes of diseases in all body systems will be highlighted. This course is delivered utilizing synchronous and asynchronous distance learning modalities.

**N 526. Portal to Advance Health Assessment.** This course provides an introduction to advanced health assessment. This intensive 15 clock hour didactic course facilitates seamless transition for the associate degree nurse into the master’s level course Advanced Health Assessment. Course content focuses on an overview of the client interviewing skills with a focus on the principles of clinical observation and communication. This online course is delivered utilizing synchronous and asynchronous distance learning modalities. Online, Internet, or Web-based Lecture (2 hours)

**N 527. Health Promotion in Populations.** The course focuses on understanding the forces shaping community and global health patterns and the impact of these global processes on societies. Students will review strategies to assess, plan, implement and evaluate population-focused programs for health promotion and disease prevention of individuals, families, groups, communities and populations. This online course is delivered utilizing synchronous and asynchronous distance learning modalities. Online, Internet, or Web-based Lecture (1 hour)

**N 528. Leadership and Management.** This course describes the functions and roles of management and leadership in professional nursing. Decision making, communication, motivation changes, theories, managed care, and leadership strategies are presented and discussed to enhance the development of a beginning nurse manager. This online course is delivered utilizing synchronous and asynchronous distance learning modalities. Online, Internet, or Web-based Lecture (2 hours)

**N 529. Information Technology & Pt Safety.** This course provides a comprehensive introduction to the use of health information technology, patient safety, and health care quality improvement. Emphasis is placed on technology-based health applications that enhance the efficacy of the nursing process, as well as the role of the nurse in improving the quality of health care through designing, implementing, and evaluating evidence-based patient safety interventions and strategies. Confidentiality, ethical, and legal issues related to the use of electronic health records will be considered. This online course is delivered utilizing asynchronous distance learning modalities. Online, Internet, or Web-based Lecture (1 hour)

**N 530. Portal to Research Design and Methods.** This course provides an introduction to research facilitating seamless transition for the RN to MSN students into the master’s level research course. Course content focuses on beginning skills and approaches to reading and evaluating research studies. This online course is delivered utilizing asynchronous distance learning modalities. Online, Internet, or Web-based Lecture (3 hours)

**N 531. Health Promotion in Populations.** The course focuses on understanding the forces shaping community and global health patterns and the impact of these global processes on societies. Students will review strategies to assess, plan, implement and evaluate population-focused programs for health promotion and disease prevention of individuals, families, groups, communities and populations. This online course is delivered utilizing synchronous and asynchronous distance learning modalities. Online, Internet, or Web-based Lecture (1 hour)

**N 532. Healthcare Leadership and Collaboration.** This course describes the functions and roles of management and leadership in professional nursing. Decision making, communication, motivation changes, theories, managed care, and legal/ethical issues are presented and discussed to enhance the development of a beginning nurse manager. This online course is delivered utilizing asynchronous distance learning modalities. Online, Internet, or Web-based Lecture (3 hours)

**N 533. Portal to Fiscal & Operations Mgmt.** In this course students are introduced to fiscal and operations management. Students will learn about operations management as a business function, the transformation process, key trends impacting health care organizations, key strategies for managing cost and the potential impact of fiscal and operations management on the patient experience. This online course is delivered utilizing asynchronous distance learning modalities. Online, Internet, or Web-based Lecture (1 hour)

**N 534. Portal to Organizational Ldrshp & Comm.** This course is designed to increase the student’s knowledge and application of organizational principles and communication models. This intense portal will introduce the student to application of systems thinking framework in analyzing organizational structure, culture and communication framework and the impact of these elements on organizational outcomes. This online course is delivered utilizing synchronous and asynchronous distance learning modalities. Online, Internet, or Web-based Lecture (2 hours)

**N 535. App & Intrp Adt Geri Acute Care Diag Mod.** This course provides the theoretical basis for the application and interpretation of diagnostic modalities used in management of the acute care patient. Emphasis is placed on selected laboratory and radiology studies and interpretation of electrocardiogram and pulmonary function tests. Traditional Lecture (2 hours)

**N 601-1. Practicum in Adult Geri Acute Care NP I.** This supervised 45 hours clinical practice course offered in a variety of settings allows the student the opportunity to integrate and practice advanced health assessment, diagnostic reasoning, decision making for the collaborative management of patients with selected acute health problems such as cardiovascular disorders, diabetes, renal diseases, respiratory alterations, etc. Students are precepted by physicians/nurse practitioners under the direction of faculty. Traditional Clinical Rotation (1 hour)

**N 601-2. Pract in Adult Geri Acute Care NP II.** This supervised 135 hours clinical practice in specialized settings allows the student the opportunity to integrate and practice advanced health assessment, diagnostic reasoning and decision making for the collaborative management of adult gerontology clients with complex critical health problems. The student selects a clinical area of specialization and, through a learning contract developed with faculty, achieves the course objectives. Students are precepted by physicians/nurse practitioners under the direction of the course faculty. Traditional Clinical Rotation (1-3 hours)

**N 601-3. Pract in Adlt Geri Acute Care NP III.** This supervised 225 hours clinical practice in critical care settings allows students the opportunity to integrate and practice advanced health assessment, diagnostic reasoning and decision making, for the collaborative management of patients with complex critical health problems such as multi-system failure, cardiac and or respiratory failure, brain attack or renal failure. The utilization of advanced technology as a diagnostic and management tool is emphasized. Students are precepted by physicians/acute care nurse practitioners under the direction of faculty. Settings include coronary care units, surgical intensive care units, neurology intensive care units, emergency departments, etc. Traditional Clinical Rotation (5 hours)

**N 601-4. Pract in Adlt Geri Acute Care NP IV.** This supervised 225 hours clinical practice in acute/ critical care allows the students the opportunity to refine and evaluate nursing management of patients with complex health problems. The focus of the clinical is to perfect their clinical skills including: diagnostic reasoning and decision making. This along with the clinical seminar IV is the capstone experience for this role practice. Students are precepted by physicians/acute care nurse practitioners under the direction of faculty. Settings include coronary care units, surgical intensive care units, neurology intensive care units, emergency department, etc. Traditional Clinical Rotation (5 hours)

**N 601-5. Adlt Geri Acute Care Asmt Mgt & Eval I.** This course provides the theoretical basis for advanced assessment, diagnosis, reasoning and decision making for the collaborative management and evaluation for advanced nursing practice. Focus will be on the collaborative management of clients with acute health problems such as: diabetes, hypertension, acute renal failure, pulmonary diseases, endocrine problems, and neurological disorders etc. Traditional Lecture (2 hours)

**N 602-1. Health Policy & Population Health.** This is a role support course to explore and analyze interrelations of societal values and issues, political process, politics, and development of health policy and its impact on population health. This online course is delivered utilizing synchronous and asynchronous distance learning modalities. Online, Internet, or Web-based Lecture (2 hours)
N 609. Directed Individual Study. This didactic elective course enables the student to use individually designed learning experiences focused on selected topics in nursing to satisfy individual learning needs and interests. A mutually agreed upon contract that details objectives and evaluation methods for the experience will be developed by student and faculty. Online, Internet, or Web-based Independent Study (1-3 hours)

N 610. Reproductive Health for Advanced Pract. This didactic course provides the theoretical basis for assessing and managing reproductive health patterns in men and women for advanced role practice in nursing as a nurse practitioner. Emphasis is placed on health promotion, screening, and prevention of illness, and management of problems common in the reproductive health care of men and women. Online, Internet, or Web-based Lecture (3 hours)

N 610-2. Reproductive Hlth for Adult NP. This didactic course provides the theoretical basis for assessing and managing reproductive health care patterns in men and women for advanced role practice in nursing as an adult gerontology nurse practitioner. Emphasis is placed on health promotion, screening, prevention of illness, and management of problems common in the reproductive health care of men and women. Online, Internet, or Web-based Lecture (2 hours)

N 610-3. Childbearing Hlth Care for the Adv NP. This didactic course provides the theoretical basis for assessing and managing reproductive health patterns in men and women for advanced role practice in nursing as a nurse practitioner. Emphasis is placed on health promotion, screening, prevention of illness, and management of problems common in the reproductive health care of men and women. Online, Internet, or Web-based Lecture (2 hours)

N 610-4. Reproductive Health for Advanced Pract. This didactic course provides the theoretical basis for assessing and managing reproductive health care patterns in men and women for advanced role practice in nursing as a nurse practitioner. Emphasis is placed on health promotion, screening, prevention of illness, and management of problems common in the reproductive health care of men and women. Online, Internet, or Web-based Lecture (3 hours)

N 612. Therapeutic Management Pediatric Client. This course provides a foundation and clinical application of the care of clients from birth through adolescence. Topics will include well child management in addition to management of selected illnesses common to this age group. Family theory and its relationship to health care management will be explored. Online, Internet, or Web-based Lecture/Lab (2 hours)

N 612-1. Therapeutic Mgmt of the Pediatric Client. This role support course provides the theoretical basis for advanced assessment, diagnostic reasoning, and collaborative management of pediatric health problems in the pediatric primary care setting as a pediatric nurse clinician. The focus of this course is placed on the collaborative management of pediatric clients with selected illnesses from birth to adolescence that are common in primary care as well as well-child health visits. Online, Internet, or Web-based Lecture (2 hours)

N 612-2. Therapeutic Mgmt of Pediatric Client II. This role support course provides the theoretical basis for advanced assessment, diagnostic reasoning, and collaborative management of pediatric health problems in the pediatric primary care setting as a pediatric nurse clinician. Emphasis is placed on the collaborative management of pediatric clients with chronic health problems. Traditional Lecture (2 hours)

N 612-3. Therapeutic Mgmt of Pediatric Client III. This role support course provides the theoretical basis for advanced assessment, diagnostic reasoning, and collaborative management of pediatric health problems in the pediatric primary care setting as a pediatric nurse clinician. Emphasis is placed on the collaborative management of pediatric clients with acute health problems. Traditional Lecture (2 hours)

N 612-4. Therapeutic Mgmt of Pediatric Client IV. This role support course provides the theoretical basis for advanced assessment, diagnostic reasoning, and collaborative management of pediatric health problems in the pediatric primary care setting as a pediatric nurse clinician. Emphasis is placed on the collaborative management of pediatric clients with chronic health problems. Traditional Lecture (2 hours)

N 613. Found of Nurse Educ Role & Teach Meth. This role support course encourages the educator student to use critical thinking, creativity, and research outcomes to develop expertise in the design and delivery of instructional strategies. Learning theories, as well as other selected principles and theories associated with the educator role, are emphasized. The roles of the nurse educator as scholar, collaborator, and educator are explored. Online, Internet, or Web-based Lecture (1-3 hours)

N 614-1. Nurse Educator Practicum I (2hrs). This course is the first of three practicum courses that gives the graduate learner an opportunity to develop and practice advanced skills in teaching and communication in academic, hospital or community environments with an emphasis in the academic setting. The graduate learner will apply theoretical knowledge in the delivery of nursing education to individuals, groups, families and communities. (90 clinical hours) Traditional Practicum/Internship (2 hours)

N 615-1. Education Tech & Health Care Informatics. This course provides an overview of current technologies used for instructional design, delivery, and evaluation in nursing education and technologies used to deliver, enhance, integrate, and coordinate patient care. Opportunities for using and evaluating current nursing education and healthcare technologies are incorporated in the course. Principles of data management for provision of evidence-based care and health education are explored along with the use of electronic health records to improve patient care. Online, Internet, or Web-based Lecture (3 hours)

N 616-1. Curriculum & Pgm Development & Eval. This role support course facilitates the application of nursing and educational theories, concepts, and models in the design and evaluation of nursing curricula and programs. Societal influences and acquisition of new knowledge in nursing and related disciplines are analyzed in relation to curriculum and program disciplines and are analyzed in evaluation in nursing. This role support course provides the student an opportunity to design data collection and analysis strategies used in evaluation processes. This online course is delivered utilizing synchronous and asynchronous distance learning modalities. Online, Internet, or Web-based Lecture (3 hours)

N 617. Informatics & Health Care Technology. This course provides an overview of the use of technologies to deliver, enhance, integrate, and coordinate care; data management to analyze and improve outcomes of care; health information management for evidence-based care and health education; and facilitation and use of electronic health records to improve patient care. This online course is delivered utilizing synchronous and asynchronous distance learning modalities. Online, Internet, or Web-based Lecture (1 hour)

N 618. Focus on Adv Nsg Pract Spec (Neonatal). This didactic course provides an in depth examination of human genetics, embryologic development and normal physiologic functioning of developing body systems. The structural and functional development of fetal systems during critical growth periods is emphasized, and environmental factors that influence the structural and functional development of fetal systems are discussed. This course will build a foundation essential for the assessment, planning and evaluation of the health of neonatal clients. Traditional Lecture (2 hours)

N 620-1. Direct Care Role of theNs Edu (Prac II). This course is the second of three courses that gives the graduate learner an opportunity to implement and evaluate, and plan the delivery of educational content to individuals, groups and communities. The emphasis is on teaching practice in hospital settings with multiple delivery modalities and measuring outcomes of planned instructional strategies in the practice setting. (90 clinical hours) Traditional Practicum/Internship (2 hours)

N 621. Educator Practicum III. This capstone practicum provides the graduate learner opportunities to implement the nurse educator role components of teacher, scholar and collaborator with a preceptor in a selected educational setting. Opportunities are provided to utilize theoretical knowledge of evaluation processes to critically examine curriculum and program components and learning outcomes. Self-assessment and strategies for transition to the educator role are incorporated. The emphasis is on teaching practice in multiple settings with multiple delivery modalities. (180 clinical hours) Traditional Clinical Rotation (4 hours)

N 627-4. Clin Mgt of Adults & Older Adults I. This course is focused on the principles of adult health, advanced clinical assessments of adults and older adults of diverse cultures, issues in the care of adults and older adults with emphasis on wellness, prevention, health maintenance, and early health care interventions. This online course is delivered utilizing synchronous and asynchronous distance learning modalities. Online, Internet, or Web-based Lecture (2 hours)
N 627-5. Clin Mgt of Adults & Older Adults II. This course is focused on the diagnosis and treatment of acute and chronic illnesses, common geriatric syndromes, and complex health problems of adults and older adults of diverse cultures, including frail and demented older adults in rural settings. This online course is delivered utilizing synchronous and asynchronous distance learning modalities. Online, Internet, or Web-based Lecture (3 hours)

N 627-6. Clin Mgt of Adults & Older Adults III. This course is focused on synthesis of theory into evidence-based gerontological advanced nursing practice with adults and older adults and their families of diverse culture, integration of AGNP roles, and professional practice in selected rural health care systems. This online course is delivered utilizing synchronous and asynchronous distance learning modalities. Online, Internet, or Web-based Lecture (2 hours)

N 628-5. Prac in Clin Mgt Adls & Older Adls II. This 180-hour practicum course is focused on the diagnosis and treatment of acute and chronic illnesses, common geriatric syndromes, and complex health problems of adults and older adults of diverse cultures, with emphasis on advanced health care interventions with frail and demented adults and older adults in rural health care settings. Traditional Clinical Rotation (3-4 hours)

N 628-6. Prac in Clin Mgt Adls & Older Adls III. This 270-hour practicum course is focused on synthesis of theory into evidence-based advanced nursing practice with adults and older adults and their families of diverse cultures, integration of AGNP roles, and practice management in selected rural health care systems. Traditional Clinical Rotation (4-6 hours)

N 629-1. Advanced Neonatal Nursing I. This didactic course addresses the complete neonatal assessment process including prenatal through neonatal history and neonatal physical examination. Neonatal pharmacology, common neonatal diagnostic and laboratory testing and invasive procedures are also examined as well as family function, dynamics, crisis theory and the grieving process are surveyed. Traditional Lecture (4 hours)

N 629-2. Advanced Neonatal Nursing II. This didactic course will provide a thorough understanding of the pathophysiology and management of common disease processes in the neonatal (preterm and term infants). This course will focus on the cardiovascular, pulmonary, gastrointestinal/nutrition, renal/genitourinary, and hematologic systems as well as fluid and electrolytes. Furthermore, this course will assist in developing the role of the neonatal nurse practitioner in the neonatal intensive care nursery (NICU), especially in emergency situations. Traditional Lecture (4 hours)

N 629-3. Advanced Neonatal Nursing III. This didactic course will provide a thorough understanding of the pathophysiology and management of common disease processes in the neonate (preterm and term infants). This course will focus on the endocrine and metabolic, immune, neurobehavioral, musculoskeletal, eyes/ears/nose/throat and dermatologic systems. Furthermore, this course will include discharge planning and follow-up care for the high-risk neonate. Traditional Lecture (4 hours)

N 630. Discipline of Nursing. This core course involves the study of knowledge shared among members of the discipline, the patterns of knowing and knowledge development, criteria for evaluating knowledge claims, and philosophy of science. The course is aimed at enabling graduate students to become knowledgeable about approaches to the study of disciplines and scientific knowledge development. The inter-relationship between theory, research, and practice is examined through discussions and critique of selected theories relevant for nursing. This online course is delivered utilizing synchronous and asynchronous distance learning modalities. Online, Internet, or Web-based Lecture (2 hours)

N 631. Research Design & Meth for Adv Nurs Pract. This core course is focused on understanding and using research designs and methods to support clinical practice. It provides the knowledge base for research problem identification, the ethical conduct of research, synthesis of research literature, critical analysis of research design, methods and data analysis for utilization in practice. In this course, students will identify practice questions for scholarly projects in role-specific courses. Online, Internet, or Web-based Lecture (2 hours)

N 634-1. Practicum I: Neonatal Ns Practitioner. This clinical role support course provides the theoretical basis for advanced assessment, diagnostic reasoning, and collaborative management of pediatric health problems in the neonatal health care setting as a neonatal nurse practitioner. Traditional Clinical Rotation (2 hours)

N 634-2. Practicum II: Neonatal Ns Practitioner. This second clinical role support course will continue to provide the theoretical basis for advanced assessment, diagnostic reasoning, and collaborative management of specific health problems in the neonatal health care setting as a neonatal nurse practitioner. Focus of care on the neonates will be related to the cardiovascular, pulmonary, gastrointestinal/nutrition, renal/genitourinary, and hematologic systems as well as emergency situations that arise in the neonate. Traditional Clinical Rotation (3 hours)

N 634-3. Practicum III: Neonatal Ns Practitioner. This third clinical role support course will continue to provide the theoretical basis for advanced assessment, diagnostic reasoning, and collaborative management of specific health problems in the neonatal health care setting as a neonatal nurse practitioner. Focus of care on the neonates will be related to the endocrine/metabolic, immune, neurobehavioral, musculoskeletal, eyes/ears/nose/throat, and dermatologic systems that arise in the neonate as well as discharge planning and follow-up care for the high-risk neonate and family. Traditional Clinical Rotation (3 hours)

N 634-4. Residency Program. This final course provides concentrated clinical experiences as students synthesize theory, knowledge, and skills from previous courses within the neonatal nurse practitioner scope of practice. Through a learning contract developed with faculty, the student uses advanced knowledge and skills for assessment, diagnosis, and problem management with select client groups in collaboration with preceptors and other health care professionals in the critical care setting to further develop expertise relevant to the assessment and management of groups of neonates and infants through 2 years of age. Traditional Practicum/Internship (1-7 hours)

N 637. Advanced Physiology/Pathophysiology. This course provides the graduate student with an understanding of human physiological and pathophysiological processes. A human body systems approach will be used in the presentation of physiologic concepts and adaptations and alterations which occur in selected disease states across the life span. This course will build a foundation essential for planning and evaluating health care and health care outcomes and serves as a basis for understanding the rationale for assessment and intervention that is taught in the advanced nursing courses. This online course is delivered through synchronous and asynchronous distance learning modalities. Online, Internet, or Web-based Lecture (3 hours)

N 638-1. Synthesis 1st Yr Nurse Practitioner Mgt. This elective course will offer students the opportunity to synthesize information from prerequisite courses using a case study approach. Online, Internet, or Web-based Lecture (1-3 hours)

N 638-2. Clinical Elective for Advanced Practice. This precepted clinical course provides the student an opportunity to practice in the role of advanced nurse practitioner and begin to establish the skills necessary to assume responsibility for management and health care of clients. Through a learning contract developed with faculty, the student uses advanced knowledge and skills for assessment, differential diagnosis, evaluation and health care management with select client groups in collaboration with preceptors and other health care professionals. Traditional Practicum/Internship (1-2 hours)
N 640. Project Management. In this course students learn the principles and fundamentals of project management necessary to achieve objectives in healthcare organizations. Special emphasis will be placed on the application of leadership skills, overcoming objections, achieving buy-in, conflict management, negotiation skills and working with diverse groups of individuals. Through case studies and various exercises, students will use tools and techniques to gain experience in single and multi-project management. This online course is delivered utilizing synchronous and asynchronous distance learning modalities. Online, Internet, or Web-based Lecture (3 hours)

N 641. Fiscal and Operations Management. Students learn how effective operations management is essential to achieving a favorable patient care experience and the financial health of an organization. Using quantitative and qualitative measures, students will study how to reduce cost and improve quality related to the conversion of resources into desired healthcare services and products. This online course is delivered through synchronous and asynchronous distance learning modalities. Online, Internet, or Web-based Lecture (3 hours)

N 644. Human Resource Management. This role support course is designed to increase students’ knowledge and application of concepts, theories, and models of human resource management. Emphasis is on the analysis of structural and behavioral systems, human resources process systems, and human resources outcomes. Online, Internet, or Web-based Lecture (3 hours)

N 646. Organizational Leadership & Communication. This course is designed to increase students’ knowledge and application of concepts, theories and models in communication for organizational leadership, problem solving, and decision making. The course emphasizes communication as a tool for organizational effectiveness and leadership. The content focuses on self awareness/knowledge, communication within complex adaptive systems, communicating for organizational effectiveness, facilitating difficult conversations and managing conflict. Online, Internet, or Web-based Lecture (3 hours)

N 652-1. Finance & Ldrshp in Hlth Care Sys. The course focuses broadly on leadership principles and their application at the micro and macro levels. This introduction to leadership is followed by the essential accounting and financial management principles and concepts relevant to management of health services organizations. Online, Internet, or Web-based Lecture (3 hours)

N 658. Strategic Management. This role support course is designed to provide the student with the opportunity to describe, analyze, and apply the strategic management process. Emphasis is placed on understanding and using tools and techniques such as SWOT analysis, matrix analysis, flow charts and performance measures to analyze a health care system. Online, Internet, or Web-based Lecture (3 hours)

N 659. Residency in Nsg & Hlth Care Adm. Role. The residency provides a structured field experience in an administrator role. The student will have an opportunity to apply theories, principles and techniques learned in the didactic portion of the program in a selected health system under the guidance of an experienced preceptor and faculty advisor. (75 clinical hours per credit hour - total 525 clinical hours) Traditional Clinical Rotation (1-7 hours)

N 660. Focus on Adv Nsg Practice Spec (Peds). This didactic course provides a foundation for the role of pediatric nurse practitioners to survey the normal growth and development and expected developmental milestones of the pediatric client from conception through adolescence. This course will build a foundation essential for the assessment, planning and evaluation of the health in the pediatric clients as well as the assessment for pediatric clients. Traditional Lecture (2 hours)

N 661-1. Practicum for Pediatrics I. This course provides clinical and theoretical experience in the care of clients from birth through adolescence in the primary care setting. Emphasis is placed on health promotion, screening, and prevention of illness and management of selected client health problems in the pediatric client. Traditional Clinical Rotation (2-4 hours)

N 661-2. Practicum for Pediatrics II. This course provides opportunities for the graduate student to develop expertise in the role of the pediatric nurse practitioner in the chronic care setting. Through a learning contract developed with faculty, the student uses advanced knowledge and skills for assessment, diagnosis, and problem management with select client groups in collaboration with preceptors and other health care professionals. Traditional Clinical Rotation (4 hours)

N 661-3. Practicum for Pediatrics III. This course provides opportunities for the graduate student to develop expertise in the role of the pediatric nurse practitioner in the acute care setting. Through a learning contract developed with faculty, the student uses advanced knowledge and skills for assessment, diagnosis, and problem management with select client groups in collaboration with preceptors and other health care professionals. Traditional Clinical Rotation (4 hours)

N 661-4. Practicum for Pediatrics IV. This course provides opportunities for the graduate student to develop expertise in the role of the pediatric nurse practitioner in the critical care setting. Through a learning contract developed with faculty, the student uses advanced knowledge and skills for assessment, diagnosis, and problem management with select client groups in collaboration with preceptors and other health care professionals. Traditional Clinical Rotation (4 hours)

N 661-5. Residency Program. This final clinical course provides concentrated clinical experiences in the primary, acute, chronic, and critical care settings to prepare for entry level functioning in the dual role of the acute/primary care nurse practitioner. This course will assist the pediatric nurse practitioner student to assume responsibility for the direct management and health care in these areas specific to this dual advanced nurse clinician role. Through a learning contract developed with faculty, the student uses advanced knowledge and skills for assessment, diagnosis, and problem management with select client groups in collaboration with preceptors and other health care professionals in the primary, acute, chronic and critical care settings. Traditional Practicum/Internship (1-7 hours)

N 666. Clinical Pharmacotherapeutics. This course provides a foundation and clinical application of pharmacotherapeutic interventions commonly prescribed for healthy and ill individuals across the life span. Emphasis is placed on pharmacokinetic and pharmacodynamic principles along with integration of the use of these products including variations for selected special populations specific to the clinical track of study and client characteristics. This online course is delivered utilizing synchronous and asynchronous distance learning modalities. Online, Internet, or Web-based Lecture (3 hours)

N 669. Role Dev & Role Enact Adv Role Prac Nsg. In this role course, enactment of advanced role practice in nursing is studied. Course will focus on the continued development of knowledge for role development and implementation. This online course is delivered utilizing synchronous and asynchronous distance learning modalities. Online, Internet, or Web-based Lecture (3 hours)

N 677. Advanced Health Assessment. This course focuses on the theoretical basis of performing a physical assessment on the individual throughout the life span. Students will acquire advanced knowledge and skills necessary to perform physical assessments. The emphasis is on managing along with history taking, and advanced physical assessment skills. Traditional Lecture (3 hours)

N 682-1. Therapeutic Management in Primary Care I. This role support course provides theoretical basis for assessing and managing client health patterns for advanced role practice in nursing as a nurse clinician. Emphasis is placed on health promotion, screening, prevention of illness, and management of selected client health problems. Online, Internet, or Web-based Lecture (2 hours)

N 682-2. Therapeutic Management in Primary Care II. This role support course provides foundational knowledge for managing care of persons with altered health patterns relevant to advanced role practice as a nurse clinician. Altered health patterns are examined in relation to differential diagnosis, therapeutic agents and problem management. Online, Internet, or Web-based Lecture (2 hours)

N 682-3. Therapeutic Mgmt in Primary Care III. This course focuses on the health issues and needs of older adults and principles for evaluating, managing and coordinating their care in a variety of settings. Emphasis is on the collaborative role of advanced practice nurses in
assisting older adults and family caregivers from diverse ethnic and cultural backgrounds to negotiate health care delivery systems. Online, Internet, or Web-based Lecture (2 hours)

N 685-1. Practicum in Primary Care I. This course provides opportunities for the graduate student to develop expertise in the role of the family nurse practitioner. Through a learning contract developed with faculty, the student uses advanced knowledge and skills for assessment, diagnosis, and problem management for the subset of women's health client groups in collaboration with preceptors and other health care professionals. (90 clinical hours) Traditional Clinical Rotation (1-2 hours)

N 685-2. Practicum in Primary Care II. This course provides opportunities for the graduate student to develop expertise in the role of the family nurse practitioner. Through a learning contract developed with faculty, the student uses advanced knowledge and skills for assessment, diagnosis, and problem management for the subset of pediatric client groups in collaboration with preceptors and other health care professionals. (135 clinical hours) Traditional Clinical Rotation (2-3 hours)

N 685-3. Practicum in Primary Care III. This course provides opportunities for the graduate student to develop expertise in the role of the family nurse practitioner. Through a learning contract developed with faculty, the student uses advanced knowledge and skills for assessment, diagnosis, and problem management for the subset of primary care client groups in collaboration with preceptors and other health care professionals. (180 clinical hours) Traditional Clinical Rotation (2-4 hours)

N 685-4. Practicum in Primary Care IV. This course provides opportunities for the graduate student to develop expertise in the role of the family nurse practitioner. Through a learning contract developed with faculty, the student uses advanced knowledge and skills for assessment, diagnosis, and problem management with select client groups in collaboration with preceptors and other health care professionals. (225 clinical hours) Traditional Clinical Rotation (3-5 hours)

N 686-1. Practicum in Clinical Assess MHP I Fam. This 180-hour practicum course is focused on the application of theoretical concepts and assessment skills with persons of diverse cultures in rural health care settings experiencing or at risk for common mental health problems and major psychiatric disorders. Traditional Clinical Rotation (4 hours)

N 686-2. Practicum in Clinical Mgmt of Indiv w/MH. This 180-hour practicum course is focused on integration of theory and practice in assessment, diagnosis, intervention, and documentation of individuals of diverse cultures in rural settings experiencing mental health problems, major psychiatric disorders, and psychiatric complications of physical illnesses. Traditional Clinical Rotation (4 hours)

N 686-3. Practicum in Clinical Mgt of Fam and Gr. This 270-hour practicum is focused on evidence-based psychoeducation, supportive therapy, and psychotherapy with groups, couples, and families of diverse cultures and on synthesis of clinical roles, practice management activities, and strategies for complex mental health issues in rural health care settings. Traditional Clinical Rotation (6 hours)

N 687-1. Clinical Assessment of PMH I - Fam. This didactic course is focused on a theoretical basis for advanced psychiatric mental health nursing practice with persons of diverse cultures in rural settings experiencing or at risk for common mental health problems and major psychiatric disorders. Emphasis is on the mental health environment and advanced clinical processes, including communication strategies, psychiatric assessments, and diagnostic standards. Online, Internet, or Web-based Lecture (2 hours)

N 687-2. Clinical Mgmt of Indiv w/MHP II Fam. This didactic course is focused on the advanced nursing practices of assessment, diagnosis, treatment, planning, evaluation, and documentation of individuals of diverse cultures in rural settings experiencing common mental health problems, major psychiatric disorders, and psychiatric complications of physical illnesses. Online, Internet, or Web-based Lecture (3 hours)

N 687-3. Clinical Mgt of Fam & Group MHP III. This didactic course is focused on evidence-based conceptual models, theories, and techniques for therapies with groups, couples, and families of diverse cultures across the lifespan. The clinical roles, practice management activities, and strategies for complex mental health care issues in rural settings also are evaluated. Online, Internet, or Web-based Lecture (2 hours)

N 696. Directed Study in Management Research. This role support course provides an opportunity for students to apply the research process to administrative problems under the direction of a graduate faculty mentor. Focus areas of research projects include organizational behavior, costs analysis, outcomes measurement, strategic management, health policy, case management, managed care, and information systems. Online, Internet, or Web-based Lecture (1-3 hours)

N 698. Directed Study in Research. This elective allows students to participate in research activities as specified in a mutually determined learning contract. A nursing faculty member with a graduate appointment will direct all research activities. With faculty guidance, students may select to: 1) participate with a mentor (minimum master's degree preparation) in the mentor's ongoing research activities, or 2) complete individual or group research proposed in previous courses. Online, Internet, or Web-based Lecture (1-3 hours)

FACULTY

Andries, Chelsey, BSN, MSN, DNP, Instructor-Nursing
Bahadur, Devina, BSN, MSN, Instructor-Nursing
Banks, Farrah, BS, MA, Instructor-Nursing
Blake, Anitra, BS, MS, Instructor-Nursing
Calcutt, Margaret Jeanne, BSN, MS, Assistant Professor-Nursing
Carr, Kayla, BSN, MSN, Assistant Professor-Nursing
Christian, Robin, BSN, MSN, DNP, Professor-Nursing
Clayton, Jill S., BSN, MSN, PhD, Associate Professor-Nursing
Criswell, Amanda, BSN, MSN, Instructor-Nursing
Douglas, Kimberly, BSN, MSN, Assistant Professor-Nursing
Duck, Angela, BSN, MSN, PhD, Assistant Professor-Nursing
Ferrell, Christina, BSN, MSN, PhD, Assistant Professor-Nursing
Fletcher, Audwin, BS, MSN, PhD, Professor-Nursing
Fouquier, Mary Kate, BS, MSN, PhD, Associate Professor-Nursing
Franklin, Sherri, BSN, MSN, Assistant Professor-Nursing
Garbo, Candon, BSN, MSN, Instructor-Nursing
Hall, Katie Chamberlin, BSN, MSN, Assistant Professor-Nursing
Harrington, Marilyn, BSN, MSN, PhD, Associate Professor-Nursing
Harris, Janet, BSN, DNP, Professor-Nursing
Haynie, Lisa, BSN, MSN, Professor-Nursing
Hizer, Laree, BS, PhD, Associate Professor-Nursing
Jones, Teresa, BSN, Instructor-Nursing
Kirkendall, Neeli, BSN, MSN, Instructor-Nursing
Klamm, Melissa, BSN, MSN, Instructor-Nursing
Lawrence, Marlie, BSN, MSN, Instructor-Nursing
Lee, Keyshawna "Nikki", BSN, MSN, PhD, Assistant Professor-Nursing
Lee, Lishia, BSN, MSN, PhD, Associate Professor-Nursing
Lofton, Susan, BSN, MSN, PhD, Professor-Nursing
Lopez-Lambert, Eloise, BSN, MSN, Instructor-Nursing
Lowry, Presy, BSN, MSN, Instructor-Nursing
Luther, Cynthia, BSN, MSN, PhD, Assistant Professor-Nursing
MacSorley, Robyn, BSN, MSN, PhD, Assistant Professor-Nursing
Mangum, Carl, BSN, MSN, PhD, Associate Professor-Nursing
Mann, Betsy, BSN, MSN, DNP, Assistant Professor-Nursing
Martin, Tina, BSN, MSN, PhD, Professor-Nursing
McCullough, Amanda, BSN, MSN, Instructor-Nursing
McElwain, Sharon, BSN, MSN, DNP, Associate Professor-Nursing
McNair, Mary, BSN, MSN, PhD, Assistant Professor-Nursing
Moore, Molly, BSN, MSN, DNP, Assistant Professor-Nursing
Morgan, Deidra, BSN, MSN, Instructor-Nursing
Northington, LaDonna, BSN, MSN, DNS, Professor-Nursing
Norwood, Anne, BS, BSN, MSN, PhD, Professor-Nursing
Palokas, Michelle, BSN, MSN, DNP, Assistant Professor-Nursing
Pruell, Christian, BSBA, MBA, PhD, Assistant Professor-Nursing
Ragland, Gaye, BSN, MSN, Assistant Professor-Nursing
Rhodes, Kathy, BSN, MSN, Assistant Professor-Nursing
Robinson, Jennifer, BSN, MSN, PhD, Professor-Nursing
Smith, Kandy K., BSN, MN, DNS, Professor-Nursing
Stanton, Sandra, BSN, MSN, PhD, Assistant Professor-Nursing
Stewart, Mary W., BSN, MSN, PhD, Professor-Nursing
Tatum, Eva, BSN, MSN, PhD, Assistant Professor-Nursing
Thweatt, Lesley, BSN, MSN, Instructor-Nursing
Torres, Elisa, BA, BSN, MS, PhD, Professor-Nursing
Walker, Jean, BSN, MSN, PhD, Professor-Nursing
Weeks, Amanda, BSN, MSN, Instructor-Nursing
White, Monica, BSN, MSN, Instructor-Nursing
Wijewardane, Johnnie Sue, BSN, MSN, PhD, Professor-Nursing
Williams, Amy, BSN, MSN, Assistant Professor-Nursing
Williams, Renee, BSN, MSN, PhD, Professor-Nursing
Winters, Karen, BSN, MSN, PhD, Professor-Nursing
school of
health related professions

The University of Mississippi
Medical Center
The School of Health Related Professions academic calendar is for all programs.

NOTE: Clinical activities of students vary and may not conform to calendar.

### SHRP 2019-2020 Academic Calendar

<table>
<thead>
<tr>
<th>April</th>
<th>29 Monday</th>
<th>Final examinations begin</th>
</tr>
</thead>
<tbody>
<tr>
<td>May</td>
<td>3 Friday</td>
<td>Final examinations end; Last day of spring semester</td>
</tr>
<tr>
<td></td>
<td>3 Friday</td>
<td>SHRP Honors Day</td>
</tr>
<tr>
<td></td>
<td>6 Monday</td>
<td>Final grades due in SAP by 5:00 p.m.</td>
</tr>
<tr>
<td></td>
<td>7 Tuesday</td>
<td>EOS reports due to the Dean</td>
</tr>
<tr>
<td></td>
<td>14 Tuesday</td>
<td>$50 late registration fee for 2019-2020 summer term effective today</td>
</tr>
<tr>
<td></td>
<td>24 Friday</td>
<td>Commencement</td>
</tr>
</tbody>
</table>

### SUMMER 2019

| May     | 28 Tuesday | Orientation for new students and classes begin |
|         | 28 Tuesday | $100 late registration fee for 2019-2020 summer term effective today |
| June    | 7 Friday   | Last day to register or add a course |
|         | 10 Monday  | Last day to withdraw from a course or from school without receiving a withdrawal grade and to receive a tuition refund |
|         | 19 Wednesday | Registration begins for 2019-2020 fall semester |
| July    | 4 Thursday | Independence Day holiday observed |
|         | 5 Friday   | Classes resume |
|         | 5 Friday   | Mid-term grades due |
|         | 12 Friday  | Last day to withdraw from a course and receive only a “W” grade if failing |
|         | 29 Monday  | $50 late registration fee for 2019-2020 fall semester effective today |
|         | 29 Monday  | Final examinations begin |

### FALL 2019

| August  | 8, 9 Thursday, Friday | Orientation for new students |
|         | 12 Monday             | Classes begin |
|         | 12 Monday             | $100 late registration fee for 2019-2020 fall semester effective today |
|         | 16 Friday             | Last day to register for fall semester |
|         | 23 Friday             | Last day to add a course |
|         | 23 Friday             | Last day to submit an application for December degree |
|         | 29 Thursday           | Last day to withdraw from school or from a course without receiving a withdrawal grade and to receive a tuition refund |
| September | 2 Monday            | Labor Day holiday observed |
| October  | 3 Tuesday            | Classes resume |
|         | 9 Wednesday          | Mid-term grades due |
|         | 25 Friday            | Last day to withdraw from a course and to receive only a “W” grade if failing |
| November | 1 Friday             | Program Focus Day |
|         | 4 Monday             | Registration begins for 2019-2020 spring semester |
|         | 13 Wednesday         | Employment Opportunities Day |
|         | 22 Friday            | Fall break begins at 5:00 p.m. |
| December | 2 Monday             | Classes resume |
|         | 9 Monday             | Final examinations begin |
|         | 13 Friday            | Final examinations end |
|         | 13 Friday            | Christmas and New Year’s holidays begin at 5:00 p.m. |
|         | 14 Saturday          | End of fall semester |
|         | 16 Monday            | Final grades due in SAP by 5:00 p.m. |
|         | 17 Tuesday           | EOS reports due to the Dean |
|         | 23 Wednesday         | $50 late registration fee for 2019-2020 spring semester effective today |
### SPRING 2020

<table>
<thead>
<tr>
<th>Date</th>
<th>Day</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>January 6</td>
<td>Monday</td>
<td>Classes begin</td>
</tr>
<tr>
<td>January 6</td>
<td>Monday</td>
<td>$100 late registration fee for 2019-2020 spring semester effective today</td>
</tr>
<tr>
<td>January 10</td>
<td>Friday</td>
<td>Last day to register for spring semester</td>
</tr>
<tr>
<td>January 17</td>
<td>Friday</td>
<td>Last day to add a course</td>
</tr>
<tr>
<td>January 17</td>
<td>Friday</td>
<td>Last day to submit an application for May degree</td>
</tr>
<tr>
<td>January 20</td>
<td>Monday</td>
<td>Martin Luther King, Jr. holiday observed</td>
</tr>
<tr>
<td>January 21</td>
<td>Tuesday</td>
<td>Classes resume</td>
</tr>
<tr>
<td>January 23</td>
<td>Thursday</td>
<td>Last day to withdraw from school or from a course without receiving a withdrawal grade and to receive a tuition refund</td>
</tr>
<tr>
<td>February 5</td>
<td>Wednesday</td>
<td>Student Financial Wellness Seminar</td>
</tr>
<tr>
<td>March 6</td>
<td>Friday</td>
<td>Program Awareness Day</td>
</tr>
<tr>
<td>March 6</td>
<td>Friday</td>
<td>Mid-term grades due</td>
</tr>
<tr>
<td>March 6</td>
<td>Friday</td>
<td>Spring Break begins at 5:00 p.m.</td>
</tr>
<tr>
<td>March 16</td>
<td>Monday</td>
<td>Classes resume</td>
</tr>
<tr>
<td>March 20</td>
<td>Friday</td>
<td>Last day to withdraw from a course and receive only a “W” grade if failing</td>
</tr>
<tr>
<td>April 9</td>
<td>Thursday</td>
<td>Easter holiday begins at 5:00 p.m.</td>
</tr>
<tr>
<td>April 13</td>
<td>Monday</td>
<td>Registration begins for 2020-2021 summer term</td>
</tr>
<tr>
<td>April 14</td>
<td>Tuesday</td>
<td>Classes resume</td>
</tr>
<tr>
<td>April 17</td>
<td>Friday</td>
<td>Last day to submit an application for August 2020 degree</td>
</tr>
<tr>
<td>April 24</td>
<td>Friday</td>
<td>SHRP Research Day</td>
</tr>
<tr>
<td>May 4</td>
<td>Monday</td>
<td>Final examinations begin</td>
</tr>
<tr>
<td>May 8</td>
<td>Friday</td>
<td>Final examinations end; Last day of spring semester</td>
</tr>
<tr>
<td>May 8</td>
<td>Friday</td>
<td>SHRP Honors Day</td>
</tr>
<tr>
<td>May 11</td>
<td>Monday</td>
<td>Final grades due in SAP by 5:00 p.m.</td>
</tr>
<tr>
<td>May 12</td>
<td>Tuesday</td>
<td>EOS reports due to the Dean</td>
</tr>
<tr>
<td>May 12</td>
<td>Tuesday</td>
<td>$50 late registration fee for 2020-2021 summer term effective today</td>
</tr>
<tr>
<td>May 22</td>
<td>Friday</td>
<td>Commencement</td>
</tr>
</tbody>
</table>
SCHOOL OF HEALTH RELATED PROFESSIONS

Jessica Bailey, PhD, Dean
Mark R. Gray, PhD, Associate Dean for Academic Affairs
Kim McGaugh, MHS, OTR/L, Assistant Dean for Administration
Molly Ratcliff, MS, Director of Admission and Learning Advancement

HISTORY
The Board of Trustees authorized the School of Health Related Professions in October 1971 to provide a source of trained, competent allied health personnel to meet the needs of Mississippi; provide consultant services to allied health educational programs; aid in the development of appropriate cooperative education programs for allied health personnel; and provide continuing education programs for allied health personnel.

MISSION
The mission of the School of Health Related Professions is to equip diverse health professionals to provide quality and innovative health services for our Mississippi communities.

PROGRAMS
The School of Health Related Professions serves approximately 500 students in the following programs:

- Bachelor of Science in Health Informatics and Information Management - Angela Morey, PhD, Director (Online Program)
- Bachelor of Science in Health Sciences - Cynthia Casey, DNP, Director (Online Program)
- Bachelor of Science in Histotechnology - Renee Wilkins, PhD, Director
- Bachelor of Science in Medical Laboratory Science - LaToya Richards-Moore, PhD, Director
- Bachelor of Science in Radiologic Sciences - Kristi Moore, PhD, Director
- Bachelor of Science in University Studies – Cynthia Casey, DNP, Director (Online Program)
- Post-Baccalaureate Certificate Program in Health Informatics – Lisa Morton, PhD, Director (Online Program)
- Master of Health Informatics and Information Management - Lisa Morton, PhD, Director (Online Program)
- Master of Health Sciences – Cynthia Casey, DNP, Director (Online Program)
- Master of Occupational Therapy - Christy Morgan, PhD, Director
- Master of Science in Magnetic Resonance Imaging - Asher Street, DHA, Director
- Master of Science in Nuclear Medicine Technology - Sherry J. West, DHA, Director
- Doctor of Health Administration - Angela Burrell, PhD, Director (Online Program)
- Doctor of Occupational Therapy – Christy Morgan, PhD, Director
- Doctor of Physical Therapy – Lisa Barnes, PhD, Director

GENERAL ADMISSION INFORMATION
Refer to the SHRP General Admission Requirements Policy (Policy E-SHRP-GEN-GEN-PO-00013) in the UMMC Document Center for information.

Application deadlines are:

Bachelor of Science in Health Informatics and Information Management
- Fall Admission: May 15
- Bachelor of Science in Health Informatics and Information Management (Progression)
  - Summer Admission: March 1
  - Fall Admission: May 15
  - Spring Admission: October 1
- Bachelor of Science in Health Sciences
  - Summer Admission: March 1
  - Fall Admission: May 15
- Bachelor of Science in Histotechnology
  - Fall Admission: March 1
- Bachelor of Science in Medical Laboratory Science (Traditional)
  - Fall Admission: March 1
- Bachelor of Science in Radiologic Sciences (Traditional)
  - Fall Admission: February 15
- Bachelor of Science in Radiologic Sciences (Advanced Standing)
  - Fall Admission: July 1
- Bachelor of Science in University Studies
  - Summer Admission: March 1
- Post-Baccalaureate Certificate Program in Health Informatics
  - Fall Admission: May 15
- Master of Health Informatics and Information Management
  - Fall Admission: May 15
- Master of Health Sciences
  - Summer Admission: March 1
- Master of Science in Magnetic Resonance Imaging
  - Summer Admission: April 1
- Master of Science in Nuclear Medicine Technology
  - Summer Admission: April 1
- Doctor of Health Administration
  - Summer Admission: February 1
Doctor of Occupational Therapy
Summer Admission

Doctor of Physical Therapy
Summer Admission

 TUITION AND REQUIRED FEES

Note: Tuition and fees listed below are valid for 2019-2020 only and are subject to change pending information from the Institutions of Higher Learning (IHL). Please contact the Department of Student Accounting at (601) 984-1060 for further information.

Tuition for the Bachelor of Science in Health Informatics and Information Management, Health Sciences, Histotechnology, Medical Laboratory Science, Radiologic Sciences, and the Post Baccalaureate Certificate in Health Informatics is $363.66 per semester hour, up to a maximum charge per semester of $4,364.00 for Mississippi residents. An additional $702.87 per semester hour, up to a maximum of $8,434.50 per semester, is charged to non-residents. Students enrolled in online programs will be charged a $150.00 distance learning fee each semester. Non-resident tuition will not be charged for students in online programs. Please look up your program in the Bulletin to determine if it is an online program.

Pending IHL approval, tuition for the Master of Science in Magnetic Resonance Imaging, Master of Science in Nuclear Medicine Technology, Master of Health Informatics and Information Management, Master of Health Sciences, and Master of Occupational Therapy is $484.88 per semester hour, up to a maximum of $4,364.00 per semester. An additional $937.16 per semester hour, up to a maximum of $8,434.50 per semester, is charged to non-residents. Students enrolled in online programs will be charged a $150.00 distance learning fee each semester. Non-resident tuition will not be charged for students in online programs. Please look up your program in the Bulletin to determine if it is an online program.

Tuition for the Doctor of Health Administration is $560.40 per semester hour, up to a maximum charge per semester of $5,043.67. A $150.00 distance learning fee will be charged each semester.

Tuition for the Doctor of Occupational Therapy and Doctor of Physical Therapy is $754.59 per semester hour, up to a maximum charge per semester of $7,547.33 for Mississippi residents. An additional $838.59 per semester hour, up to a maximum of $7,547.33 per semester, is charged to non-residents.

FINANCIAL AID

Students wishing to apply for financial aid at the University of Mississippi Medical Center must complete the FAFSA (Free Application for Federal Student Aid) online (using the Medical Center's Federal School Code number 004688) and create a FSA ID online. Because the University of Mississippi Medical Center offers special aid programs to students from underserved areas, the Medical Center recommends all applicants, regardless of financial need, complete the FAFSA. Applicants who need financial aid assistance should contact the Office of Student Financial Aid at the University of Mississippi Medical Center at (601) 984-1117 or by e-mail.

SCHOLARSHIPS AND LOANS

The Dean's Scholarship, established in 2001, offers a full tuition scholarship to a student in the School of Health Related Professions. Recipients must be in good academic standing.

E.H. Sumners Foundation Scholarships were established in 1977 by Mrs. E.H. Sumners of Eupora, MS, to provide scholarship assistance for students from Webster, Montgomery, Attala, Carroll and Choctaw counties who are enrolled at the Medical Center.

Federal-State Loan Programs, in which the Medical Center participates, are administered through the Office of Student Financial Aid.

Feild Co-operative Association, Inc. Loan program offers low-interest, long-term loans to residents of Mississippi who have completed a minimum of two years of college work. Students may borrow up to $1,000 per nine-month academic year.

Frances H. Freeman Scholarship Fund was established in 1990, in recognition of Mrs. Freeman and her many contributions to medical technology education. Mrs. Freeman was the first chairman of the School of Health Related Professions' medical technology department. The scholarship is awarded to a senior medical laboratory science student who has earned a minimum 3.50 grade point average at the University of Mississippi Medical Center and has demonstrated outstanding performance in professional activities.

George C. and Laura B. McKinstry Loan Fund was established in 1973 by Dr. McKinstry in memory of his father and mother to provide low-interest loans to needy students in the School of Health Related Professions.

Health Related Professions Alumni Student Emergency Loan Fund provides small low-interest loans to students repayable within 90 days.

Irene H. Snipes Scholarship Fund was established in 1997 by the Mississippi Hospital Association in memory of Irene H. Snipes. The fund provides assistance to students in good academic standing.

James T. Baird Memorial Scholarship, established in 2000, offers a full tuition scholarship to a student in the School of Health Related Professions. All recipients must be in good academic standing, and preference is given to those students who intend to practice in smaller Mississippi towns and communities.

Lettie Pate Whitehead Foundation Scholarships are available to female students in all programs. Awards are based on financial need.

Mississippi Rural Allied Health Professionals Scholarship was established in 2015 by the Robert M. Hearin Support Foundation for selected SHRP allied health students from the state of Mississippi obligated to providing healthcare service in a rural or underserved area equal to one year for each year of scholarship support.

Ottie Schillig Memorial Scholarship Fund was established in 1984 through a gift to the Medical Center from the Schillig Trust. Miss Schillig, a native of Port Gibson, was a noted concert singer. At least one scholarship is available each year to the School of Health Related Professions. All recipients must be in good academic standing, and preference is given to those students who intend to practice in small Mississippi towns and communities.

Pearl and Otis Walters Scholarship Fund is presented annually to a SHRP student(s) with outstanding academic achievement and who intends to practice in smaller Mississippi towns and communities.

Physical Therapy Scholarship was established in 2009 by friends and program alumni. One scholarship is awarded annually to a second-year physical therapy student.

Raymond E. Hogue Scholarship Fund was established in 2008 to recognize the first chairman of the physical therapy program and his contributions to practice in Mississippi. At least one scholarship is awarded annually to a qualified second-year physical therapy student.

THE UNIVERSITY OF MISSISSIPPI MEDICAL CENTER
Rita and David Halbrook Endowment to the Health Informatics and Information Management program was established in 2007. This scholarship is awarded annually to a qualified applicant.

**AWARDS AND HONORS**

**Academic Excellence Award** is presented to graduating students in graduate programs who have achieved an overall grade point average of 3.75 or better every semester of continuous full time enrollment.

**Alpha Eta Award** is presented by the University of Mississippi Medical Center chapter of the Alpha Eta Honor Society to student initiates of Alpha Eta who excel in scholarship and leadership. The recipients of this award will be the University of Mississippi Medical Center nominees for the national Alpha Eta Society’s Sidney Rodenberg, Lee Holder, and Exceptional Student Professional Service Awards.

**Alpha Eta Society** is a national allied health scholastic and leadership honor society which recognizes outstanding achievement by allied health students, faculty and alumni. Student membership is limited to seniors who have an overall grade point average of 3.50 or better for bachelor degree candidates and 3.75 or better for master’s or doctoral degree candidates; each program is limited to no more than 20 percent of the graduating class.

**Benton Clay Gordon Award**, sponsored by the Mississippi Radiological Society, is presented to the graduating radiologic sciences student who demonstrated outstanding performance in clinical practice.

**Bette A. Groat Occupational Therapy Award** is presented to the graduating occupational therapy student who has maintained a high level of performance, both clinically and academically, and represents the occupational therapy profession in an exemplary manner before peers and the public.

**Celia Robson Sports and Orthopedics Physical Therapy Award**, an award honoring Celia Robson, is presented to the graduating physical therapy student demonstrating exemplary attitude and interest in sports physical therapy.

**Dean’s Award** is presented to graduating students in any discipline, whose activities in the areas of academics, scholarship, school, community or professional service are exemplary and bring honor to the school. The award is presented at the discretion of the dean.

**Dean’s List** recognizes undergraduate students for superior academic achievement. Eligibility is based upon at least 12 semester hours in the preceding semester on the Medical Center campus with a semester average of 3.50 or above.

**D.J. Banford Award** is presented to academically eligible occupational therapy student(s) to support the student’s extraordinary efforts of being a single custodial parent of minor children.

**Dr. Virginia Stansel Tolbert Award**, sponsored by the Mississippi State Medical Association, is given on Commencement Day to the graduating student who has been continuously enrolled as a full time student and who has the highest academic average.

**Excellence in Data Analytics Award** is presented to the health informatics and information management student deemed by the faculty to display exceptional skills in analyzing, representing or visualizing data.

**Jack R. Gordy Outstanding Graduate Student Capstone Award** is presented to the graduating student in the Master of Health Sciences program who demonstrates academic excellence, as deemed by departmental faculty.

**Jack R. Gordy Outstanding Undergraduate Student Capstone Award** is presented to the graduating student in the bachelor of science in health sciences program who demonstrates academic excellence, as deemed by departmental faculty.

**John Carey Bolen Occupational Therapy Memorial Award** is presented to the graduating occupational therapy student who, as deemed by the faculty, exemplifies the spirit of occupational therapy through courage and determination to persevere and overcome adversity to accomplish professional goals while maintaining interest and enthusiasm for the profession.

**Juanita Woods Distinguished Service Award**, sponsored by the Mississippi Physical Therapy Association in honor of Juanita Woods, is presented to the graduating physical therapy student who has demonstrated involvement in community and school activities, and leadership in the physical therapy profession.

**Latin Honors** are awarded to undergraduate students who have been continuously enrolled as full time students and have achieved a cumulative GPA average of 3.50 or higher during the duration of the entire undergraduate career. Latin Honors awarded include Cum Laude (3.50-3.74 GPA), Magna Cum Laude (3.75-3.89 GPA), or Summa Cum Laude (3.90-4.0 GPA).

**Leaders in Service Award** is presented to the SHRP student who has demonstrated a high level of service and humility in regards to their commitment to community engagement, service, and advocacy.

**Lois Boackle Jones Memorial Award** was established in 2013 by the family of Lois Boackle Jones. One award is given annually to a senior student who has earned a minimum 3.75 grade point average at the University of Mississippi Medical Center. The scholarship rotates among baccalaureate programs.

**Magnetic Resonance Imaging Excellence Award** is sponsored by the Mississippi Radiological Society and presented to the graduating student in Magnetic Resonance Imaging who has excelled both academically and clinically.

**Marshal of the Class Award** is presented to the Student Marshal of the Class, selected as the graduating student with highest grade point average in a department on a rotational basis. The Marshal of the Class is responsible for organizing, leading and guiding the graduates at commencement.

**Mississippi Blood Services Medical Laboratory Science Outstanding Clinical Achievement Award** is presented to the senior medical laboratory science student who demonstrates outstanding clinical achievement in the senior year.

**Mississippi Occupational Therapy Association Outstanding Leadership Award** is presented to a graduating occupational therapy student judged by the faculty to consistently demonstrate exceptional leadership skills in the classroom, on the school campus and in the community.

**Mississippi Society of Radiologic Technologists Excellence Award**, sponsored by the Mississippi Society of Radiologic Technologists, is presented to the graduating student in Radiologic Sciences who has excelled both academically and clinically.

**Neva F. Greenwald Physical Therapy Award** is presented to the graduating physical therapy student who has maintained a high level of performance, both clinically and academically, and represents the physical therapy profession in an exemplary manner before peers and the public.

**North Mississippi Medical Center Community Outreach Occupational Therapy Award** is presented to the graduating occupational therapy student who demonstrates community awareness and promotion of the field of occupational therapy.

**North Mississippi Medical Center Community Outreach Physical Therapy Award** is presented to the graduating physical therapy student who demonstrates community awareness and promotion of the field of physical therapy.
Nuclear Medicine Technology Clinical Practice Award is sponsored by the Mississippi Society of Nuclear Medicine and Molecular Imaging and is presented to the graduating Nuclear Medicine Technology student who has demonstrated outstanding performance in clinical practice.

Nuclear Medicine Technology Excellence Award is sponsored by the Mississippi Radiological Society and presented to the graduating student in Nuclear Medicine Technology who has excelled both academically and clinically.

Occupational Therapy Award of Clinical Excellence is presented to the graduating occupational therapy student who demonstrates outstanding performance, judgment and attitude in clinical performance.

Outstanding Health Informatics and Information Management Student Award is presented to the graduating health informatics and information management student judged by the faculty to be the outstanding student as demonstrated by academic performance, departmental and school activities, professional service and community involvement.

Outstanding Immunohematology Award is presented to the graduating medical laboratory science student with the highest academic average in immunohematology.

Outstanding Occupational Therapy Student Award is presented to the graduating occupational therapy student who is judged by the faculty to be the outstanding student as demonstrated by academic performance, departmental and school activities, professional service and community involvement.

Outstanding Physical Therapy Student Award is presented to the graduating physical therapy student who is judged by the faculty to be the outstanding student as demonstrated by academic performance, departmental and school activities, professional service and community involvement.

Phi Kappa Phi is a national honor society recognizing and promoting academic excellence in all fields of higher education and engaging the community of scholars in service to others. Initiates are selected on the basis of academic achievement.

Physical Therapy Award of Excellence, initiated by the physical therapy class of 1983, is presented to a graduating physical therapy student in recognition of overall contribution to physical therapy and the potential for future professional achievement.

Physical Therapy Clinical Education Award, initiated by the physical therapy class of 1991, is presented to a graduating physical therapy student or students who are judged by essay to have a keen insight into the goals and benefits of clinical education and who reflect a commitment to lifelong learning.

Pi Theta Epsilon (Gamma Lambda Chapter) is a specialized honor society recognizing and encouraging superior scholarship among occupational therapy students. The society strives to instill in its members the ideal of respect for learning and commitment to scholarship throughout one’s professional life.

Rebecca J. Yates Professionalism Award is given to a health informatics and information management graduating student who displays exceptional poise, confidence, knowledge and skill.

Regions Bank Health Informatics and Information Management Scholastic Award is presented to the graduating undergraduate health informatics and information management student who is graduating with the highest academic average. A minimum 3.50 grade point average is required for this award.

Regions Bank Histotechnology Scholastic Award is presented to the graduating histotechnology student who is graduating with the highest academic average. A minimum 3.50 grade point average is required for this award.

Regions Bank Medical Laboratory Science Scholastic Award is presented to the graduating medical laboratory science student who is graduating with the highest academic average. A minimum 3.50 grade point average is required for this award.

Robert B. Weaver Student Physical Therapy Award, sponsored by the physical therapy class of 1998, recognizes a graduating physical therapy student for friendliness, helpfulness, genuine concern, cooperation, effective communications and interpersonal skills.

Scottie Mooney Memorial Outstanding Medical Laboratory Science Student Award is presented to the graduating medical laboratory science student judged by the faculty to be outstanding in clinical interpretation as demonstrated by clinical and academic performance.

Student Research Awards, sponsored by the School of Health Related Professions, acknowledges students for their outstanding achievements in research.

Timothy Moore Student Award is given to the graduating occupational therapy student who is deemed by their peers to be a living example of therapeutic use of self in putting others’ needs before their own. This person exhibits humility, a consistently positive attitude, and a true love of their chosen profession.

Trustmark National Bank Occupational Therapy Scholastic Award is presented to the occupational therapy student who is graduating with the highest academic average. A minimum 3.50 grade point average is required for this award.

Trustmark National Bank Physical Therapy Scholastic Award is presented to the physical therapy student who is graduating with the highest academic average. A minimum 3.50 grade point average is required for this award.

Trustmark National Bank Radiologic Sciences Scholastic Award, honoring Ann Whitfield Fox, is presented to the radiologic sciences student graduating with the highest academic average. A minimum 3.50 grade point average is required for this award.

University Pathology Associates Award, sponsored by the University Pathology Associates, is presented to the graduating medical laboratory science student and graduating Histotechnology student who have demonstrated the highest standards in professionalism and interpersonal communication skills in laboratory knowledge.

Who’s Who Among Students in American Universities and Colleges listing is a national compendium recognizing seniors for outstanding achievements.

ACADEMIC REGULATIONS

Refer to the following policies in the UMMC Document Center:

Academic Dishonesty Policy for the School of Health Related Professions (Policy E-SHRP-GEN-GEN-PO-00001)
Academic Good Standing Policy (Policy E-SHRP-GEN-GEN-PO-00007)
Academic Progress Policy for the School of Health Related Professions (Policy E-SHRP-GEN-GEN-PO-00018)
Attendance and Registration Policy for the School of Health Related Professions (Policy E-SHRP-GEN-GEN-PO-00014)
Course Withdrawal Policy for the School of Health Related Professions (Policy E-SHRP-GEN-GEN-PO-00016)
Degree Requirements Policy for the School of Health Related Professions (Policy E-SHRP-GEN-GEN-PO-00020)
Forgiveness Policy (Policy E-SHRP-GEN-GEN-PO-00004)
Grading Policy for the School of Health Related Professions (Policy E-SHRP-GEN-GEN-PO-00015)
HEALTH ADMINISTRATION (DHA) (Online)
Angela Burrell, PhD, MSN, RN, Department Chair and Program Director

ABOUT THE PROGRAM
The Doctor of Health Administration (DHA) program offers an advanced educational opportunity in health care leadership. The program trains leaders in administration, education and clinical areas to navigate changes in the health care environment. The program is designed to provide graduates an opportunity to assume upper level managerial and leadership roles within the health care delivery system. The program is also designed to prepare licensed, certified and/or registered health care practitioners for higher education faculty or leadership positions.

The DHA program, offered across nine semesters, is designed for part-time, non-traditional students. Online course work is the primary method of content delivery with minimal mandatory face-to-face on-campus sessions.

PROGRAM ADMISSION REQUIREMENTS
In addition to the admission standards of the institution and the general admission requirements of the School of Health Related Professions, candidates seeking admission to the doctor of health administration program must meet the following requirements:

1. Awarded a master’s degree or professional doctorate from a regionally accredited institution of higher learning with a GPA of at least 3.00 on a 4.00 scale in a health care related field
   OR
   awarded a master's degree from a regionally-accredited institution of higher learning with a GPA of at least 3.00 on a 4.00 scale with five or more years of experience in health care management, health care policy, clinical medical specialty, etc.;
2. Official scores on the Graduate Record Exam (GRE);
3. Current curriculum vitae or resume and;
4. Submit an essay documenting previous health care experience

A limited number of applicants will be admitted to the health administration program with students selected on a competitive basis. Qualification does not ensure admission.

PROGRAM APPLICATION DEADLINES
All application documents and application fees must be received by the Office of Student Records and Registrar by February 1 for summer admission. Final transcripts indicating graduate degree completion must be included in these documents. In addition, the GRE must be official and completed within the last 5 years. General application information and application procedures may be found in the SHRP General Admissions Requirements Policy (Policy E-SHRP-GEN-GEN-PO-00013) in the UMMC Document Center.

DEGREE
Candidates for the doctor of health administration degree must have completed the prescribed curriculum with an overall cumulative grade point average of 3.00 or higher on a 4.00 scale. Credits representing research and preparation of the doctoral project (dissertation) hours are earned as directed by the plan of study. The acceptability of the doctoral project proposal and defense is determined by the student's advisory committee and department chair. Following satisfactory completion of all requirements, students will be awarded the doctor of health administration degree from the University of Mississippi.

PROFESSIONAL COURSE OF STUDY

<table>
<thead>
<tr>
<th>COURSE</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>DHA 700 Leadership Strategies in Health Entities</td>
<td>3</td>
</tr>
<tr>
<td>DHA 706 Foundations of Health Policy</td>
<td>3</td>
</tr>
<tr>
<td>DHA 712 Strategic Change Management</td>
<td>3</td>
</tr>
<tr>
<td>DHA 718 Current Trends in Accreditation &amp; Licensure</td>
<td>3</td>
</tr>
<tr>
<td>DHA 724 Health Care Law, Regulations &amp; Ethics</td>
<td>3</td>
</tr>
<tr>
<td>DHA 736 Health Economics</td>
<td>3</td>
</tr>
<tr>
<td>DHA 748 Communications in Health Organizations</td>
<td>3</td>
</tr>
<tr>
<td>DHA 754 Fundamentals of Applied Research</td>
<td>3</td>
</tr>
<tr>
<td>DHA 756 Quality Processes in Health Organizations</td>
<td>3</td>
</tr>
<tr>
<td>DHA 760 Fiscal Responsibility &amp; Accountability</td>
<td>3</td>
</tr>
<tr>
<td>DHA 764 Health Systems</td>
<td>3</td>
</tr>
<tr>
<td>DHA 767 Current Topics in Health Administration</td>
<td>3</td>
</tr>
<tr>
<td>DHA 770 Epidemiology</td>
<td>3</td>
</tr>
<tr>
<td>DHA 776 Applied Research Techniques</td>
<td>3</td>
</tr>
<tr>
<td>DHA 791 Doctoral Project Proposal</td>
<td>9</td>
</tr>
<tr>
<td>DHA 798 Doctoral Project</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total Required Hours</strong></td>
<td><strong>60</strong></td>
</tr>
</tbody>
</table>
HEALTH INFORMATICS AND INFORMATION MANAGEMENT (BS) (Online)
Lisa Morton, PhD, RHIA, Department Chair
Angela Morey, PhD, RHIA, Program Director

ABOUT THE PROFESSION
Health informatics and information management professionals are experts in managing the collection, storage, retrieval and interpretation of health care information. To provide the highest quality health care delivery, health care information is used not only for patient care, but also in medical legal issues, research, planning and evaluation. Opportunities for employment are found in a variety of settings, including hospitals, clinics, rehabilitation centers, home health agencies, managed care organizations, insurance agencies, governmental agencies, educational institutions and research centers.

ACCREDITATION STATUS
The health informatics and information management baccalaureate program is accredited by the Commission on Accreditation for Health Informatics and Information Management Education (CAHIIM). 200 East Randolph Street, Suite 5100, Chicago, IL 60601. CAHIIM’s phone number is (312)235-3255.

HEALTH INFORMATICS AND INFORMATION MANAGEMENT (Online)
The baccalaureate degree program in health informatics and information management is an entry-level program for students who want to pursue a career in health informatics and information management and to obtain the registered health information administrator (RHIA) credential from the American Health Information Management Association. Upon completion of the program, students receive a bachelor of science degree and are prepared to apply for and obtain their RHIA.

The program is designed for part-time, non-traditional students. Online coursework is the method of content delivery.

PROGRAM ADMISSION REQUIREMENTS
In addition to the admission standards of the institution and the general admission requirements of the School of Health Related Professions, candidates seeking admission to the health informatics and information management program must:

1. Have completed a minimum of 60 semester hours of academic credit from a regionally accredited institution of higher learning;
2. Have an overall cumulative grade point average of 2.50 on a 4.00 scale;
3. Submit ACT scores; and
4. Successfully complete (a grade of C or better) the following minimum prerequisite requirements:

<table>
<thead>
<tr>
<th>Prerequisite Courses</th>
<th>Number of Courses</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>English Composition</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>Social or Behavioral Science</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>College Algebra, Quantitative Reasoning or Higher Mathematics</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Speech</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Humanities and Fine Arts</td>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td>Anatomy and Physiology with Lab</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>Basic Computer Concepts and Applications</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Electives</td>
<td></td>
<td>22</td>
</tr>
<tr>
<td><strong>Total Prerequisites</strong></td>
<td><strong>60</strong></td>
<td></td>
</tr>
</tbody>
</table>

1Social and Behavioral Sciences include courses such as anthropology, economics, political science, psychology or sociology.
2Humanities and Fine Arts include courses such as art history, dance, history, modern languages, music, philosophy, religion or theatre.

PROGRAM APPLICATION DEADLINE
All application documents and the application fees must be received by the Office of Student Records and Registrar by May 15 for fall admission. General application information and application procedures can be found in the SHRP General Admissions Requirements Policy (Policy E-SHRP-GEN-GEN-PO-00013) in the UMMC Document Center. The School reserves the right to consider and accept applications after the established deadline if places are available. To determine if a deadline has been extended, call the Office of Student Records and Registrar after the deadline at (601) 984-1080.

DEGREE AND LICENSURE
Candidates for the health informatics and information management degree must have completed the prescribed curriculum with an overall cumulative grade point average of 2.00 or higher on a 4.00 scale. Following satisfactory completion of all requirements, students will be awarded the bachelor of science in health informatics and information management degree from the University of Mississippi and are eligible to apply to take the registration examination of the American Health Information Management Association for the RHIA designation. Be advised that a misdemeanor or felony conviction may affect a graduate’s ability to sit for the certification examination or attain state licensure.

PROFESSIONAL COURSE OF STUDY

<table>
<thead>
<tr>
<th>Course</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>HI 301 Health Information Management Across Healthcare Settings</td>
<td>4</td>
</tr>
<tr>
<td>HI 302 Medical Language &amp; Pathophysiology</td>
<td>3</td>
</tr>
<tr>
<td>HI 303 Legal Foundations in HIM</td>
<td>3</td>
</tr>
<tr>
<td>HI 312 Data Analytics &amp; Visualization</td>
<td>3</td>
</tr>
<tr>
<td>HI 313 Healthcare Database Design &amp; Administration</td>
<td>3</td>
</tr>
<tr>
<td>HI 326 Human Resources Management</td>
<td>3</td>
</tr>
<tr>
<td>HI 335 Coding &amp; Classification Systems</td>
<td>4</td>
</tr>
<tr>
<td>HI 336 Research Design &amp; Healthcare Statistics</td>
<td>3</td>
</tr>
<tr>
<td>HI 340 Health Information Privacy, Security &amp; Governance</td>
<td>3</td>
</tr>
<tr>
<td>HI 341 Healthcare Standards, Terminologies &amp; Data Sets</td>
<td>3</td>
</tr>
<tr>
<td>HI 342 Seminar I</td>
<td>1</td>
</tr>
<tr>
<td>HI 345 Electronic Health Records &amp; Informatics</td>
<td>3</td>
</tr>
<tr>
<td>HI 418 Management of Health Information Systems</td>
<td>4</td>
</tr>
<tr>
<td>HI 420 Biostatistics &amp; Analytical Tools</td>
<td>3</td>
</tr>
</tbody>
</table>
PROGRESSION HEALTH INFORMATICS AND INFORMATION MANAGEMENT (Online)

This progression program is designed to allow a healthcare professional holding the Registered Health Information Technician (RHIT) credential from the American Health Information Management Association to receive credit for previous educational and professional experience and to earn a baccalaureate degree in health informatics and information management from the University of Mississippi Medical Center. The program is designed for part-time, non-traditional students. Online coursework is the method of content delivery.

PROGRAM ADMISSION REQUIREMENTS

In addition to the admission standards of the institution and the general admission requirements of the School of Health Related Professions, candidates seeking admission to the progression health informatics and information management program must:

1. Have completed a minimum of 60 semester hours of academic credit from a regionally accredited institution of higher learning;
2. Have an overall cumulative grade point average of 2.50 on a 4.00 scale;
3. Hold a current RHIT credential; and
4. Successfully complete (a grade of C or better) the following minimum prerequisite requirements:

<table>
<thead>
<tr>
<th>Prerequisite Courses</th>
<th>Number of Courses</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>English Composition</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>Humanities and Fine Arts¹</td>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td>College Algebra, Quantitative Reasoning or Higher Mathematics</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Natural Science²</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>Social or Behavioral Science²</td>
<td>2</td>
<td>6</td>
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<tr>
<td>Electives</td>
<td>30</td>
<td></td>
</tr>
<tr>
<td><strong>Total Prerequisites</strong></td>
<td></td>
<td><strong>60</strong></td>
</tr>
</tbody>
</table>

¹Humanities and Fine Arts include courses such as art history, dance, history, modern languages, music, philosophy, religion or theatre.
²Social and Behavioral Sciences include courses such as anthropology, economics, political science, psychology or sociology.
³Natural Sciences include courses such as astronomy, anatomy and physiology, biology, chemistry, geology, physics or physical science.

PROGRAM APPLICATION DEADLINE

All application documents and the application fees for the progression program in health informatics and information management must be received by the Office of Student Records and Registrar by March 1 for summer admission, May 15 for fall admission, and October 1 for spring admission. General application information and application procedures may be found in the SHRP General Admissions Requirements Policy (Policy E-SHRP-GEN-GEN-PO-00013) in the UMMC Document Center. The School reserves the right to consider and accept applications after the established deadline if places are available. To determine if a deadline has been extended, call the Office of Student Records and Registrar after the deadline at (601) 984-1080.

DEGREE

Candidates for the health informatics and information management degree must have completed the prescribed curriculum with an overall cumulative grade point average of 2.00 or higher on a 4.00 scale. Following satisfactory completion of all requirements, students will be awarded the bachelor of science in health informatics and information management degree from the University of Mississippi. Be advised that a misdemeanor or felony conviction may affect a graduate's ability to sit for the certification examination or attain state licensure.

PROFESSIONAL COURSE OF STUDY

<table>
<thead>
<tr>
<th>Course</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>HI 301 Health Information Management Across Healthcare Settings</td>
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</tr>
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<tr>
<td>HI 340 Health Information Privacy, Security &amp; Governance</td>
<td>3</td>
</tr>
<tr>
<td>HI 345 Electronic Health Records &amp; Informatics</td>
<td>3</td>
</tr>
<tr>
<td>HI 418 Management of Health Information Systems</td>
<td>4</td>
</tr>
<tr>
<td>HI 420 Biostatistics &amp; Analytical Tools</td>
<td>3</td>
</tr>
<tr>
<td>HI 421 Healthcare Compliance and Documentation Improvement</td>
<td>4</td>
</tr>
<tr>
<td>HI 424 Revenue Cycle and Reimbursement Management</td>
<td>3</td>
</tr>
<tr>
<td>HI 431 Healthcare Systems Design &amp; Project Management</td>
<td>4</td>
</tr>
<tr>
<td>HI 451 Directed Study</td>
<td>3</td>
</tr>
<tr>
<td>HI 485 Health Information Administration Professional Practicum</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total Required Hours</strong></td>
<td><strong>38</strong></td>
</tr>
</tbody>
</table>

*Upon the successful completion of HI 451, students will be awarded an additional 23 semester hours of professional credit based on previous coursework required for certification and professional credential.*
POST-BACCALAUREATE CERTIFICATE IN HEALTH INFORMATICS (Online)

Lisa Morton, PhD, RHIA, Department Chair

ABOUT THE PROFESSION

Health informatics (HI) is a dynamic field that blends healthcare information systems with business administration and management. Implementation of electronic health records has increased the need for skilled health informatics individuals and has broadened opportunities for HI practice. Employment is found in a variety of organizations, including hospitals, clinics, rehabilitation centers, home health agencies, health plans, insurance agencies, governmental agencies, educational institutions, vendor organizations and research centers.

Health informatics (HI) professionals innovate healthcare delivery and impact patient outcomes by analyzing, designing, implementing, and evaluating information systems. Health informaticians assess the information needs of healthcare providers and consumers, evaluate and enhance clinical processes, and participate in the customization, development, implementation and evaluation of clinical information systems.

DESCRIPTION OF PROGRAM

The goal of the post-baccalaureate certificate in health informatics program is to educate professionals who can contribute to high quality health care through development, implementation, and refinement of clinical information systems.

The program will provide students with knowledge and skills in the areas of information systems analysis, design, implementation and management; health information exchange; social and ethical issues in health care computing; privacy and security of electronic health information; decision support systems; and other emerging areas.

This certificate is designed for working healthcare professionals and others seeking training in health informatics. Online coursework is the method of content delivery. The target audience includes, but is not limited to:

- Clinicians (e.g., physicians, nurses, pharmacists, radiologic technologists, medical laboratory technologists, etc.) who are serving in health information technology liaison roles in their respective departments.
- Clinicians who would like to enhance their health informatics skill sets to better utilize clinical information systems, such as electronic health records and computerized provider order entry, to improve patient outcomes.
- Clinicians desiring to transition into informatics-based positions, such as clinical informatics or nursing informatics.
- Information technology professionals (such as Epic support) desiring to enhance their skill sets to include specialized training in development, implementation and evaluation of clinical information solutions, through an understanding of clinical workflow processes.
- Professionals in other fields who wish to transition into the healthcare industry by gaining knowledge in healthcare delivery and clinical information systems.

This certificate is comprised of courses, which are offered in the first year of the health informatics track of the Master of Health Informatics & Information Management (MHIIM) program. Graduates of this certificate program may choose to submit an application to the MHIIM.

Semester credit hours earned in the certificate program with a grade of ‘B’ or higher are transferable to the MHIIM.

ACCREDITATION STATUS

The health informatics track is accredited as a Master of Health Informatics by the Commission on Accreditation for Health Informatics and Information Management Education (CAHIIM), 200 East Randolph Street, Suite 5100, Chicago, IL, 60601. CAHIIM’s phone number is (312)235-3255.

PROGRAM ADMISSION REQUIREMENTS

In addition to the admission standards of the institution and the general admission requirements of the School of Health Related Professions, candidates seeking admission to the post-baccalaureate certificate program in health informatics must:

1. Have a bachelor’s degree from a regionally-accredited institution of higher learning with an overall GPA of at least 2.75 on a 4.00 scale;
2. Submit a resume;
3. Submit an essay describing the applicant’s career goals.

PROGRAM APPLICATION DEADLINE

All application documents and application fees must be received by the Office of Student Records and Registrar by May 15 for fall admission. General application information and application procedures may be found in the SHRP General Admissions Requirements Policy (Policy E-SHRP-GEN-GEN-PO-00013) in the UMMC Document Center. The School reserves the right to consider and accept applications after the established deadline if places are available. To determine if a deadline has been extended, call the registrar’s office after the deadline at (601) 984-1080.

CERTIFICATE

Candidates for the health informatics post-baccalaureate certificate must have completed the prescribed curriculum with an overall cumulative grade point average of 2.00 or higher on a 4.00 scale. Following satisfactory completion of all requirements, students will be awarded the post baccalaureate certificate in health informatics from the University of Mississippi.

PROFESSIONAL COURSE OF STUDY

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>HI 602</td>
<td>Health Care Delivery and Policy</td>
<td>3</td>
</tr>
<tr>
<td>Fall</td>
<td>HI 603</td>
<td>Perspectives in the Health Information Professions</td>
<td>1.5</td>
</tr>
<tr>
<td>Spring</td>
<td>HI 631</td>
<td>Health Informatics</td>
<td>3</td>
</tr>
<tr>
<td>Summer</td>
<td>HI 634</td>
<td>Development of Electronic Health Information Systems</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Required Hours 10
HEALTH INFORMATICS AND INFORMATION MANAGEMENT (MHIIM) (Online)
Lisa Morton, PhD, RHIA, Department Chair and Program Director

ABOUT THE PROFESSION
The Master of Health Informatics and Information Management (MHIIM) program prepares health care professionals for leadership roles in a health care system that increasingly relies on information technology. It provides students with knowledge and skills in the areas of information systems analysis, design, implementation, and management; health information exchange; social and ethical issues in health care computing; privacy and security of electronic health information; database and knowledge management; decision support systems; and other emerging areas.

The program has two tracks wherein students may earn a master of health informatics and information management degree. The health informatics track prepares graduates to assume a critical role in the development and implementation of electronic health records in hospitals and health systems as related to structure, function and transfer of information, socio-technical aspects of health computing and human-computer interaction.

Specifically, graduates will be able to do the following:

1. Describe the impact of modern computing technologies and the Internet on biomedical computing;
2. Examine sociotechnical aspects of health care computing;
3. Evaluate human computer interaction and incorporate human factors engineering principles into user interface design;
4. Examine computer skills required for implementation of technical security applications and software requirements;
5. Explore networking principles to achieve system interoperability and health information exchange; and
6. Develop a map for clinical terminologies, vocabularies and ontologies.

The health information management track prepares graduates to assume a critical role in the development and implementation of electronic health records in hospitals and health systems, to manage patient health information and medical records, administer computer information systems, collect and analyze patient data, and use classification systems and medical terminologies.

Specifically, graduates will be able to do the following:

1. Apply knowledge of health data structure, content, and acquisition to the management of health care data;
2. Apply knowledge of clinical classification systems to manage processes, policies, and procedures to ensure the accuracy of coded data;
3. Manage processes for compliance and reporting of health care data based on knowledge of reimbursement methodologies, regulations, and revenue cycle management;
4. Analyze and present data for quality management, utilization management, risk management, and other patient care related studies; and
5. Apply knowledge of research methods to facilitate biomedical research while ensuring adherence to Institutional Review Board (IRB) processes and policies.

This track will allow graduates to test for the Registered Health Information Administrator (RHIA) credential from the American Health Information Management Association if an additional five (5) hours are completed.

The master of health informatics and information management program is designed for part-time, non-traditional students. Online coursework is the method of content delivery.

ACCREDITATION STATUS
The health informatics track of the Master of Health Informatics and Information Management program is accredited by the Commission on Accreditation for Health Informatics and Information Management Education (CAHIIM), 200 East Randolph Street, Suite 5100, Chicago, IL 60601. CAHIIM’s phone number is (312)235-3255.

PROGRAM ADMISSION REQUIREMENTS
In addition to the admission standards of the institution and the general admission requirements of the School of Health Related Professions, candidates seeking admission to the master of health informatics and information management program must:

1. Have a bachelor’s degree from a regionally-accredited institution of higher learning with a GPA of at least 3.00 on a 4.00 scale on the last 60 hours attempted;
2. Submit an official GRE report;
3. Submit a resume;
4. Successfully complete (a grade of “C” or better) a course in Human Anatomy and Physiology. This includes Human Anatomy & Physiology I and II; and
5. Submit an essay;

Students will be selected on a competitive basis. Qualification does not ensure admission.

PROGRAM APPLICATION DEADLINE
All application documents and the application fees must be received by the Office of Student Records and Registrar by May 15 for fall admission. General application information and application procedures may be found in the SHRP General Admissions Requirements Policy (Policy E-SHRP-GEN-GEN-PO-00013) in the UMMC Document Center. The School reserves the right to consider and accept applications after the established deadline if places are available. To determine if a deadline has been extended, call the Office of Student Records and Registrar after the deadline at (601) 984-1080.

DEGREE
Candidates for the master of health informatics and information management degree must have completed the prescribed curriculum with an overall cumulative grade point average of 3.00 or higher on a 4.00 scale. Following satisfactory completion of all requirements, students will be awarded the master of health informatics and information management degree from the University of Mississippi.
PROFESSIONAL COURSE OF STUDY

<table>
<thead>
<tr>
<th>COURSE</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>HI 608 Data Arch, Analytics &amp; Visualization</td>
<td>3</td>
</tr>
<tr>
<td>HI 611 Research Design and Statistics in Health Informatics</td>
<td>3</td>
</tr>
<tr>
<td>HI 632 Databases and Knowledge Management</td>
<td>3</td>
</tr>
<tr>
<td>HI 634 Development of Electronic Health Information Systems</td>
<td>3</td>
</tr>
</tbody>
</table>

**HEALTH INFORMATICS TRACK**

<table>
<thead>
<tr>
<th>COURSE</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>HI 601 Data Arch, Analytics &amp; Visualization</td>
<td>3</td>
</tr>
<tr>
<td>HI 602 Health Care Delivery and Policy</td>
<td>3</td>
</tr>
<tr>
<td>HI 607 Management and Leadership in Health Informatics</td>
<td>3</td>
</tr>
<tr>
<td>HI 614 Privacy and Security for Health Informatics</td>
<td>3</td>
</tr>
<tr>
<td>HI 617 Epidemiology and Public Health Informatics</td>
<td>3</td>
</tr>
<tr>
<td>HI 619 Health Information and Computer Science</td>
<td>3</td>
</tr>
<tr>
<td>HI 631 Health Informatics</td>
<td>3</td>
</tr>
<tr>
<td>HI 632 Databases and Knowledge Management</td>
<td>3</td>
</tr>
<tr>
<td>HI 634 Development of Electronic Health Information Systems</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Required Hours: 36

*Should a student desire to sit for the Registered Health Information Administrator (RHIA) national exam, the student would need to pursue the health information management track and add the following electives. Students pursuing these electives are eligible to sit for the RHIA exam by virtue of CAHIIM accreditation of the baccalaureate program:

<table>
<thead>
<tr>
<th>COURSE</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>HI 621 Clinical Classification Systems I*</td>
<td>1</td>
</tr>
<tr>
<td>HI 622 Clinical Classification Systems II*</td>
<td>1</td>
</tr>
<tr>
<td>HI 623 Clinical Classification Systems III*</td>
<td>1</td>
</tr>
<tr>
<td>HI 625 Clinical Document Improvement Strategies*</td>
<td>1</td>
</tr>
<tr>
<td>HI 684 Management Capstone</td>
<td>1</td>
</tr>
</tbody>
</table>

HEALTH SCIENCES (BS) (Online)

Cynthia Casey, DNP, RN, Department Chair and Program Director

ABOUT THE PROGRAM

The mission of the Bachelor of Science in Health Sciences Program is to educate health professionals and provide students with a firm foundation for understanding the role of health care in the contemporary society. The bachelor of science in health sciences program provides exposure to expanded roles in healthcare management and community education. The program prepares clinical and non-clinical health professionals, leaders, managers, and educators to enter the workforce. The program also prepares students for and promotes post-baccalaureate education in clinical and non-clinical degree areas. The bachelor of science in health sciences program is a degree-completion program with three degree pathways.

The Track I Health Care Practitioner curriculum is designed to enable licensed, registered, or certified health care practitioners who are graduates of a regionally accredited associate degree health care program to prepare for a management career within their area of discipline in health care systems or organizations. Degree content focuses on management of the healthcare delivery environment. The Track I Health Care Practitioner student earns 60 hours of academic credit through the successful completion of academic courses and professional, non-traditional academic credit. Examples of individuals who may qualify for admission to the health care practitioner track include, but are not limited to, respiratory care practitioners, radiologic technologists, physical therapy assistants, occupational therapy assistants, dental hygienists, emergency medical technician-paramedics, medical laboratory technologists, and health information administrators.

The Track II Health Care Operations curriculum is designed to prepare students for a career in health care with a focus on management and leadership principles. The Track II Health Care Operations student earns 60 hours of academic credit through the successful completion of academic courses.

The Track III Healthcare Generalist curriculum is designed to enable healthcare support personnel, in health science centers and other healthcare environments, to prepare for a management career in administrative functions within health systems or organizations. Degree content focuses on administrative functions necessary to maintain and operate successful healthcare centers or organizations. The Track III Healthcare Generalist student will earn 30 hours of academic credit through the successful completion of academic courses. To be considered for the healthcare generalist track, the student must meet the requirements of the Complete 2 Compete (C2C) Initiative. Please visit http://www.msc2c.org/ to see if you qualify.

The program is designed for, but not limited to, part-time, non-traditional students. Online instruction is the method of content delivery.
### PROGRAM ADMISSION REQUIREMENTS

**Track I and Track II**

In addition to the admission standards of the institution and the general admission requirements of the School of Health Related Professions, candidates seeking admission to the health sciences program (Track I and Track II) must:

1. Have an associate degree or a minimum of 60 semester hours of academic credit from a regionally accredited institution of higher learning;
2. Submit:
   a. A copy of a current license, registration, or certification in a health care field (Track I only)
   b. An employee verification from their previous or current supervisor in a healthcare institution (Track II only); or
   c. Documentation detailing observation of various clinical and/or administrative support roles within the healthcare environment (Track II only); or
   d. Documentation of a recent community service within the health care environment (Track II only)
3. Have a minimum overall cumulative grade point average of 2.00 on a 4.00 scale; and
4. Successfully complete (a grade of “C” or better) the following minimum prerequisite requirements:

<table>
<thead>
<tr>
<th>Prerequisite Courses</th>
<th>Number of Courses</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>English Composition</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>Social or Behavioral Science</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>College Algebra, Quantitative Reasoning or Higher Mathematics</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Humanities and Fine Arts</td>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td>Natural Science</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>Electives</td>
<td></td>
<td>30</td>
</tr>
<tr>
<td><strong>Total Prerequisites</strong></td>
<td></td>
<td><strong>60</strong></td>
</tr>
</tbody>
</table>

*Social and Behavioral Sciences include courses such as anthropology, economics, political science, psychology or sociology.

**Track III**

In addition to the admission standards of the institution and the general admission requirements of the School of Health Related Professions, candidates seeking admission to the health sciences program (Track III Healthcare Generalist) must:

1. Meet the requirements of the Complete 2 Compete (C2C) Initiative. Please visit [http://www.msc2c.org/](http://www.msc2c.org/) to see if you qualify.
2. Have a minimum of 90 semester hours of academic credit from a regionally accredited institution of higher learning;
3. Submit:
   a. An employee verification from their previous or current supervisor in a healthcare institution; or
   b. Documentation detailing observation of various clinical and/or administrative support roles within the healthcare environment; or
   c. Documentation of recent community service within the health care environment
4. Have a minimum overall cumulative grade point average of 2.00 on a 4.00 scale;
5. Have not attended a postsecondary institution within 24 consecutive months of application;
6. Not have already earned a postsecondary baccalaureate degree; and
7. Successfully complete (a grade of “C” or better) the following minimum prerequisite requirements:

<table>
<thead>
<tr>
<th>Prerequisite Courses*</th>
<th>Number of Courses</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>English Composition</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>Social or Behavioral Science</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>College Algebra, Quantitative Reasoning or Higher Mathematics</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Humanities and Fine Arts</td>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td>Natural Science</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>Electives</td>
<td></td>
<td>60</td>
</tr>
<tr>
<td><strong>Total Prerequisites</strong></td>
<td></td>
<td><strong>90</strong></td>
</tr>
</tbody>
</table>

*Social and Behavioral Sciences include courses such as anthropology, economics, political science, psychology or sociology.

**READMISSION POLICY**

This policy is for bachelor of science in health sciences students who have been inactive for more than two (2) consecutive semesters and those students who have reapplied to the program after a voluntary or involuntary absence.

- Students who have been inactive for more than two (2) consecutive semesters are subject to being administratively withdrawn by the School. Additional information may be found in the Attendance and Registration for the School of Health Related Professions Policy (Policy E-SHRP-GEN-GEN-PO-00014) in the [UMMC Document Center](http://www.ummcdocs.org).
- Students will be required to re-apply to the program via the UMMC Registrar’s office and pay a new application fee.
- Updated transcripts will not be required as long as the student has not attended any other school during the period of inactivity.
- A written letter requesting consideration for readmission and an updated resume must be submitted for committee review. It is required that the letter include reasoning for inactivity.
The admission committee will review the student’s file. Once reviewed, the admission committee will determine if an interview is required. All readmissions are considered on a case-by-case basis.

Students applying for readmission are not guaranteed admission. All readmission requests must be made prior to the application deadline for the semester in which the student wishes to enroll.

Students who were placed on probation and are reapplying will only be considered for readmission on a probationary status. If readmitted, the student must complete the first 6 hours of returning classes with a 2.0 or higher GPA in order to have the probationary status removed.

PROGRAM APPLICATION DEADLINE

All application documents and the application fees must be received by the Office of Student Records and Registrar by March 1 for summer admission and May 15 for fall admission. General application information and application procedures may be found in the SHRP General Admissions Requirements Policy (Policy E-SHRP-GEN-GEN-PO-00013) in the UMMC Document Center. The School reserves the right to consider and accept applications after the established deadline if places are available. To determine if a deadline has been extended, call the Office of Student Records and Registrar after the deadline at (601) 984-1080.

NO SHOW POLICY

Additional information may be found in the Attendance and Registration for the School of Health Related Professions Policy (Policy E-SHRP-GEN-GEN-PO-00014) in the UMMC Document Center.

DEGREE

Candidates for the health sciences degree must have completed the prescribed curriculum with a cumulative grade point average of 2.00 or higher on a 4.00 scale. Following satisfactory completion of all requirements, students will be awarded the bachelor of science in health sciences degree from the University of Mississippi.

PROFESSIONAL COURSE OF STUDY (Track I – Health Care Practitioner)  

<table>
<thead>
<tr>
<th>Course</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>HS 303 Writing for Health Professionals</td>
<td>3</td>
</tr>
<tr>
<td>HS 310 Principles of Management in Healthcare</td>
<td>3</td>
</tr>
<tr>
<td>HS 311 Introduction to Research</td>
<td>3</td>
</tr>
<tr>
<td>HS 319 Interdisciplinary Health Studies</td>
<td>3</td>
</tr>
<tr>
<td>HS 330 Introduction to Statistics</td>
<td>3</td>
</tr>
<tr>
<td>HS 409 Introduction to Policy, Advocacy &amp; Ethics</td>
<td>3</td>
</tr>
<tr>
<td>HS 420 Leadership Development</td>
<td>3</td>
</tr>
<tr>
<td>HS 427 Finance and Reimbursement in Healthcare</td>
<td>3</td>
</tr>
<tr>
<td>HS 430 Strategic Decision Making in Healthcare</td>
<td>3</td>
</tr>
<tr>
<td>HS 455 Capstone Seminar</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Required Hours</strong></td>
<td><strong>30</strong></td>
</tr>
</tbody>
</table>

Upon the successful completion of HS 455, students will be awarded up to 30 semester hours of professional credit based on previous coursework required for certification and professional credential.

PROFESSIONAL COURSE OF STUDY (Track II – Health Care Operations)  

<table>
<thead>
<tr>
<th>Course</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>HS 303 Writing for Health Professionals</td>
<td>3</td>
</tr>
<tr>
<td>HS 305 Cultural Competency in Healthcare</td>
<td>3</td>
</tr>
<tr>
<td>HS 308 Foundations of Disease and Health</td>
<td>3</td>
</tr>
<tr>
<td>HS 310 Principles of Management in Healthcare</td>
<td>3</td>
</tr>
<tr>
<td>HS 311 Introduction to Research</td>
<td>3</td>
</tr>
<tr>
<td>HS 313 Health Education in Healthcare Systems</td>
<td>3</td>
</tr>
<tr>
<td>HS 319 Interdisciplinary Health Studies</td>
<td>3</td>
</tr>
<tr>
<td>HS 320 The Role of Quality Improvement in Healthcare</td>
<td>3</td>
</tr>
<tr>
<td>HS 326 Human Resources in Healthcare</td>
<td>3</td>
</tr>
<tr>
<td>HS 330 Introduction of Statistics</td>
<td>3</td>
</tr>
<tr>
<td>HS 401 Introduction to Global Health</td>
<td>3</td>
</tr>
<tr>
<td>HS 408 Organizational Behavior in Healthcare</td>
<td>3</td>
</tr>
<tr>
<td>HS 409 Introduction to Policy, Advocacy &amp; Ethics</td>
<td>3</td>
</tr>
<tr>
<td>HS 418 Community Health</td>
<td>3</td>
</tr>
<tr>
<td>HS 420 Leadership Development</td>
<td>3</td>
</tr>
<tr>
<td>HS 423 Health Promotion</td>
<td>3</td>
</tr>
<tr>
<td>HS 425 Health Behaviors</td>
<td>3</td>
</tr>
<tr>
<td>HS 427 Finance and Reimbursement in Healthcare</td>
<td>3</td>
</tr>
<tr>
<td>HS 430 Strategic Decision Making in Healthcare</td>
<td>3</td>
</tr>
<tr>
<td>HS 455 Capstone Seminar</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Required Hours</strong></td>
<td><strong>60</strong></td>
</tr>
</tbody>
</table>

PROFESSIONAL COURSE OF STUDY (Track III - Healthcare Generalist)  

<table>
<thead>
<tr>
<th>Course</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>HS 303 Writing for Healthcare Professionals</td>
<td>3</td>
</tr>
<tr>
<td>HS 310 Principles of Management in Healthcare</td>
<td>3</td>
</tr>
<tr>
<td>HS 311 Introduction to Research</td>
<td>3</td>
</tr>
<tr>
<td>HS 319 Interdisciplinary Health Studies</td>
<td>3</td>
</tr>
<tr>
<td>HS 330 Introduction to Statistics</td>
<td>3</td>
</tr>
<tr>
<td>HS 409 Introduction to Policy, Advocacy &amp; Ethics</td>
<td>3</td>
</tr>
<tr>
<td>HS 420 Leadership Development</td>
<td>3</td>
</tr>
<tr>
<td>HS 427 Finance and Reimbursement in Healthcare</td>
<td>3</td>
</tr>
<tr>
<td>HS 430 Strategic Decision Making in Healthcare</td>
<td>3</td>
</tr>
<tr>
<td>HS 455 Capstone Seminar</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Required Hours</strong></td>
<td><strong>30</strong></td>
</tr>
</tbody>
</table>
HEALTH SCIENCES (MHS) (Online)

Cynthia Casey, DNP, RN, Department Chair and Program Director

ABOUT THE PROGRAM

The Master of Health Sciences (MHS) program offers an advanced educational opportunity in health care leadership. It was created to provide graduates an opportunity to assume upper level managerial and leadership roles within the health care delivery system. The program prepares licensed, certified and/or registered health care practitioners for faculty and leadership positions within the higher education system.

The program is designed for part-time, non-traditional students. Online instruction is the method of content delivery.

PROGRAM ADMISSION REQUIREMENTS

In addition to the admission standards of the institution and the general admission requirements of the School of Health Related Professions, candidates seeking admission to the master of health sciences program must:

1. Have a bachelor’s degree from a regionally accredited institution of higher learning with a GPA of at least 3.0 on a 4.0 scale in a health care-related field. Qualifying fields include medical laboratory science, cytotechnology, dental hygiene, health care administration, health informatics, medical sciences, nursing, occupational therapy, physical therapy, psychology, public health, radiologic sciences, respiratory therapy, speech pathology, medicine or another health-related field. Professional experience may also be considered. Other degrees may be considered acceptable at the discretion of the dean;
2. Submit an official score from the GRE; and
3. Submit a letter of recommendation from a current supervisor or previous instructor.

A limited number of applicants will be admitted to the master of health sciences program during each admission cycle. Students will be selected on a competitive basis. Qualification does not ensure admission.

READMISSION POLICY

This policy is for master of health sciences students who have been inactive for more than two (2) consecutive semesters.

- Students who have been inactive for more than two (2) consecutive semesters are subject to being administratively withdrawn by the School. Additional information may be found in the Attendance and Registration for the School of Health Related Professions Policy (Policy E-SHRP-GEN-GEN-PO-00014) in the UMMC Document Center.
- Students will be required to re-apply to the program via the UMMC Registrar’s Office and pay a new application fee.
- Updated transcripts will not be required as long as the student has not attended any other school during the period of inactivity.
- A written letter requesting consideration for readmission and an updated resume must be submitted for committee review. It is required that the letter include reasoning for inactivity.
- The admission committee will review the student’s file. Once reviewed, the admission committee will determine if an interview is required. All re-admissions are considered on a case-by-case basis.

Students applying for readmission are not guaranteed admission. All readmission requests must be made prior to the application deadline for the semester in which the student wishes to enroll.

Students who were placed on probation and are reapplying will only be considered for readmission on a probationary status. If readmitted, the student must complete the first 6 hours of returning classes with a 3.0 or higher GPA in order to have the probationary status removed.

TRANSFER POLICY

This policy is for master of health sciences students who may have completed related graduate level coursework in a similar program.

- Graduate students must complete 75% of coursework through courses offered by the University of Mississippi Medical Center.
- Graduate transfer work must have been completed at a regionally accredited institution in the United States.
- Graduate transfer work must have been completed with a grade of “B” or better. No transfer course work taken as pass/fail or a similar grading system will be accepted.
- Graduate transfer credit will not be allowed for undergraduate level courses, continuing education units (CEUs), and non-credit certificate programs.
- A maximum of nine (9) credit hours may be allowed for transfer toward the master of health sciences degree, as approved by the program director and the dean. The student transfer credit form must be completed.

PROGRAM APPLICATION DEADLINE

All application documents and the application fees must be received by the Office of Student Records and Registrar by March 1 for summer admission. General application information and application procedures may be found in the SHRP General Admissions Requirements Policy (Policy E-SHRP-GEN-GEN-PO-00013) in the UMMC Document Center. The School reserves the right to consider and accept applications after the established deadline if places are available. To determine if a deadline has been extended, call the Office of Student Records and Registrar after the deadline at (601) 984-1080.

NO SHOW POLICY

Additional information may be found in the Attendance and Registration for the School of Health Related Professions Policy (Policy E-SHRP-GEN-GEN-PO-00014) in the UMMC Document Center.

DEGREE

Candidates for the master of health sciences degree must have completed the prescribed curriculum with a cumulative grade point average of 3.00 or higher on a 4.00 scale. Following satisfactory completion of all requirements, students will be awarded the master of health sciences degree from the University of Mississippi.

PROFESSIONAL COURSE OF STUDY

<table>
<thead>
<tr>
<th>COURSE</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>HS 601 Strategic Management in Healthcare</td>
<td>3</td>
</tr>
<tr>
<td>HS 602 Legal/Ethical Concepts in Healthcare</td>
<td>3</td>
</tr>
<tr>
<td>HS 604 Organizational Behavior</td>
<td>3</td>
</tr>
<tr>
<td>HS 612 Data Analysis and Outcomes Assessment</td>
<td>3</td>
</tr>
<tr>
<td>HS 616 Healthcare Administration</td>
<td>3</td>
</tr>
<tr>
<td>HS 630 Health Policy and Society</td>
<td>3</td>
</tr>
<tr>
<td>HS 650 Resource Management</td>
<td>3</td>
</tr>
<tr>
<td>HS 651 Quality and Risk Management in Healthcare</td>
<td>3</td>
</tr>
</tbody>
</table>
The Histotechnologist (HTL) is a health care professional who processes and prepares human and animal tissues to be observed by various forms of microscopy. Following proper tissue preparation, a histotechnologist stains tissue for routine and special identification of bacteria, fungi, cancer, and tissue structure abnormalities for pathological diagnosis. The histotechnologist performs standardized laboratory skills that include tissue fixation, processing, embedding, sectioning, and staining. These skills and tasks performed by the histotechnologist require patience, dexterity, and knowledge of anatomy, pathology, physiology, microbiology, immunology, molecular biology, and chemistry. This knowledge, combined with the skilled application of standardized techniques, enables the histotechnologist to apply appropriate methods for visualizing anatomic structures with high quality results. Employment for the majority of histotechnologists is in anatomic pathology laboratories within hospitals and clinics; however, career opportunities also exist in pharmaceutical, veterinary, biomedical, and academic laboratories. There is an exponential growth for opportunities in this field of study.

ACCREDITATION STATUS

The bachelor of science in histotechnology program is seeking programmatic accreditation by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS). The National Accrediting Agency for Clinical Laboratory Sciences (NAACLS) serves as the accrediting body for Histotechnology programs in the United States. All documentation regarding the accreditation process is reviewed by NAACLS. The NAACLS Program Review Committee makes recommendations for accreditation to the NAACLS Board of Directors. The NAACLS Board of Directors then awards the final accreditation. Eligibility to take certification exams may depend on whether or not the program achieves “serious applicant” status. Contact information for NAACLS is as follows: The National Accrediting Agency for Clinical Laboratory Science, 5600 North River Road, Suite 720, Rosemont, IL 60018-5119, (773) 714-8880 phone, www.naacls.org.

PROGRAM ADMISSION REQUIREMENTS

The histotechnology program is an entry-level program incorporated within the Medical Laboratory Science Department. Histotechnology students engage in common core courses with Medical Laboratory Science students and graduate with a bachelor of science degree in histotechnology from the University of Mississippi.

In addition to the admission standards of the institution and the general admission requirements of the School of Health Related Professions, candidates seeking admission to the histotechnology program must:

1. Have completed a minimum of 60 semester hours of academic credit from a regionally accredited institution of higher learning;
2. Complete a total of 12 semester hours in required science courses before the application deadline;
3. Have an overall cumulative grade point average of 2.50 on a 4.00 scale; and
4. Successfully complete (a grade of “C” or better) the following minimum prerequisite requirements:

<table>
<thead>
<tr>
<th>Prerequisite Courses</th>
<th>Number of Courses</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>HS 652 Program Development and Implementation</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>HS 653 Research for Health Professionals</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>HS 654 Contemporary Issues in Healthcare Finance</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>HS 699 Integrated Healthcare Leadership</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td><strong>Total Required Hours</strong></td>
<td><strong>36</strong></td>
<td></td>
</tr>
</tbody>
</table>

1. Social and Behavioral Sciences include courses such as anthropology, economics, political science, psychology or sociology.
2. Humanities and Fine Arts include courses such as art history, dance, history, modern languages, music, philosophy, religion or theatre.
3. Biological Sciences include courses such as general biology, cell biology, genetics, embryology and zoology. Science survey courses and science courses designed for non-majors are not acceptable for transfer credit.
4. Chemistry courses such as inorganic, organic, and biochemistry are acceptable. Science survey courses and science courses designed for non-majors are not acceptable for transfer credit.
5. Electives should be selected from a broad range of academic courses which may include immunology, cell biology, genetics, embryology, calculus, management or computer applications.

PROGRAM APPLICATION DEADLINE

All application documents and the application fees must be received by the Office of Student Records and Registrar by March 1 for fall admission. General application information and application procedures may be found in the SHRP General Admissions Requirements Policy (Policy E-SHRP-GEN-GEN-P0-00013) in the UMBC Document Center. The School reserves the right to consider and accept applications after the established deadline if places are available. To determine if a deadline has been extended, call the Office of Student Records and Registrar after the deadline at (601) 984-1080.

DEGREE AND LICENSURE

Candidates for the histotechnology degree must have completed the prescribed curriculum with an overall cumulative grade point average of 2.00 or higher on a 4.00 scale. Due to the variability of available clinical sites, completion of the required curriculum may be extended beyond the minimum of 22 months. Following satisfactory completion of all requirements, students will be awarded the bachelor of science in...
histotechnology from the University of Mississippi and are eligible to apply to take the HTL(ASCP) national certification examination to become certified as a histotechnologist. Some states may require licensure in order to practice; however, state licenses are usually based on the results of the HTL(ASCP) certification examination. Be advised that a misdemeanor or felony conviction may affect a graduate’s ability to sit for the HTL(ASCP) certification examination or attain state licensure.

PROFESSIONAL COURSE OF STUDY

JUNIOR YEAR

Fall

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>HTL 300 Introduction to Histology</td>
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<tr>
<td>HTL 305 Basic Clinical Biochemistry</td>
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<tr>
<td>HTL 310 Medical Terminology</td>
<td>2</td>
</tr>
<tr>
<td>MLS 311 Basic and Clinical Immunology</td>
<td>3</td>
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<td>MLS 313 Clinical Bacteriology</td>
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<td>MLS 327 Laboratory Operations</td>
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Spring

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<thead>
<tr>
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<tbody>
<tr>
<td>HTL 320 Histotechniques I</td>
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<td>HTL 330 Staining Techniques I</td>
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<td>HTL 350 Research Design and Statistics</td>
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<td>MLS 312 Essentials of Hematology</td>
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<td>MLS 340 General Pathology</td>
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SENIOR YEAR

Summer

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<td>MLS 323 Mycology, Parasitology and Virology</td>
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<td>MLS 405 Introduction to Molecular Diagnostics</td>
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<td>MLS 430 Research Methods</td>
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Fall

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<td>MLS 310 Body Fluid Analysis</td>
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Spring

<table>
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<td>HTL 440 Histotechnology Practicum I</td>
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<td>HTL 445 Histotechnology Practicum II</td>
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Total Required Hours 64

CLINICAL FACILITIES

Clinical educational experiences in histotechnology are provided in conjunction with the following health care facilities:

- University of Mississippi Medical Center – Jackson

MAGNETIC RESONANCE IMAGING (MS)

Kristi Moore, PhD, RT (R) (CT) ARRT, Radiologic Sciences Department Chair
Asher Street, DHA, RT (R) (MR) ARRT, MRSO, Program Director & Clinical Coordinator

ABOUT THE PROFESSION

Magnetic resonance imaging (MRI) technologists are highly skilled radiologic professionals utilizing specialized computer systems, radiofrequencies, and a strong magnetic field to create images of cross sectional anatomy for radiologists’ interpretation. The MRI technologist functions in multiple areas including issues surrounding magnet safety, performing imaging procedures, monitoring patient comfort, ensuring quality assurance, and communicating and consulting with radiologists. The MRI technologist must possess communication skills to interact with compassion to both healthy and critically ill patients.

Magnetic resonance imaging continues to grow as a diagnostic imaging technique, with the use of MRI quadrupling in recent years. The future expectations of the introduction of higher magnetic field strengths into clinical imaging departments, coupled with advanced imaging techniques such as functional MRI (fMRI) and spectroscopy, provide more detailed imaging for radiologists. The integration of MRI with Positron Emission Tomography (PET/MRI) is paving the way for the future in molecular level imaging, advancing disease management and improving care for all patients. Molecular imaging is being hailed as the next great advance in imaging. These developments provide technologists with a variety of skill enrichment opportunities and career advancements for the future.

ACCREDITATION STATUS

The magnetic resonance imaging program is accredited by the Joint Review Committee on Education in Radiologic Technology (JRCERT), mail@jrcert.org, 20 N. Wacker Drive, Suite 2850, Chicago, IL, 60606. JRCERT’s phone number is (312)704-5300.
PROGRAM ADMISSION REQUIREMENTS

In addition to the admission standards of the institution and the general admission requirements of the School of Health Related Professions, candidates seeking admission to the master of science in magnetic resonance imaging must:

1. Hold current ARRT (R) registration or be registry-eligible;
2. Have completed a bachelor of science degree from a regionally accredited institution of higher learning;
3. Have successfully completed (a grade of "C" or better) two courses of Anatomy and Physiology with lab;
4. Have a minimum overall cumulative grade point average of 3.00 on a 4.00 scale;
5. Submit official GRE report that includes verbal, quantitative, and analytical writing scores;
6. Provide three (3) letters of recommendation:
   - One (1) from current or past Radiologic Sciences Program Director
   - One (1) from current Radiologic Sciences Clinical Coordinator, if student, or Supervisor, if employed
   - One (1) from a member of the community;
7. Provide documentation of a minimum of 8 hours of observation in a Magnetic Resonance Imaging Department;
8. Have current CPR certification at the time of registration; and
9. Complete an interview.

*The program strongly recommends that students take a general physics course and additional science course as prerequisite courses.

PROGRAM ADMISSION DEADLINE

All application documents and the application fees must be received by the Office of Student Records and Registrar by April 1 for summer admission. General application information and application procedures may be found in the SHRP General Admissions Requirements Policy (Policy E-SHRP-GEN-GEN-PO-00013) in the UMMC Document Center. The School reserves the right to consider and accept applications after the established deadline if places are available. To determine if a deadline has been extended, call the Registrar’s office after the deadline at 601-984-1080.

DEGREE AND LICENSURE

Students who satisfactorily complete all the requirements will be awarded the master of science in magnetic resonance imaging from the University of Mississippi and will be eligible to take the examination for certification offered by the American Registry of Radiologic Technologists (ARRT). Candidates for certification must have an overall grade point average (GPA) in University of Mississippi Medical Center coursework of 3.0 or higher on a 4.0 scale. Most states require licensure in order to practice; however, state licenses are usually based on the results of the ARRT certification examinations. Be advised that a misdemeanor or felony conviction may affect a graduate’s ability to sit for the ARRT certification examination or attain state licensure.

PROFESSIONAL COURSE OF STUDY

<table>
<thead>
<tr>
<th>Course</th>
<th>Semester Hours</th>
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<tbody>
<tr>
<td>MRI 601 Magnetic Resonance Imaging Foundations</td>
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<tr>
<td>MRI 605 Magnetic Resonance Imaging Principles</td>
<td>3</td>
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<tr>
<td>MRI 610 Magnetic Resonance Imaging Physics</td>
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<tr>
<td>MRI 612 Applied Magnetic Resonance Imaging I</td>
<td>3</td>
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<tr>
<td>MRI 624 Applied Magnetic Resonance Imaging II</td>
<td>3</td>
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<td>MRI 650 Clinical Practicum I</td>
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<td>MRI 652 Clinical Practicum III</td>
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<td>MRI 660 Magnetic Resonance Imaging Seminar</td>
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<td>MRI 670 MRI Leadership, Education, &amp; Management</td>
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<td>MRI 690 Magnetic Resonance Imaging Research I</td>
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<td>MRI 699 Magnetic Resonance Imaging Research II</td>
<td>3</td>
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Total Required Program Hours 36

CLINICAL FACILITIES

Clinical educational experiences in magnetic resonance imaging are provided in conjunction with the following health care facilities:

- G.V. “Sonny” Montgomery VA Medical Center – Jackson
- Madison Radiological Group, LLC – Madison
- Mississippi Sports Medicine – Jackson
- Mississippi Baptist Medical Center - Jackson
- St. Dominic Hospital – Jackson
- University of Mississippi Medical Center – (University Hospital and Health System) – Jackson
- University of Mississippi Medical Center – (Jackson Medical Mall) – Jackson

MEDICAL LABORATORY SCIENCE (BS)

La'Toya Richards-Moore, PhD, MLS(ASCP)CM, Department Chair and Program Director
Lisa M. Stempak, MD, Medical Director

ABOUT THE PROFESSION

Medical laboratory science (MLS) is a dynamic profession that is ever-changing in terms of technology and professional expertise. The medical laboratory scientist is a highly skilled scientist who functions in multiple roles. Some of these roles include performing and evaluating diagnostic laboratory procedures on body fluids, developing new diagnostic procedures, supervising biomedical research projects, providing technical expertise, consulting, managing clinical and research laboratory departments, and analyzing and implementing laboratory information systems. The major areas of interest in laboratory science are hematology, immunohematology (transfusion medicine), clinical microbiology, clinical chemistry, clinical immunology, body fluid analysis and molecular diagnostics.

Career opportunities for the medical laboratory scientist are readily available and include technical and management positions in hospitals and reference laboratories, research in biomedical companies, forensic medicine, public health, sales and marketing, private consulting, health care administration and education.
As one of the fastest growing industries of the 21st century, biotechnology is developing new diagnostic tests for clinical laboratories, research laboratories, forensic laboratories and the pharmaceutical industry. The skills of the molecular scientist are in great demand in the biotechnology industry. Molecular biology has developed more than any other science in the last 10 years. The certified molecular biologist works in clinical, research, forensic and biotechnology laboratories. There is an exponential growth in opportunities in this field of study.

ACCREDITATION STATUS
The medical laboratory science program is accredited by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS), 5600 North River Road, Suite 720, Rosemont, IL 60018-5119. NAACLS’s phone number is (773) 714-8880.

TRADITIONAL MEDICAL LABORATORY SCIENCE
The traditional baccalaureate degree program in medical laboratory science is an entry-level program for students who want to become certified as a medical laboratory scientist or molecular biologist. Upon completion of the two-year program, students receive a bachelor of science and are eligible to apply to take national certification examinations to become certified as a medical laboratory scientist or molecular biologist.

PROGRAM ADMISSION REQUIREMENTS
In addition to the admission standards of the institution and the general admission requirements of the School of Health Related Professions, candidates seeking admission to the medical laboratory science program must:

1. Have completed a minimum of 60 semester hours of academic credit from a regionally accredited institution of higher learning;
2. Complete a total of 12 semester hours in required science courses before the application deadline;
3. Have an overall cumulative grade point average of 2.50 on a 4.00 scale; and
4. Successfully complete (a grade of C or better) the following minimum prerequisite requirements:

<table>
<thead>
<tr>
<th>Prerequisite Courses</th>
<th>Number of Courses</th>
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<tbody>
<tr>
<td>English Composition</td>
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<tr>
<td>General Chemistry with Lab</td>
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<tr>
<td>College Algebra, Quantitative Reasoning or Higher Mathematics</td>
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<td>3</td>
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<tr>
<td>Social or Behavioral Science¹</td>
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<td>6</td>
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<td>Humanities and Fine Arts²</td>
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<tr>
<td>Microbiology with Lab</td>
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<td>4</td>
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<td>Biological Sciences³</td>
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<tr>
<td>Electives⁴</td>
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<td>Total Prerequisites</td>
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</table>

¹Social and Behavioral Sciences include courses such as anthropology, economics, political science, psychology or sociology.
²Humanities and Fine Arts include courses such as art history, dance, history, modern languages, music, philosophy, religion or theatre.
³Biological Sciences include courses such as general biology, cell biology, anatomy and physiology, genetics, embryology and zoology. Science survey courses and science courses designed for non-majors are not acceptable for transfer credit.
⁴Electives should be selected from a broad range of academic courses which may include anatomy and physiology, cell biology, genetics, embryology, calculus, management or computer applications.

PROGRAM APPLICATION DEADLINE
All application documents and the application fees must be received by the Office of Student Records and Registrar by March 1 for fall admission. General application information and application procedures may be found in the SHRP General Admissions Requirements Policy (Policy E-SHRP-GEN-GEN-PO-00013) in the UMMC Document Center. The School reserves the right to consider and accept applications after the established deadline if places are available. To determine if a deadline has been extended, call the Office of Student Records and Registrar after the deadline at (601) 984-1080.

DEGREE AND LICENSURE
Candidates for the medical laboratory science degree must have completed the prescribed curriculum with an overall cumulative grade point average of 2.00 or higher on a 4.00 scale. Due to the variability of available clinical sites, completion of the required curriculum may be extended beyond the minimum of 24 months. Following satisfactory completion of all requirements, students will be awarded the bachelor of science in medical laboratory science from the University of Mississippi and are eligible to apply to take national certification examinations to become certified as a medical laboratory scientist or molecular biologist. Be advised that a misdemeanor or felony conviction may affect a graduate’s ability to sit for the certification examination or attain state licensure.

PROFESSIONAL COURSE OF STUDY
JUNIOR YEAR

<table>
<thead>
<tr>
<th>Fall</th>
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<tbody>
<tr>
<td>MLS 311 Basic and Clinical Immunology</td>
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<tr>
<td>MLS 313 Clinical Bacteriology</td>
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<tr>
<td>MLS 314 Essentials of Clinical Chemistry</td>
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<tr>
<td>MLS 315 Phlebotomy</td>
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<td>MLS 327 Laboratory Operations</td>
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<tr>
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<tbody>
<tr>
<td>MLS 312 Essentials of Hematology</td>
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<tr>
<td>MLS 324 Clinical Chemistry</td>
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<tr>
<td>MLS 325 Immunohematology</td>
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<td>MLS 332 Diagnostic Hemostasis</td>
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<td>MLS 340 General Pathology</td>
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SENIOR YEAR

Summer
MLS 322 Clinical Hematology 3
MLS 323 Mycology, Parasitology and Virology 3
MLS 405 Introduction to Molecular Diagnostics 3
MLS 430 Research Methods 3

Fall
MLS 310 Body Fluid Analysis 3
MLS 326 Clinical Simulation 3
MLS 413 Diagnostic Microbiology 3
MLS 416 Research Design and Statistics 3
MLS 417 Principles of Management and Education in CLS 1
MLS 429 Clinical Correlations 2

Spring
MLS 422 Hematology Practicum 3
MLS 423 Clinical Microbiology Practicum 3
MLS 424 Clinical Chemistry Practicum 3
MLS 425 Immunohematology Practicum 3

Total Required Hours 64

CLINICAL FACILITIES
Clinical educational experiences in medical laboratory science are provided in conjunction with the following health care facilities:
- Baptist Memorial Hospital-DeSoto - Southaven
- Biloxi Regional Medical Center – Biloxi
- Central Mississippi Medical Center - Jackson
- Crossgates River Oak Hospital - Brandon
- Delta Regional Medical Center - Greenville
- Magnolia Regional Health System - Corinth
- River Region Health System - Vicksburg
- Singing River Hospital – Pascagoula
- South Central Regional Medical Center – Laurel
- Southwest Mississippi Medical Center – McComb
- University of Mississippi Medical Center - Grenada
- University of Mississippi Medical Center – Jackson

NUCLEAR MEDICINE TECHNOLOGY (MS)
Kristi Moore, PhD, RT (R) (CT) ARRT, Radiologic Sciences Department Chair
Sherry J. West, DHA, RT (R) (N) ARRT, CNMT, Program Director
Chelsea P. Stephens, BSRS, RT (R) (N), CNMT, Clinical Coordinator
Anson L. Thaggard, MD, Medical Advisor

ABOUT THE PROFESSION
Nuclear medicine technology is a multidisciplinary paramedical field concerned with the use of radioactive materials for the diagnosis of various pathological disease states and for the treatment of specialized disorders. The nuclear medicine technologist (NMT) is responsible for radiation safety, quality control, preparing and administering radiopharmaceuticals, performing imaging procedures, collecting and preparing biological specimens, performing special laboratory procedures, and preparing data for interpretation by a physician. The ability to produce functional images and quantify physiologic processes at a molecular level distinguishes nuclear medicine technology from other imaging modalities such as radiography, sonography and magnetic resonance imaging (MRI).

Nuclear medicine is one of the fastest growing allied health professions due to the development of new radiopharmaceuticals for diagnostic and therapeutic purposes as well as promising research and development of cancer-detecting agents and imaging technology such as Positron Emission Tomography-Computed Tomography (PET/CT). Career opportunities are exceptional, ranging from positions as staff technologists to supervisory posts. Other positions are available in specialty areas as research technologists, PET/CT technologists and educators.

ACCREDITATION STATUS
The nuclear medicine technology program is accredited by the Joint Review Committee on Educational Programs in Nuclear Medicine Technology (JRCNMT), 820 W Danforth Rd., #B1, Edmond, OK 73034. JRCNMT’s phone number is (405) 285-0546.

PROGRAM ADMISSION REQUIREMENTS
In addition to the admission standards of the institution and the general admission requirements of the School of Health Related Professions, candidates seeking admission to the master of science in nuclear medicine technology program must:
1. Hold current ARRT (R) registration or be registry eligible;
2. Have earned a bachelor of science degree from a regionally accredited institution of higher learning;
3. Have successfully completed (a grade of “C” or better) Anatomy & Physiology with Lab (2 courses), Chemistry with Lab (1 course), and General Physics (1 course) or Radiologic Physics completed within an accredited Radiologic Sciences program;
4. Have a minimum overall cumulative grade point average of 3.00 on 4.00 scale;
5. Submit an official GRE report that includes verbal, quantitative, and analytical writing scores;
6. Provide three (3) letters of recommendation:
   • One (1) from current or past Radiologic Sciences Program Director
   • One (1) from current Radiologic Sciences Clinical Coordinator, if student, or Supervisor, if employed
   • One (1) from a member of the community;
7. Provide documentation of a minimum of 8 hours of observation in a nuclear medicine department;
8. Hold current CPR certification at the time of registration; and
9. Complete an interview.

PROGRAM APPLICATION
All application documents and the application fees must be received by the Office of Student Records and Registrar by April 1 for summer admission. General application information and application procedures may be found in the SHRP General Admissions Requirements Policy (Policy E-SHRP-GEN-GEN-PO-00013) in the UMMC Document Center. The School reserves the right to consider and accept applications after the established deadline if places are available. To determine if a deadline has been extended, call the Office of Student Records and Registrar after the deadline at (601) 984-1080.

DEGREE AND LICENSURE
Students who satisfactorily complete all the program requirements will be awarded the master of science in nuclear medicine technology from the University of Mississippi and will be eligible to take the examinations for certifications offered by the American Registry of Radiologic Technologists (ARRT) and the Nuclear Medicine Technologist Certification Board (NMTCB). Candidates for certification must have an overall grade point average (GPA) in University of Mississippi Medical Center coursework of 3.0 or higher on a 4.0 scale. Most states require licensure in order to practice; however, state licenses are usually based on the results of the ARRT and NMTCB certification examinations. Be advised that a misdemeanor or felony conviction may affect a graduate's ability to sit for the ARRT and NMTCB certification examinations or attain state licensure.

PROFESSIONAL COURSE OF STUDY

<table>
<thead>
<tr>
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<tr>
<td>NMT 601 Nuclear Medicine Foundations</td>
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<td>NMT 606 Nuclear Physics and Radiobiology</td>
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<td>NMT 610 Nuclear Medicine Technology Principles</td>
<td>3</td>
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<td>NMT 612 Applied Nuclear Medicine Imaging I</td>
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<td>NMT 624 Applied Nuclear Medicine Imaging II</td>
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<td>NMT 650 Clinical Practicum I</td>
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<td>NMT 652 Clinical Practicum III</td>
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<td>NMT 660 Nuclear Medicine Seminar</td>
<td>3</td>
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<td>NMT 670 NMT Leadership, Education, &amp; Management</td>
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<td>NMT 690 Nuclear Medicine Research Methods I</td>
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<td>NMT 699 Nuclear Medicine Research Methods II</td>
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Total Required Hours 36

CLINICAL FACILITIES
Clinical educational experiences in nuclear medicine technology are provided in conjunction with the following health care facilities:
- G. V. "Sonny" Montgomery VA Medical Center - Jackson
- Cardinal Health Nuclear Pharmacy - Jackson
- Central Mississippi Medical Center (Merit Health) - Jackson
- Baptist Medical Center – Jackson
- Jackson Heart Clinic – Jackson
- St. Dominic Hospital - Jackson
- University of Mississippi Medical Center - Jackson

OCCUPATIONAL THERAPY (MOT)
Christy M. Morgan, PhD, OTR/L, Department Chair and Program Director
Carol Tubbs, MA, OTR/L, Associate Department Chair

The UMMC Department of Occupational Therapy is completing a teach-out plan for the Master of Occupational Therapy (MOT) Program. Admission into the MOT program has been discontinued and replaced with a doctoral level degree admission process. Students interested in a degree in occupational therapy should review the information included in the Doctor of Occupational Therapy (OTD) program section of this bulletin. Please visit the School of Health Related Professions website for additional OTD admission and curriculum information.

ABOUT THE PROFESSION
The occupational therapist is a health care professional that provides intervention to individuals across the life span whose lives have been impacted by physical, psychological or developmental problems. The therapist designs activities for these individuals to maximize occupational performance in work, self-care, leisure and other daily occupations. The therapist must have the ability to effectively interact with other people and enjoy creative problem-solving. Employment opportunities are found in hospitals, rehabilitation centers, outpatient facilities, mental health programs, private practice, long-term care facilities, home health agencies, industry and school settings.

ACCREDITATION STATUS
The Master of Occupational Therapy program is accredited by the Accreditation Council for Occupational Therapy Education (ACOTE) of the American Occupational Therapy Association (AOTA), 4720 Montgomery Lane, Suite 200, Bethesda, MD 20814-3449. ACOTE may be contacted by phone at (301) 652-2682 (AOTA).
DEGREE AND LICENSURE
Candidates for the master of occupational therapy degree must have completed the prescribed curriculum, encompassing 36 continuous months (3 years) of study, with an overall cumulative grade point average of 3.00 or higher on a 4.00 scale. Completion of the Master of Occupational Therapy Program in its entirety is required for eligibility for the national certification examination. Graduates of the program are eligible to sit for the national certification examination for the occupational therapist administered by the National Board for Certification in Occupational Therapy (NBCOT). After successful completion of this exam, the individual will be an Occupational Therapist, Registered (OTR). All states require licensure in order to practice; however, state licenses are usually based on the results of the NBCOT certification examination. Be advised that a felony conviction may affect a graduate’s ability to sit for the NBCOT certification examination or attain state licensure. Note: Due to variability of available clinical sites, completion of the required curriculum may be extended beyond the minimum of 36 months. All OT students must complete Level II Fieldwork within 24 months following completion of didactic course work.

PROFESSIONAL COURSE OF STUDY*

<table>
<thead>
<tr>
<th>FIRST YEAR</th>
<th>Semester Hours</th>
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<tr>
<td>OT 310 Introduction to Occupational Therapy in Health Care Delivery</td>
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<td>OT 311 Group Process</td>
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<td>OT 315 Medical Conditions I</td>
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<td>OT 318 Introduction to Research</td>
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<td>Fall</td>
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<tr>
<td>OT 308 Structural Analysis of Human Motion</td>
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<td>OT 309 Structural Analysis of Human Motion Laboratory</td>
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<tr>
<td>OT 312 Conceptual Framework for Therapeutic Occupation I</td>
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<td>OT 323 Occupational Therapy: Pediatrics/Early Childhood</td>
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<tr>
<td>OT 337 Pediatric Fieldwork I</td>
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<tr>
<td>OT 313 Kinesiology</td>
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<tr>
<td>OT 316 Medical Conditions II</td>
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<td>OT 326 Occupational Therapy: Middle Childhood/Adolescent</td>
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<td>OT 328 Neuroscience for Occupational Therapy</td>
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<tr>
<td>OT 332 Conceptual Framework for Therapeutic Occupation II</td>
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<td>OT 317 Medical Conditions III</td>
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<td>OT 333 Occupational Therapy: Adult/Older Adult</td>
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<tr>
<td>OT 441 Analysis of Legal and Ethical Issues in Occupational Therapy</td>
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<td>OT 324 Psychiatric Medical Conditions</td>
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<td>OT 426 Neurological Principles in Occupational Therapy</td>
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<tr>
<td>OT 427 Physical Dysfunction Fieldwork I</td>
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<td>OT 434 Psychosocial Dysfunction</td>
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<td>OT 460 Research Methods I</td>
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<td>OT 422 Orthopedic Principles in Occupational Therapy</td>
<td>3</td>
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<tr>
<td>OT 430 Splinting, Orthotics and Physical Agent Modalities</td>
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<td>OT 431 Assistive Technology and Environmental Adaptations</td>
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<td>OT 435 Psychosocial Fieldwork I</td>
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<td>OT 500 Research Methods II</td>
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<td>THIRD YEAR</td>
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<td>Summer</td>
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<td>OT 515 Fieldwork II A**</td>
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<td>OT 501 Research Methods III</td>
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<td>OT 510 Advanced Therapeutic Modalities and Applications</td>
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<td>OT 516 Management Practices and Professional Leadership</td>
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<td>OT 530 Advanced Clinical Reasoning</td>
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<td>OT 542 Community Practice</td>
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About the Profession

The occupational therapist is a health care professional that provides education and intervention to individuals across the life span. Occupational therapy services are provided to individuals whose lives have been impacted by physical, cognitive, psychological or developmental problems or others who can also benefit from health promotion services. The therapist designs activities for individuals, groups, and communities to maximize occupational performance in self-care, work, leisure and other daily occupations. The therapist must have leadership capabilities, be able to effectively interact with other people and enjoy creative problem-solving. Employment opportunities are found in hospitals, rehabilitation centers, outpatient facilities, mental health programs, private practice, long-term care facilities, home health agencies, industry, school systems, and many other community-based settings.

Accreditation Status

The entry-level occupational therapy doctoral degree program has applied for accreditation and has been granted Candidacy Status by the Accreditation Council for Occupational Therapy Education (ACOTE) of the American Occupational Therapy Association (AOTA), located at 4720 Montgomery Lane, Suite 200, Bethesda, MD 20814-3449. ACOTE’s telephone number c/o AOTA is (301) 652-AOTA and its Web address is www.acoteonline.org. As a transitioning program (i.e., MOT to OTD), the program must have a pre-accreditation review, complete an on-site evaluation, and be granted Accreditation Status before its graduates will be eligible to sit for the national certification examination for the occupational therapist administered by the National Board for Certification in Occupational Therapy (NBCOT).

Program Admission Requirements

Admission into the OTD program is competitive and selective due to a limited class size. Preference is given to Mississippi residents; out-of-state applicants will be considered only if there are positions available after all qualified Mississippi applicants are accepted. The program does not accept outside coursework, work experience or experiential learning in place of any OTD curriculum course. The program does not offer advanced placement or admission based on ability to benefit.

In addition to the general admission requirements for the University of Mississippi Medical Center and the School of Health Related Professions, candidates seeking admission into the occupational therapy doctoral program must also meet the following minimum requirements:

1. Completion of a baccalaureate degree from a regionally accredited institution of higher learning or submission of a plan of study which outlines completion of a baccalaureate degree prior to summer enrollment. There is not a required major for the baccalaureate degree; however, science courses beyond the required prerequisites (above) which may be helpful to the student in the OTD program include: advanced science courses; psychology courses and/or research courses.

2. Earn a minimum overall cumulative grade point average of 3.00 on a 4.00 scale.

3. Provide evidence of 24 hours of observation under an occupational therapist or an occupational therapy assistant in at least three varied occupational therapy clinical departments (i.e., practice settings) within the two calendar years preceding the application deadline.

4. Submit an official GRE report that includes verbal, quantitative and analytical writing scores.

5. Complete all prerequisite courses with the following stipulations. By the application deadline, at least four (4) of the seven (7) prerequisite courses must be complete; completion of all seven (7) courses by the deadline is preferred. Students must achieve a grade of “C” or better on each prerequisite course with a minimum prerequisite average of 3.0 on a 4.0 scale.

6. Upon invitation, complete an interview with representatives from the Occupational Therapy Admissions Committee.

Prerequisite Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Number of Courses</th>
<th>Semester Hours</th>
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<td>Statistics (1)</td>
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<tr>
<td>General Psychology</td>
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<td>Human Growth and Development or Developmental Psychology</td>
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<td>Anatomy and Physiology with Lab (2)</td>
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<td>Physics with Lab</td>
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<tr>
<td>Biological or Physical Science: 300 level or above</td>
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<td><strong>Total Prerequisites</strong></td>
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<td><strong>24-26</strong></td>
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</table>

*Statistics may include courses such as Elementary, Behavioral or Introductory. Survey courses are not acceptable.

*One course of pure human anatomy with lab and one course of pure physiology with lab is equivalent to two combined anatomy and physiology with lab courses.

*Courses beyond the required prerequisites (above) which may be helpful to the student in the OTD program include: medical terminology; advanced science courses; psychology courses and/or research courses.

Program Application Deadline

All application documents (including completed observation forms) and the application fees must be received by the Office of Student Records and Registrar by January 15 for summer admission. Students are strongly encouraged to complete the application submission well before the deadline date whenever possible. General application information and application procedures may be found in the SHRP General Admissions Requirements Policy (Policy E-SHRP-GEN-GEN-PO-000013) in the UMMC Document Center.
DEGREE AND LICENSURE

Candidates for the doctor of occupational therapy degree must have successfully completed the prescribed curriculum, encompassing 36 continuous months (3 years) of study, with an overall cumulative grade point average of 3.00 or higher on a 4.00 scale. Once the program is accredited, graduates will be eligible to sit for the national certification examination for the occupational therapist administered by the National Board for Certification in Occupational Therapy (NBCOT). After successful completion of this exam, the individual will be an Occupational Therapist, Registered (OTR). All states require licensure in order to practice, and state licenses are usually based on the results of the NBCOT certification examination. Be advised that a misdemeanor or felony conviction may affect a graduate's ability to sit for the NBCOT certification examination or attain state licensure.

PROFESSIONAL COURSE OF STUDY

**FIRST YEAR**

<table>
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<tr>
<th>Semester</th>
<th>Course Title</th>
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<tr>
<td>Summer</td>
<td>OT 601 Functional Human Anatomy</td>
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<td>OT 602 Functional Human Anatomy Laboratory</td>
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<td>OT 605 Introduction to Occupational Therapy Practice</td>
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<td>OT 608 Group Process and Leadership</td>
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<td>OT 610 Kinesiology for Occupational Therapy</td>
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<td>OT 612 Neuroscience for Occupational Therapy</td>
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<td>OT 614 Occupation-Based Practice I</td>
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<td>OT 616 Occupational Therapy; Pediatrics I</td>
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<td>OT 617 Principles of Patient Care</td>
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<td>OT 618 Research and Evidence-Based Practice I</td>
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<td>OT 620 Occupation-Based Practice II</td>
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<td>OT 622 Medical Conditions: Physical Dysfunction</td>
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<td>OT 624 Occupational Therapy; Pediatrics II</td>
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<td>OT 625 Pediatric Fieldwork I</td>
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**SECOND YEAR**

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<tr>
<td>Summer</td>
<td>OT 630 Management I: Legal and Ethical Principles</td>
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<td>OT 632 Assistive Technology and Environmental Adaptation</td>
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<td>OT 634 Community Health and Wellness</td>
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<td>OT 638 Research and Evidence-Based Practice III</td>
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<td>OT 639 Research Proposal II</td>
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<td>Fall</td>
<td>OT 640 Occupational Therapy: Psychiatric/Psychosocial</td>
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<td>OT 642 Neurological Principles in Occupational Therapy</td>
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<td>OT 644 Orthopedic Principles in Occupational Therapy</td>
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<td>OT 645 Physical Dysfunction Fieldwork I</td>
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<td>OT 646 Case-Based Clinical Reasoning</td>
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<td>OT 650 Orthoses and Physical Agent Modalities</td>
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<td>OT 652 Specialty Interventions in Occupational Therapy</td>
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<td>OT 654 Management II: Professional Leadership and Administration</td>
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<td>OT 655 Psychiatric/Psychosocial Fieldwork I</td>
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<td>OT 658 Research and Evidence-Based Practice IV</td>
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**THIRD YEAR**

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<td>OT 670 Fieldwork II B**</td>
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<td>OT 671 Doctoral Capstone Seminar</td>
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PHYSICAL THERAPY (DPT)
Lisa Barnes, PT, DPT, PhD, Department Chair and Program Director

ABOUT THE PROFESSION
The physical therapist is a health professional who examines, designs, implements and modifies therapeutic interventions for persons of all age groups in order to enhance or maintain endurance, muscle strength and mobility, and treat pain, movement dysfunction or disability due to disease, injury, loss of a body part or birth defect. The therapist helps the individual prevent injury and overcome movement dysfunction through the use of exercise, education, assistive devices and physical procedures. Additionally, the therapist considers psychological, sociological and economic factors in interactions with clients, patients and community groups, assesses living environments and recommends adaptations to eliminate architectural barriers.

As the need for qualified professional physical therapists exists wherever health care services are required, employment opportunities include hospitals, private practices, rehabilitation centers, home health agencies, industry, research centers, nursing homes, community centers, wellness centers, clinics and school settings. The physical therapy profession offers opportunities for advancement in the areas of education, clinical specialization, management, consultation and research. Practice settings, employment arrangements, occupational responsibilities and career opportunities depend upon the interests and skills of each practitioner.

ACCREDITATION STATUS
The physical therapy program is accredited by the Commission on Accreditation in Physical Therapy Education (CAPTE), 1111 North Fairfax Street, Alexandria, VA 22314; telephone: (703) 706-3245; email: accreditation@apta.org; website: http://www.capteonline.org.

PROGRAM ADMISSION REQUIREMENTS
In addition to the admission standards of the institution and the general admission requirements of the School of Health Related Professions, candidates seeking admission to the doctor of physical therapy program must:

1. Provide evidence of observation in a minimum of two physical therapy clinical departments or practices for total of 40 hours. Additional hours and sites are considered beneficial to enhance the applicant’s knowledge of the professions. A maximum of 20 hours may be used from any one site. Hours earned through employment will not be accepted and no more than 20 hours total can be applied to the observation requirement from hours earned during internship experiences. All observation hours must be completed in the current year of application and documentation forms must be received by the application deadline;
2. Have a baccalaureate degree from a regionally accredited institution of higher learning;
3. Have a minimum overall grade point average of 3.00 on a 4.00 scale;
4. Have a minimum required course grade point average of 3.00 on a 4.00 scale;
5. Submit an official GRE report that includes verbal, quantitative, and analytical writing scores;
6. Submit a resume that includes (1) career objective; (2) educational history; (3) work history; (4) community service activities; and (5) honors and activities;
7. Submit an essay specific to the topic provided by the DPT admissions committee;
8. Be proficient in the use of computers for word processing, spreadsheet, library database searching and be able to perform Internet searches;
9. Successfully complete (a grade of "C" or better) the prerequisite courses as follows. At least five (5) of the eight (8) prerequisite courses must be completed by the end of the fall semester in which the application is submitted.

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<tr>
<th>Prerequisite Courses*</th>
<th>Number of Courses</th>
<th>Semester Hours</th>
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<tr>
<td>Statistics (mathematics, psychology or education)¹</td>
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<td>3</td>
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<tr>
<td>Biology with Lab</td>
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<tr>
<td>Chemistry with Lab</td>
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<td>Physics with Lab</td>
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<tr>
<td>Advanced Physical or Biological Science²</td>
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<td><strong>Total Prerequisites</strong></td>
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<td>28-32</td>
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*Science survey courses designed for non-science majors are not acceptable for a required course. Combined anatomy and physiology courses will be accepted as a prerequisite only if the course is taken at a 4 year institution, offered in the biology department and has a biology prefix, and is accepted as credit for biology majors. For students entering in May 2020, combined anatomy and physiology courses will no longer be accepted to meet prerequisite requirements. Normally required science courses must have been taken in the last 10 years. All physical or biological sciences listed at a particular college or university do not necessarily satisfy the prerequisite requirements; please consult with the physical therapy pre-academic advisor for clarification.

¹Must be taken at a senior college. Graduate level courses will not be used to meet prerequisite requirements.
²Must be 300 or 400 level undergraduate courses and taken at a senior college. Associated labs, whether incorporated or offered separately, must also be completed. Graduate level courses will not be used to meet prerequisite requirements.

PROGRAM APPLICATION DEADLINE
All application documents and the application fees must be received by the Office of Student Records and Registrar by November 1 for summer admission, while final fall transcripts must be received by Friday, January 17, 2020. General application information and application procedures may be found in the SHRP General Admissions Requirements Policy (Policy E-SHRP-GEN-GEN-PO-00013) in the UMMC Document Center.
### DEGREE AND LICENSURE

Candidates for the physical therapy degree must have completed the prescribed curriculum with an overall cumulative grade point average of 3.00 or higher on a 4.00 scale. Following satisfactory completion of all course requirements, the student will be awarded the doctor of physical therapy degree from the University of Mississippi. Due to the variability of available clinical sites, completion of the required curriculum may be extended beyond the minimum of 36 months. Students are recommended by the faculty for graduation. The graduate will be eligible to take the national physical therapy licensure examination. Be advised that a misdemeanor or felony conviction may affect a graduate’s ability to sit for the certification examination or attain state licensure.

### PROFESSIONAL COURSE OF STUDY

#### FIRST YEAR

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course Title</th>
<th>Hours</th>
<th>Semester Hours</th>
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<tr>
<td>Summer</td>
<td>PT 600 Anatomical Basis of Human Movement in Physical Therapy Practice</td>
<td>5</td>
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<td>PT 607 Anatomical Basis of Human Movement in Physical Therapy – Lab</td>
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<td>PT 610 Introduction to Physical Therapy Practice</td>
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<td>Fall</td>
<td>PT 601 Physiologic Basis of Physical Therapy I</td>
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<td>PT 602 Human Kinesiology and Biomechanics I</td>
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<td>PT 611 Systems Review and Clinical Dysfunction</td>
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<td>PT 620 Acute Care in Physical Therapy I</td>
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<td>PT 630 Principles of Physical Therapy Practice I</td>
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<td>PT 603 Physiologic Basis of Physical Therapy II</td>
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<td>PT 621 Clinical Tests and Measures in Physical Therapy Practice</td>
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<td>PT 631 Assessment and Management of Musculoskeletal Problems I</td>
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<td>PT 632 Principles of Physical Therapy Practice II</td>
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<td>PT 660 Evidence-Based Physical Therapy Practice I</td>
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#### SECOND YEAR

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<td>PT 604 Human Kinesiology and Biomechanics II</td>
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<td>PT 605 Pharmacology in Physical Therapy</td>
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<td>PT 633 Acute Care in Physical Therapy II</td>
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<td>PT 640 Legal and Ethical Issues in Healthcare</td>
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<td></td>
<td>PT 670 Specialty Practice in Physical Therapy Elective</td>
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<td>Fall</td>
<td>PT 617 Issues in Community Health and Prevention and Wellness</td>
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<td>PT 634 Assessment and Management of Musculoskeletal Problems II</td>
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<td>PT 650 Clinical Experience I</td>
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<td>PT 625 Physical Therapy Practice Across Client Populations</td>
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<td>PT 636 Neurological Aspects of Physical Therapy Practice I</td>
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<td>PT 661 Evidence-Based Physical Therapy Practice II</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>PT 665 Research Methodology II</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>PT 670 Specialty Practice in Physical Therapy Elective</td>
<td>2*</td>
<td>17*</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>17</strong></td>
<td></td>
</tr>
</tbody>
</table>

#### THIRD YEAR

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course Title</th>
<th>Hours</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Summer</td>
<td>PT 613 Applied Clinical Decision-Making</td>
<td>3</td>
<td></td>
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<tr>
<td></td>
<td>PT 651 Clinical Experience II</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>9</strong></td>
<td></td>
</tr>
<tr>
<td>Fall</td>
<td>PT 616 Comprehensive Capstone</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>PT 637 Neurological Aspects of Physical Therapy Practice II</td>
<td>4</td>
<td></td>
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<tr>
<td></td>
<td>PT 638 Neurological Aspects of Physical Therapy Practice III</td>
<td>4</td>
<td></td>
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<tr>
<td></td>
<td>PT 642 Resource Management in Physical Therapy</td>
<td>3</td>
<td></td>
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<tr>
<td></td>
<td>PT 670 Specialty Practice in Physical Therapy Elective</td>
<td>2*</td>
<td>14*</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>14</strong></td>
<td></td>
</tr>
</tbody>
</table>
RADIOLOGIC SCIENCES (BS)
Kristi Moore, PhD, RT (R) (CT), ARRT, Department Chair and Program Director
Seena Shazowee Edgerton, DHA, RT (R) (M), ARRT, Clinical Coordinator

ABOUT THE PROFESSION
The field of radiologic sciences is a dynamic profession that is ever-changing in terms of technology and professional expertise. Radiology is one of the fastest growing, most exciting and increasingly important fields in medicine today. Radiologic sciences is a specialized field in which professional radiologic technologists perform medical imaging procedures for the purpose of diagnosing disease and injury. The radiologic technologist is responsible for performing a variety of challenging and interesting examinations on a diverse patient population. Those procedures include conventional radiography, fluoroscopy and surgical studies. Although many graduates seek employment as diagnostic radiographers, some choose to specialize in advanced imaging modalities, such as magnetic resonance imaging, computed tomography, sonography, radiation therapy, nuclear medicine, mammography, vascular imaging and quality management. As an integral part of the healthcare team, radiologic technologists endeavor to provide outstanding patient care while limiting radiation exposure to patients, themselves and others.

A career as a radiologic technologist offers a promising future, job stability and competitive salaries with other health professionals who have similar educational backgrounds. Excellent career opportunities exist in hospitals, diagnostic imaging centers and private physician’s offices. The bachelor of science in radiologic sciences provides graduates opportunities for career advancement in areas such as administration, medical sales, education, quality management and public health facilities. As technology advances and the population ages, the demand for radiologic procedures has increased, thus creating a demand for new professionals in the field.

ACCREDITATION STATUS
The radiologic sciences program is accredited by the Joint Review Committee on Education in Radiologic Technology (JRCERT), mail@jrcert.org, 20 N. Wacker Dr., Suite 2850; Chicago, IL 60606-3182. JRCERT’s phone number is (312) 704-5300.

TRADITIONAL RADIOLOGIC SCIENCES
The traditional baccalaureate degree program in radiologic sciences is an entry-level program for students who want to become a registered radiologic technologist. Upon completion of the program, consisting of 22 continuous months, students receive a bachelor of science degree and are prepared to apply for and are eligible to take the examination for certification as a registered radiologic technologist.

PROGRAM ADMISSION REQUIREMENTS
In addition to the admission standards of the institution and the general admission requirements of the School of Health Related Professions, candidates seeking admission to the radiologic sciences program must:
1. Have completed a minimum of 60 semester hours of academic credit from a regionally accredited institution of higher learning;
2. Have a minimum overall cumulative grade point average of 2.50 on 4.00 scale;
3. Complete an interview with the Radiologic Sciences Admissions Committee;
4. Submit ACT scores;
5. Hold current CPR certification at the time of registration;
6. Successfully complete a background check at the time of registration; and
7. Successfully complete (a grade of “C” or better) the following minimum prerequisite number of required courses:

<table>
<thead>
<tr>
<th>Prerequisite Courses</th>
<th>Number of Courses</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>English Composition</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>Social or Behavioral Science(^1)</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>College Algebra, Quantitative Reasoning or Higher Mathematics</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Speech</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Humanities and Fine Arts(^2)</td>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td>Anatomy and Physiology with Lab</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>Natural Sciences(^3)</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Basic Computer Concepts and Applications</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Electives(^4)</td>
<td></td>
<td>18</td>
</tr>
<tr>
<td><strong>Total Prerequisites</strong></td>
<td></td>
<td><strong>60</strong></td>
</tr>
</tbody>
</table>

\(^1\)Social and Behavioral Sciences include courses such as anthropology, economics, political science, psychology or sociology.
\(^2\)Humanities and Fine Arts include courses such as art history, dance, history, modern languages, music, philosophy, religion or theatre.
\(^3\)Natural Sciences include courses such as astronomy, biology, chemistry, geology, physics or physical science.
\(^4\)The Radiologic Sciences Admissions Committee highly recommends general chemistry with lab and general physics as electives. Additional recommended electives are medical terminology, natural sciences (biology, microbiology), advanced mathematics and advanced computer sciences.

PROGRAM APPLICATION DEADLINE
All application documents and the application fees must be received by the Office of Student Records and Registrar by February 15 for fall admission. General application information and application procedures may be found in the SHRP General Admissions Requirements Policy (Policy E-SHRP-GEN-GEN-PO-00013) in the UMMC Document Center. The School reserves the right to consider and accept applications.
after the established deadline if places are available. To determine if a deadline has been extended, call the Office of Student Records and Registrar after the deadline at (601) 984-1080.

DEGREE AND LICENSURE
Candidates for the radiologic sciences degree must have completed the prescribed curriculum with an overall cumulative grade point average of 2.00 or higher on a 4.00 scale. Following satisfactory completion of all requirements, students will be awarded the bachelor of science in radiologic sciences from the University of Mississippi and are eligible to take the examination for certification offered by the American Registry of Radiologic Technologists (ARRT). Most states require licensure in order to practice; however, state licenses are usually based on the results of the ARRT certification examination. Be advised that a misdemeanor or felony conviction may affect a graduate’s ability to sit for the ARRT certification examination or attain state licensure.

PROFESSIONAL COURSE OF STUDY

JUNIOR YEAR

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course Title</th>
<th>Hours</th>
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<tbody>
<tr>
<td>Fall</td>
<td>RAD 300 Concepts of Radiologic Sciences</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>RAD 306 Radiographic Procedures I</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>RAD 312 Radiation Protection</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>RAD 318 Principles of Image Formation</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>RAD 324 Age Specific Patient Care</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>RAD 354 Clinical Practicum I</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>14</strong></td>
</tr>
<tr>
<td>Spring</td>
<td>RAD 330 Radiologic Physics</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>RAD 336 Radiobiology</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>RAD 342 Research Methods</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>RAD 348 Radiographic Procedures II</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>RAD 360 Clinical Practicum II</td>
<td>2</td>
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<tr>
<td></td>
<td>RAD 418 Digital Image Acquisition and Display</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
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</tr>
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</table>

SENIOR YEAR

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Summer</td>
<td>RAD 400 Legal and Ethical Issues in Imaging Sciences</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>RAD 451 Management Issues in Diagnostic Health Care</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>RAD 454 Clinical Practicum III</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>RAD 472 Seminar I</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>10</strong></td>
</tr>
<tr>
<td>Fall</td>
<td>RAD 406 Radiographic Procedures III</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>RAD 412 Advanced Medical Imaging Science</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>RAD 420 Image Evaluation and Critique</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>RAD 430 Pharmacology and Drug Administration</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>RAD 460 Clinical Practicum IV</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>12</strong></td>
</tr>
<tr>
<td>Spring</td>
<td>RAD 424 Principles of Computed Tomography</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>RAD 436 Radiographic Pathology</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>RAD 440 Advanced Clinical Management</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>RAD 448 Radiographic Procedures IV</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>RAD 466 Clinical Practicum V</td>
<td>3</td>
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<tr>
<td></td>
<td>RAD 475 Seminar II</td>
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</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>13</strong></td>
</tr>
</tbody>
</table>

Total Required Hours | 64

CLINICAL FACILITIES
Clinical educational experiences in radiologic sciences are provided in conjunction with the following health care facilities:

- Baptist Medical Center Yazoo - Yazoo City
- G. V. "Sonny" Montgomery VA Medical Center - Jackson
- Madison Radiological Group LLC - Madison
- Medical Associates of Vicksburg - Vicksburg
- Merit Health Rankin - Brandon
- MeritHealth River Region - Vicksburg
- Mississippi Methodist Rehabilitation Center - Jackson
- University of Mississippi Medical Center (Jackson Medical Mall) - Jackson
- University of Mississippi Medical Center (Lakeland Family Medicine Center) - Jackson
- University of Mississippi Medical Center - Jackson
- University Physicians Grants Ferry Clinic - Flowood

ADVANCED STANDING RADIOLOGIC SCIENCES (Online)
The advanced standing baccalaureate degree program in radiologic sciences is intended to enhance the quality and education of registered radiologic technologists. It enables practicing registered radiologic technologists to update their education background, enhance their didactic skills, improve their clinical decision-making skills, and receive the Bachelor of Science in Radiologic Sciences. The program, offered across five semesters, is designed for part-time, non-traditional students. Online course work is the method of content delivery.
### PROGRAM ADMISSION REQUIREMENTS

In addition to the admission standards of the institution and the general admission requirements of the School of Health Related Professions, candidates seeking admission to the advanced standing radiologic sciences program must:

1. Submit a copy of current ARRT (R) credential or be registry eligible;
2. Have completed a minimum of 60 semester hours of academic credit (exclusive of physical education, military science, dogmatic religion, and vocational courses) from a regionally accredited institution of higher learning;
3. Have a minimum cumulative GPA of 2.50 on a 4.00 scale; and
4. Successfully complete (a grade of “C” or better) the following minimum prerequisite number of required courses below:

<table>
<thead>
<tr>
<th>Prerequisite Courses</th>
<th>Number of Courses</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>English Composition</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>Social or Behavioral Science¹</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>College Algebra, Quantitative Reasoning or Higher Mathematics</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Humanities and Fine Arts²</td>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td>Anatomy and Physiology with lab</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>Electives³</td>
<td></td>
<td>28</td>
</tr>
</tbody>
</table>

**Total Prerequisites**

60

¹Social and Behavioral Sciences include courses such as anthropology, economics, political science, psychology or sociology.

²Humanities and Fine Arts include courses such as art history, dance, history, modern languages, music, philosophy, religion or theatre.

³The Radiologic Sciences Admissions Committee highly recommends general chemistry with lab and general physics as electives. Additional recommended electives are medical terminology, natural sciences (biology, microbiology), advanced mathematics and advanced computer sciences.

### PROGRAM APPLICATION DEADLINE

All application documents and application fees must be received by the Office of Student Records and Registrar by July 1 for fall admission. General application information and application procedures may be found in the SHRP General Admissions Requirements Policy (Policy E-SHRP-GEN-GEN-PO-00013) in the UMMC Document Center. The School reserves the right to consider and accept applications after the established deadline if places are available. To determine if a deadline has been extended, call the Office of Student Records and Registrar after the deadline at (601) 984-1080.

### DEGREE

Candidates for the radiologic sciences degree must have completed the prescribed curriculum with an overall cumulative grade point average of 2.00 or higher on a 4.00 scale. Following satisfactory completion of all requirements, students will be awarded the bachelor of science in radiologic sciences degree from the University of Mississippi.

### PROFESSIONAL COURSE OF STUDY

<table>
<thead>
<tr>
<th>Course</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>RAD 400 Legal and Ethical Issues in Imaging Sciences</td>
<td>3</td>
</tr>
<tr>
<td>RAD 414 Advanced Clinical Practice Skills</td>
<td>4</td>
</tr>
<tr>
<td>RAD 418 Digital Image Acquisition and Display</td>
<td>3</td>
</tr>
<tr>
<td>RAD 430 Pharmacology and Drug Administration</td>
<td>2</td>
</tr>
<tr>
<td>RAD 436 Radiographic Pathology</td>
<td>3</td>
</tr>
<tr>
<td>RAD 438 Radiographic Image Analysis</td>
<td>4</td>
</tr>
<tr>
<td>RAD 442 Clinical Research Methods</td>
<td>4</td>
</tr>
<tr>
<td>RAD 451 Management Issues in Diagnostic Health Care</td>
<td>3</td>
</tr>
<tr>
<td>RAD 478 Computed Tomography Applications and Sectional Imaging</td>
<td>4</td>
</tr>
<tr>
<td>RAD 484 Radiologic Sciences Directed Study*</td>
<td>4</td>
</tr>
</tbody>
</table>

**Total Required Hours** 34

*Upon the successful completion of RAD 484, students will be awarded an additional 30 semester hours of professional credit based on previous course work required for certification and professional credential.

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### UNIVERSITY STUDIES (US) (Online)

Cynthia Casey, DNP, RN, Health Sciences Department Chair

### ABOUT THE PROGRAM

The University Studies curriculum is designed to enable healthcare support personnel, in health science centers and other healthcare environments, to prepare for a management career in administrative functions within health systems or organizations. Degree content focuses on administrative functions necessary to maintain and operate successful healthcare centers or organizations. The University Studies student will earn 30 hours of academic credit through the successful completion of academic courses. To be considered for the University Studies program, the student must meet the requirements of the Complete 2 Compete (C2C) Initiative. Please visit [http://www.msc2c.org/](http://www.msc2c.org/) to see if you qualify.

The program is designed for full-time, non-traditional students. Online instruction is the method of content delivery.

### PROGRAM ADMISSION REQUIREMENTS

In addition to the admission standards of the institution and the general admission requirements of the School of Health Related Professions, candidates seeking admission to the university studies program must:

1. Meet the requirements of the Complete 2 Compete (C2C) Initiative. Please visit [http://www.msc2c.org/](http://www.msc2c.org/) to see if you qualify.
2. Have a minimum of 90 semester hours of academic credit from a regionally accredited institution of higher learning
3. Submit:
   a. An employee verification from their previous or current supervisor in a healthcare institution; or
   b. Documentation detailing observation of various clinical and/or administrative support roles within the healthcare environment; or
   c. Documentation of recent community service within the health care environment
4. Have a minimum overall cumulative grade point average of 2.00 on 4.00 scale;
5. Have not attended a postsecondary institution within 24 consecutive months of application;  
6. Not have already earned a postsecondary baccalaureate degree; and  
7. Successfully complete (a grade of "C" or better) the following minimum prerequisite requirements:

<table>
<thead>
<tr>
<th>Prerequisite Courses*</th>
<th>Number of Courses</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>English Composition</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>Social or Behavioral Science¹</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>College Algebra, Quantitative Reasoning or Higher Mathematics</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Humanities and Fine Arts²</td>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td>Natural Science³</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>Academic Electives</td>
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<td>60</td>
</tr>
<tr>
<td><strong>Total Prerequisites</strong></td>
<td><strong>90</strong></td>
<td></td>
</tr>
</tbody>
</table>

¹Social and Behavioral Sciences include courses such as anthropology, economics, political science, psychology or sociology.  
²Humanities and Fine Arts include courses such as art history, dance, history, modern languages, music, philosophy, religion or theatre.  
³Natural Sciences include courses such as astronomy, anatomy and physiology, biology, chemistry, geology, physics or physical science.  
*A letter grade of "D" and some technical credits may be considered for applicants in University Studies as outlined by IHL policy 521.A2.

The program director and the dean must approve any exceptions to the requirements listed above. All applicants are subject to interview.

**PROGRAM APPLICATION DEADLINE**
All application documents and the application fees must be received by the Office of Student Records and Registrar by March 1 for summer admission. General application information and application procedures may be found in the SHRP General Admissions Requirements Policy (Policy E-SHRP-GEN-GEN-PO-00013) in the UMMC Document Center. The School reserves the right to consider and accept applications after the established deadline if places are available. To determine if a deadline has been extended, call the Office of Student Records and Registrar after the deadline at (601) 984-1080.

**NO SHOW POLICY**
Additional information may be found in the Attendance and Registration for the School of Health Related Professions Policy (Policy E-SHRP-GEN-GEN-PO-00014) in the UMMC Document Center.

**DEGREE**
Candidates for the university studies degree must have completed the prescribed curriculum with a cumulative grade point average of 2.00 or higher on a 4.00 scale. Following satisfactory completion of all requirements, students will be awarded the bachelor of science in university studies degree from the University of Mississippi.

**PROFESSIONAL COURSE OF STUDY**

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course Details</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Summer</strong></td>
<td><strong>HS 310 Principles of Management in Healthcare</strong></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>HS 319 Interdisciplinary Health Studies</strong></td>
<td>3</td>
</tr>
<tr>
<td><strong>Fall</strong></td>
<td><strong>HS 303 Writing for Health Professionals</strong></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>HS 330 Introduction to Statistics</strong></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>HS 409 Introduction to Policy, Advocacy &amp; Ethics</strong></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>HS 427 Finance and Reimbursement in Healthcare</strong></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>TOTAL REQUIRED HOURS</strong></td>
<td>30</td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td><strong>HS 311 Introduction to Research</strong></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>HS 430 Strategic Decision Making in Healthcare</strong></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>HS 455 Capstone Seminar</strong></td>
<td>3</td>
</tr>
</tbody>
</table>

**COURSES OF INSTRUCTION**

**DHA 700. Leadership Strategies in Health Entities.** An exploration of leadership strategies that generate value, competitive advantage, and growth in health entities. Students will be exposed to core concepts, analytical techniques, and frameworks. Online, Internet, or Web-based Lecture (3 hours)

**DHA 706. Foundations of Health Policy.** An examination of health policy and economic issues as they relate to the healthcare delivery system. The complex arrangements and interactions among governmental, private not-for-profit, and for-profit systems are explored within a context including economic, legal, socio-political, and public policy perspectives. Online, Internet, or Web-based Lecture (3 hours)

**DHA 712. Strategic Change Management.** A disquisition of the strategic change management process in the delivery of healthcare. Within the context of healthcare mission, planning, resource allocation, program implementation, and program evaluation are examined. Online, Internet, or Web-based Lecture (3 hours)

**DHA 718. Current Trends in Accreditation & Licenses.** An inquiry into the foundations, requirements, and trends in various accrediting and licensing entities within healthcare. Online, Internet, or Web-based Lecture (3 hours)

**DHA 724. Health Care Law, Regulations & Ethics.** An exploration of the legal and ethical issues and dilemmas in the delivery of healthcare. The principles and practical application of laws and regulations affecting operational decisions of healthcare providers, health plans and third party payers along with the social, moral, and ethical issues encountered in the balance of patient interests, needs, and rights. Online, Internet, or Web-based Lecture (3 hours)

**DHA 736. Health Economics.** A disquisition of economic theory, trends, market issues, and applications as related to healthcare delivery. The application of economic analytical techniques to healthcare markets, quality improvement, and patient safety will be explored. Online, Internet, or Web-based Lecture (3 hours)
DHA 748. Communications in Health Organizations. An exploration of concepts and issues related to communication among internal entities and with external entities in the delivery of healthcare. Interprofessional collaborative practice, interprofessional education, knowledge management, negotiation, mediation, and public relations will be studied. Online, Internet, or Web-based Lecture (3 hours)

DHA 754. Fundamentals of Applied Research. An inquiry into the principles and techniques for designing and implementing research studies in the healthcare environment. Critical assessment of literature, analysis and interpretation of results, and application to management decisions will be studied. Online, Internet, or Web-based Lecture (3 hours)

DHA 756. Quality Processes in Health Organization. A review of methods to improve healthcare systems and healthcare delivery. Students will learn to focus on identifying opportunities to improve process, developing methods to identify factors that impact process, and using data to determine appropriate actions. Online, Internet, or Web-based Lecture (3 hours)

DHA 760. Fiscal Responsibility and Accountability. An examination of financial management and operations theory as related to healthcare delivery. Online, Internet, or Web-based Lecture (3 hours)

DHA 764. Health Systems. A discussion of the evolution, structure, and current issues in the health systems. Students will be exposed to provider, supplier, and payer aspects of health systems as well as to healthcare disparity within the United States but especially within Mississippi. Online, Internet, or Web-based Lecture (3 hours)

DHA 767. Current Topics in Health Administration. An exploration of the rapidly changing health care landscape. Students will examine executive-level managers’ use of innovative and strategic practices to capitalize on trends and optimize potential opportunities in today’s health care market. Online, Internet, or Web-based Lecture (3 hours)

DHA 770. Epidemiology. An exploration of epidemiological principles and tools of investigation as applied to managerial decision-making in healthcare delivery. Students will examine health behaviors and lifestyles that impact demand on healthcare delivery systems, require integration of health services, necessitate preventive programs, and affect continuity of care. Online, Internet, or Web-based Lecture (3 hours)

DHA 776. Applied Research Techniques. A continuation of DHA 754, Fundamentals of Applied Research. Students will apply research methods to community health problems and critique research in terms of design, technique, analysis, and interpretation. Online, Internet, or Web-based Lecture (3 hours)

DHA 791. Doctoral Project Proposal. In consultation with the department chair and advisory committees, students will write and successfully defend a doctoral research project proposal in which they describe the problem and question(s) to be answered, the introduction, the literature review, and the investigation portions of the project. Online, Internet, or Web-based Dissertation (9 hours)

DHA 798. Doctoral Project. In consultation with the department chair and the advisory committees, research, findings, implementations and conclusions of the doctoral research project will be defended and recorded. Online, Internet, or Web-based Dissertation (3-9 hours)

HI 301. Health Information Mgmt Across Health Ca. Health information systems in various healthcare settings including record content, access and retention, accreditation and licensure, electronic health records, and comparative reimbursement systems. Online, Internet, or Web-based Lecture/Lab (4 hours)

HI 302. Medical Language & Pathophysiology. A study of current clinical concepts with emphasis on medical language, disease etiologies and evidence-based treatments. Online, Internet, or Web-based Lecture (3 hours)

HI 303. Legal Foundations in HIM. A study of health information laws, regulations, and standards; professional ethical issues; legal health records in an electronic environment; and e-discovery guidelines. Online, Internet, or Web-based Lecture (3 hours)

HI 312. Data Analytics & Visualization. The application of analytical tools to compile, analyze and visualize healthcare data. Online, Internet, or Web-based Lecture (3 hours)

HI 313. Healthcare Database Design & Admin. Utilize technology for data collection, storage, analysis, and reporting of information by applying knowledge of database architecture and design to meet organizational needs. Online, Internet, or Web-based Lecture (3 hours)

HI 326. Human Resource Management. Principles and policies of personnel administration including interviewing, evaluating, and compensating with emphasis on healthcare settings. Online, Internet, or Web-based Lecture (3 hours)

HI 330. Special Topics. Elective. Content varies. May be repeated for credit. Prerequisite: Permission of program director Online, Internet, or Web-based Lecture (1-3 hours)

HI 335. Coding & Classification Systems. Classifying diagnoses and procedures; case mix classifications; and provider reimbursement mechanisms for inpatients and outpatients. Prerequisite HI 302. Online, Internet, or Web-based Lecture (4 hours)

HI 336. Research Design & Healthcare Statistics. The application of research methods including healthcare statistics to explore health information practices. Online, Internet, or Web-based Lecture (3 hours)

HI 340. Health Info Privacy, Security, Governance. Advanced application of legal concepts regarding managing access and disclosure of personal health information, ensuring privacy and security of protected health information, and enterprise-wide information management. Online, Internet, or Web-based Lecture (3 hours)

HI 345. Electronic Health Records & Informatics. Applied principles of health informatics, including electronic health record technologies and infrastructure, human factors and ergonomics, health information exchange to support population health, e-health and consumer informatics. Online, Internet, or Web-based Lecture (3 hours)

HI 418. Management of Health Information Systems. Apply general principles of management in the administration of health information services; interpret concepts of change management theories, techniques and leadership. Online, Internet, or Web-based Lecture (4 hours)

HI 420. Biostatistics & Analytical Tools. Analyze statistical data to visualize trends to demonstrate quality, safety, and effectiveness while facilitating healthcare decision making. Online, Internet, or Web-based Lecture (3 hours)

HI 421. Health Care Compliance and Document Imp. Determine processes for compliance with current laws and standards related to health information initiatives and revenue cycle, including verification of health record documentation in supporting patient care and the claims process. Online, Internet, or Web-based Lecture (4 hours)

HI 424. Revenue Cycle and Reimbursement Mgmt. Clinical data and reimbursement management; compliance strategies and reporting; charge description master management; case-mix management; audit processes for compliance and reimbursement; payment systems (such as prospective payment systems, APCs, RBRVS, RUGs, MSDRGs, etc.); revenue cycle management. Online, Internet, or Web-based Lecture (3 hours)

HI 428. Qual Mgmt & Perf Improvement Strategies. Management of the quality assessment and performance improvement function, including benchmarking, statistical quality control and risk management; utilization and resource management; disease management process (such as case management, critical path); outcomes measurement (such as patient, customer satisfaction, disease specific); benchmarking techniques; patient and organization safety initiatives. Online, Internet, or Web-based Lecture (3 hours)
HI 430. Special Topics. Treatment of specific subjects not dealt with fully in other courses. This elective course may be repeated for credit. Online, Internet, or Web-based Lecture (1-4 hours)

HI 431. Healthcare Systems Design & Project Mgmt. Utilize project management tools to plan, design, implement and evaluate health information systems. Online, Internet, or Web-based Lecture (4 hours)

HI 432. Capstone Experience. Applied health information principles through completion of a formal capstone project in a healthcare setting. Online, Internet, or Web-based Clinical Rotation (2 hours)

HI 442. Seminar II. Self-guided study to review content of senior courses taken. Students take a mock RHIA exam to assess readiness for the registry exam, and then sit for the RHIA exam administered by AHIMA. Online, Internet, or Web-based Lecture (2 hours)

HI 451. Directed Study. Projects related to advanced health informatics and information management topics to demonstrate management and leadership skills. Online, Internet, or Web-based Lecture (3 hours)

HI 485. Health Info Admin Professional Practicum. Project-based practice of health information administration in affiliated healthcare organizations that support or regulate healthcare organizations or healthcare professionals. Projects completed will relate to didactic courses taken previously or concurrently. Online, Internet, or Web-based Clinical Rotation (1 hour)

HI 600. Health Information Management. Health information systems in various settings including record content, record retention requirements, accreditation and licensure, filing and numbering systems, vital statistics, electronic health records, documentation requirements, quality assessment, and reimbursement methodologies. Online, Internet, or Web-based Lecture (3 hours)

HI 601. Medical Concepts. A study of current clinical concepts in diseases and their treatments with emphasis on medical language, specified diseases and their causes, lesions, manifestations, and treatments. Online, Internet, or Web-based Lecture (3 hours)

HI 602. Health Care Delivery and Policy. A survey of the modern health care system, covering health information technology, financing health care, population health policies that serve as the foundation of the US health care system. Online, Internet, or Web-based Lecture (3 hours)

HI 603. Perspectives in the Health Info Prof. Provides an overview of the disciplines that comprise the health information field, including a survey of professional certifications, principal publications, essential core competencies, and the value of information as a tool. Online, Internet, or Web-based Lecture (1 hour)

HI 606. Mgmt of Health Info Services & Systems. Development of managerial and leadership skills for managing health information services through group interaction, projects, and reading; principles and policies of human resource management including interviewing, evaluating, and compensating with emphasis on healthcare settings. Online, Internet, or Web-based Lecture (3 hours)

HI 607. Management and Leadership in Health Info. Management and leadership strategies with emphasis on health informatics issues. Online, Internet, or Web-based Lecture (3 hours)

HI 608. Data Arch, Analytics, & Visualization. Overview of data sciences focusing on architecture, analytics, visualization, mining, big data and warehousing. Online, Internet, or Web-based Lecture (3 hours)

HI 610. Privcy, Sec, & Legl aspects of Hlth Info. Principles of law and their application in the healthcare field, the health record as a legal document, release of information, confidential communications, consents, authorizations, and risk management. HIPAA and HITECH requirements for privacy and security. Online, Internet, or Web-based Lecture (3 hours)

HI 611. Research Design and Statistics in Health. Health informatics research design and statistics. Special focus on critical review and techniques of applied research. Online, Internet, or Web-based Lecture (3 hours)

HI 613. Health Care Performance Improvement Stra. Principles of performance improvement applied to healthcare organizations. Online, Internet, or Web-based Lecture (3 hours)

HI 614. Privacy and Security for Health Informat. Assessment of security vulnerabilities and threats, exploration of technical applications and software tools used for securing health information systems. Addresses compliance with legal and regulatory guidelines. HIPAA and HITECH requirements for privacy and security. Online, Internet, or Web-based Lecture (3 hours)

HI 615. Healthcare Reimbursement & Financial Man. A study of the relationship between health information management and healthcare reimbursement. Online, Internet, or Web-based Lecture (3 hours)

HI 617. Epidemiology & Public Health Informatic. An overview of the principles, methods, and issues in epidemiology and public health informatics. Course topics include disease determinants in human populations; public health infrastructure, surveillance and reporting; evidence-based community health assessment; outbreak prediction and prevention; and technological advancements within the field. Online, Internet, or Web-based Lecture (3 hours)

HI 619. Health Information and Computer Science. Principles of computer science theory and networking, including programming languages, system integration tools, electronic data exchange, technical security applications, system testing, and IT system documentation. Online, Internet, or Web-based Lecture (3 hours)

HI 621. Clinical Classifications Systems I. An introduction to classification systems including impact of ICD-10-CM/PCS on MS-DRGs and APR DRGs; case mix classifications and classifying diagnosis. Online, Internet, or Web-based Lecture (1 hour)

HI 622. Clinical Classifications Systems II. Classifying procedures based on ICD-10-PCS and impact of procedures on DRG assignment; building on HI 621 with adding diagnoses to complete the classification. Prerequisite: HI 621. Online, Internet, or Web-based Lecture (1 hour)

HI 623. Clinical Classifications Systems III. Classifying outpatient services. Review of APCs and building on HI 621 with adding diagnoses to complete the classification. Prerequisites: HI 621 and HI 622. Online, Internet, or Web-based Lecture (1 hour)

HI 625. Clinical Document Improvement Strategies. An analysis of clinical documentation impact on compliance, quality, and reimbursement. Prerequisites: HI 621, HI 622 and HI 623. Online, Internet, or Web-based Lecture (1 hour)

HI 630. Health Information Systems. An examination of health informatics topics including the electronic health record, clinical information systems, healthcare policy analysis and development, technology and data standards, health information exchange, and consumer health informatics. Online, Internet, or Web-based Lecture (3 hours)

HI 631. Health Informatics. An exploration of the health informatics domain including emergence of the discipline, health information systems research, clinical data standards theory and development, medical decision-making principles, biomedical simulations, artificial intelligence applications, and principles for knowledge management system design. Online, Internet, or Web-based Lecture (3 hours)

HI 632. Databases and Knowledge Management. A study of advanced use of healthcare data and knowledge management that addresses database methods in healthcare, data administration, data architecture, data modeling, data dictionary development, advanced data search and access techniques (data mining), advanced information/data analysis, and presentation techniques. Online, Internet, or Web-based Lecture (3 hours)

HI 634. Dev. of Electronic Health Info Systems. A study of technology applications used in healthcare, including electronic health records, that emphasizes project management, user interface design, system selection, and security management. Online, Internet, or Web-based Lecture (3 hours)
HI 638. Clinical Vocabularies and Class Systems. An examination of standardized clinical terminology, medical vocabulary standards, data mapping, and natural language processing including the classifications used for statistical reporting as well as terminologies required for interoperability standards. Online, Internet, or Web-based Lecture (3 hours)

HI 683. Special Topics Prof Practice Mgmt Exp. In this elective supervised professional practice experience, students will spend 40 clock hours per credit hour practicing health informatics or information administration in affiliated healthcare organization(s) (or organizations that provide health informatics or information administration practice opportunities). A minimum of 5 additional clock hours per credit hour will be spent preparing project reports and presenting findings to faculty and/or fellow students. Projects completed will relate to areas of special interest to the student. Course may be repeated for credit. Prerequisite: Permission of program director Online, Internet, or Web-based Practicum/Internship (1-6 hours)

HI 684. Management Capstone. An applied practice-based problem solving experience that draws on information management and informatics principles. Online, Internet, or Web-based Clinical Rotation (1 hour)

HI 690. Special Topics. Elective covering selected issues, problems, research techniques, materials, and policies. Content varies. May be repeated for credit. Prerequisite: Permission of program director Online, Internet, or Web-based Lecture (1-3 hours)

HS 303. Writing for Healthcare Professionals. A structured, writing intensive course designed to prepare healthcare professionals to write analytical papers. The writing process, writing style, organization, and clarity of communication are major emphases in this course. Online, Internet, or Web-based Lecture (3 hours)

HS 305. Cultural Competency in Healthcare. This course is designed to increase awareness of the need to provide healthcare to patients with diverse values, beliefs, and behaviors. Emphasis will be placed on tailoring healthcare delivery to meet patients' social, cultural, and linguistic needs. Online, Internet, or Web-based Lecture (3 hours)

HS 308. Foundations of Disease and Health. The interface of health and basic disease processes. Topics include the definition, symptoms, etiology, treatment, and prognosis of each disease process. Online, Internet, or Web-based Lecture (3 hours)

HS 310. Principles of Management in Healthcare. Management and leadership theories, functions, and skills required for success in the healthcare organization, with an emphasis on supervisory management. Online, Internet, or Web-based Lecture (3 hours)

HS 311. Introduction to Research. An introductory study of research design with an emphasis on the analysis, synthesis, and application of evidence-based information in the healthcare delivery system. Online, Internet, or Web-based Lecture (3 hours)

HS 313. Health Education in Healthcare Systems. An introduction to health education programs for the healthcare professional working in healthcare facilities and systems. Includes development and delivery of programs and current problems in continuing professional health education. Online, Internet, or Web-based Lecture (3 hours)

HS 319. Interdisciplinary Health Studies. An introductory study of the intersecting concepts, skills, facets, tenets, and trends of the modern healthcare delivery industry. Online, Internet, or Web-based Lecture (3 hours)

HS 320. The Role of Quality Improvement in Health. This course examines the organization and operations of hospitals. The respective roles of hospital staff will be discussed. Online, Internet, or Web-based Lecture (3 hours)

HS 326. Human Resources in Healthcare. Principles and policies of personnel administration including interviewing, evaluating, and compensating with emphasis on healthcare settings. Online, Internet, or Web-based Lecture (3 hours)

HS 330. Introduction to Statistics. An introductory course in statistical decision-making methods including sampling, measures of central tendency, frequency distributions, probability, probability distributions, sampling methods, hypothesis testing, statistical inference, correlations, regression, and analysis of variance. Online, Internet, or Web-based Lecture (3 hours)

HS 401. Introduction to Global Health. This course is designed to provide a comprehensive overview of principles and theoretical perspectives of health education in global settings. Online, Internet, or Web-based Lecture (3 hours)

HS 408. Organizational Behavior in Healthcare. An overview of the nature of employee behavior and the function of management in the healthcare organizational setting. Human behavior will be examined at individual, group, and organizational levels, including strategies to improve productivity. Online, Internet, or Web-based Lecture (3 hours)

HS 409. Intro to Policy, Advocacy & Ethics. An introduction to the study of interrelationships between political issues, sociological issues, ethical issues, public policy information, and legal implications in the healthcare delivery system. This course covers the basic forms for advocacy, public policy, messaging, base building, and effective communication. Online, Internet, or Web-based Lecture (3 hours)

HS 418. Leadership Development. An introduction to the theory and practice of leadership. Students will explore how leadership theory can inform and direct the way leadership is practiced in the healthcare environment. Online, Internet, or Web-based Lecture (3 hours)

HS 423. Health Promotion. An in-depth review of interventions, programs, and strategies for promoting the prevention of common disease influenced by cultural, social, economic, and educational factors. Online, Internet, or Web-based Lecture (3 hours)

HS 427. Finance and Reimbursement in Healthcare. Introduction to healthcare budgeting and finance, including legislation, federal programs, managed care, and subscription programs. Online, Internet, or Web-based Lecture (3 hours)

HS 430. Strategic Decision Making in Healthcare. The application of applied statistics and data analysis for strategic decision making in healthcare organizations. Online, Internet, or Web-based Lecture (3 hours)

HS 455. Capstone Seminar. A capstone course in which students utilize the knowledge, skills and insight gained from previous coursework in the BSHS program to develop a project related to the student’s area of focus/interest. Projects may be designed to improve some facet of healthcare delivery or program administration. Online, Internet, or Web-based Lecture (3 hours)

HS 490. Special Topics. Interprofessional elective. Content varies. May be repeated for credit. Prerequisite: Permission of program director. Online, Internet, or Web-based Lecture (1-5 hours)

HS 601. Strategic Management in Healthcare. A study of strategic management of healthcare organizations, including the formulation of long term strategic directions, the planning of objective and supporting strategies, and the control of strategic implementation. Online, Internet, or Web-based Lecture (2 hours)

HS 602. Legal/Ethical Concepts in Healthcare. An examination of the legal, ethical and social issues that arise in the management of health services organizations. Online, Internet, or Web-based Lecture (3 hours)
**HS 604. Organizational Behavior.** An exploration of organizational structure and processes including interpersonal relations and team development with a particular focus on healthcare environments. Additionally, this course will provide the healthcare manager with a framework for decision making, an understanding of work teams and employee motivation, perspectives for handling of conflict, tools for assessing work design, and an evolution of an organizational behavior framework. Online, Internet, or Web-based Lecture (3 hours)

**HS 612. Data Analysis and Outcomes Assessment.** A study of basic applied statistical methods used in the summarization of management and healthcare data for decision making, especially as they relate to the interpretation of data. Online, Internet, or Web-based Lecture (3 hours)

**HS 616. Healthcare Administration.** A practical and quantitative approach to operation and management of healthcare delivery systems including administration, financial systems, staffing, departmental functions, and performance evaluation. Online, Internet, or Web-based Lecture (3 hours)

**HS 630. Health Policy and Society.** An examination of theory and methods of health policy analysis in the public, nonprofit, and private health sectors. Emphasis is placed on the role of analysis during various phases of the public policy formulation and implementation cycle. Online, Internet, or Web-based Lecture (3 hours)

**HTL 435. Histotechnology Capstone.**

**HTL 305. Basic Clinical Biochemistry.** An introduction to the fundamental aspects of biochemistry with an emphasis on the relationship between structure and function of the major classes of macromolecules in living systems. Traditional Lecture (2 hours)

**HTL 310. Medical Terminology.** The study of basic medical terminology as it applies to the structure, function, and diseases of the human body. Traditional Lecture (2 hours)

**HTL 320. Histotechniques I.** A systematic lecture and laboratory study of the theory and practical applications of tissue fixation, processing, embedding, sectioning, microtomy, and routine staining. Students will learn the basic principles, components, and use of instruments in the histology laboratory. Traditional Lecture/Lab (4 hours)

**HTL 330. Staining Techniques I.** The theoretical and practical aspects of routine and special stains. Quality control of routine and special stains is also covered. Staining techniques for identifying nuclear and cytoplasmic structures, carbohydrates, and amyloid will be presented. Traditional Lecture/Lab (3 hours)

**HTL 350. Research Design and Statistics.** A study of basic topics of research design and statistics. Special focus on critical review and techniques of applied research. Traditional Lecture (3 hours)

**HTL 410. Ethics and Professional Issues.** A review of legal and ethical concepts affecting healthcare professionals. Traditional Lecture (1 hour)

**HTL 420. Histotechniques II.** A lecture and laboratory focusing on the theory and practical applications of routine and advanced techniques in histology such as: immunohistochemistry, enzyme histochemistry, microwave technology, in situ hybridization and electron microscopy. Prerequisite: HTL 320. Traditional Lecture/Lab (4 hours)

**HTL 425. Seminar.** This course provides an overview of various topics in Histotechnology. Traditional Lecture (1 hour)

**HTL 430. Staining Techniques II.** A continuation of routine and special stains with an emphasis on connective, muscle, and nerve tissues. Pigments, minerals, and cytoplasmic granules will be differentiated and identified. Prerequisite: HTL 330. Traditional Lecture/Lab (3 hours)

**HTL 435. Histotechnology Capstone.** This course provides a review of histology theory and practice through use of assessment modules focusing on: fixation, processing, embedding, staining, immunohistochemistry, flow cytometry, in situ hybridization, electron microscopy, lab operations, gross dissection and description, cytology, and lab safety. Prerequisite: HTL 420. Traditional Lecture (2 hours)

**HTL 440. Histotechnology Practicum I.** Supervised rotations through clinical sites, to include histopathology, autopsy pathology, immunohistochemistry, and electron microscopy. Prerequisite: HTL 420. Traditional Clinical Rotation (5 hours)

**HTL 445. Histotechnology Practicum II.** Supervised rotations through clinical sites, to include advanced techniques and special stains and procedures in histopathology, autopsy pathology, immunohistochemistry, and electron microscopy. Prerequisite: HTL 420. Traditional Clinical Rotation (5 hours)

**MLS 310. Body Fluid Analysis.** A study of the qualitative and quantitative changes in the renal system based on anatomical and physiological alterations. Online, Internet, or Web-based Lecture/Lab (3 hours)

**MLS 311. Basic and Clinical Immunology.** A study of the principles of in vivo and in vitro immunological responses and immunologic testing, theory, and practice in relation to disease in man. Traditional Lecture/Lab (3 hours)

**MLS 312. Essentials of Hematology.** A study of blood and blood forming organs and basic diagnostic procedures. Traditional Lecture/Lab (3 hours)

**MLS 313. Clinical Bacteriology.** A study of pathological bacteria with an emphasis on techniques of isolation and identification. Traditional Lecture/Lab (3 hours)

**MLS 314. Essentials of Chemical Chemistry.** A study of biochemical compounds and elements found in body fluids. Emphasis is placed on methods of determination and clinical interpretation relating to pathological states in man. Traditional Lecture/Lab (3 hours)

**MLS 315. Phlebotomy.** A study of theory, practical application, technical performance, and evaluation of procedures used in collecting, handling, and processing blood specimens. Traditional Lecture (2 hours)

**MLS 322. Clinical Hematology.** A study of blood cells and their abnormalities with emphasis on disease processes. Prerequisite: MLS 312. Traditional Lecture/Lab (3 hours)
MLS 323. Mycology, Parasitology, and Virology. A study of pathological microorganisms with an emphasis on techniques of isolation and identification of fungi and viruses, medically significant protozoan and helminth parasites and their vectors, and various culturing techniques. Prerequisite: MLS 313 Traditional Lecture/Lab (3 hours)

MLS 324. Clinical Chemistry. A study of biological compounds and elements found in body fluids. Emphasis is placed on methods of determination and clinical interpretation relating to pathological states in man. Prerequisite: MLS 314 Traditional Lecture/Lab (3 hours)

MLS 325. Immunohematology. A study of principles, techniques, and applications of blood transfusion practices. Traditional Lecture/Lab (3 hours)

MLS 326. Clinical Simulation. A capstone course of medical laboratory science focusing on clinical diagnosis. Traditional Lecture (3 hours)

MLS 327. Laboratory Operations. A study of laboratory math, basic statistics, and quality assurance programs in the clinical laboratory. Traditional Lecture (2 hours)

MLS 332. Diagnostic Hemostasis. A study of the blood clotting system in normal and pathological states. Emphasis is placed on the correlation of test results with disease and therapies. Traditional Laboratory (1 hour)

MLS 340. General Pathology. A study of the etiology and symptomatology of the general pathological conditions affecting the body. Traditional Lecture (2 hours)

MLS 405. Introduction to Molecular Diagnostics. An introductory course in molecular terminology, the basic anatomy of a gene, the components of DNA and RNA, and the role of DNA and RNA in a cell. Principles of basic molecular techniques used in research and clinical laboratories will be introduced. Traditional Lecture (3 hours)

MLS 413. Diagnostic Microbiology. A study of clinical specimens with regard to pathogenic organisms and diagnosis in organ systems. Traditional Lecture/Lab (3 hours)

MLS 416. Research Design and Statistics. A study of basic topics of research design and statistics. Special focus on critical review and techniques of applied research. Traditional Lecture (3 hours)

MLS 417. Principles of Mgmt & Education in CLS. An introduction to the principles of management and education as applied to the profession of medical laboratory science. Online, Internet, or Web-based Lecture (1 hour)

MLS 422. Hematology Practicum. Clinical education practicum in affiliated laboratories. Prerequisite: MLS 322 Traditional Clinical Rotation (3 hours)

MLS 423. Clinical Microbiology Practicum. Clinical education practicum in affiliated laboratories. Prerequisite MLS 323 Traditional Clinical Rotation (3 hours)

MLS 424. Clinical Chemistry Practicum. Clinical education practicum in affiliated laboratories. Prerequisite MLS 324 Traditional Clinical Rotation (3 hours)

MLS 425. Immunohematology Practicum. Clinical education practicum in affiliated laboratories. Prerequisite MLS 325 Traditional Clinical Rotation (3 hours)

MLS 429. Clinical Correlations. Student presentations of case studies and new laboratory techniques to aid in clinical diagnosis. Traditional Lecture (2 hours)

MLS 430. Research Methods. An in-depth study in analyzing and evaluating the applications involved in research issues through literature reviews culminating in writing a research report. Traditional Lecture (3 hours)

MRI 601. Magnetic Resonance Imaging Foundations. An introduction to practice management and clinical practices in the MRI environment, including aspects of patient care, procedural performance and competency. Basic applications of computers and digital imaging in the field of radiology are examined. A foundation of ethical and legal issues in the radiologic sciences is presented. An overview of imaging sciences in healthcare, including regulation and professional standards. Introduction to venipuncture in a laboratory setting. Traditional Lecture/Lab (3 hours)

MRI 605. Magnetic Resonance Imaging Principles. An introduction to physical principles of MRI, instrumentation, image formation and basic imaging parameters. The course will include an overview of the history of MRI. Fundamental principles covered include magnetism, signal production, contrast characteristics, imaging planes and image formation. Instrumentation information details operation and use of equipment, radionuclear systems and gradient systems. Traditional Lecture (3 hours)

MRI 610. Magnetic Resonance Imaging Physics. In depth information regarding pulse sequences, image formation, and contrast. Emphasis is placed on details of MR parameters, pulse sequences, methods of data acquisition, imaging options, image artifacts, and quality assurance to enable the student to maximize MR quality by understanding the fundamentals of MR imaging. Traditional Lecture (3 hours)

MRI 612. Applied Magnetic Resonance Imaging I. Details the knowledge base necessary to perform standard magnetic resonance imaging procedures. Content includes MRI imaging procedures and sectional anatomy and physiology relating to the central nervous system and the musculoskeletal system. The study of normal anatomy and pathologic conditions aid the student in recognizing the need for imaging changes based on these conditions. Topics include clinical considerations regarding contrast administration and safety, magnetic field safety, and procedural considerations for optimal scanning techniques. Traditional Lecture (3 hours)

MRI 624. Applied Magnetic Resonance Imaging II. A continuation of MRI 612. Details the knowledge base necessary to perform standard magnetic resonance imaging procedures. Content includes MRI imaging procedures and sectional anatomy and physiology relating to the cardiovascular system, thorax, abdomen, pelvis and special imaging procedures. The study of normal anatomy and pathologic conditions aid the student in recognizing the need for imaging changes based on these conditions. Topics covered include clinical considerations regarding contrast administration and safety, magnetic field safety and procedural considerations for optimal scanning techniques. Traditional Lecture (3 hours)

MRI 650. Clinical Practicum I. Supervised clinical practice experience designed for sequential development, application, critical analysis, integration, synthesis, and evaluation of concepts and theories in the performance of magnetic resonance imaging procedures. Content includes experience in MR scanning techniques, safety procedures, image evaluation, image post processing, patient care, and professional development. Traditional Clinical Rotation (3 hours)

MRI 651. Clinical Practicum II. A continuation of MRI 650. Supervised clinical practice experience designed for sequential development, application, critical analysis, integration, synthesis, and evaluation of concepts and theories in the performance of magnetic resonance imaging procedures. Content includes experience in MR scanning techniques, safety procedures, image evaluation, image post processing, patient care, and professional development. Traditional Clinical Rotation (4 hours)

MRI 652. Clinical Practicum III. A continuation of MRI 651. Supervised clinical practice experience designed for sequential development, application, critical analysis, integration, synthesis, and evaluation of concepts and theories in the performance of magnetic resonance imaging procedures. Content includes experience in MR scanning techniques, safety procedures, image evaluation, image post processing, patient care, and professional development. Traditional Clinical Rotation (4 hours)

MRI 660. Magnetic Resonance Imaging Seminar. Prepares the student for the ARRT MRI certification exam. Content will integrate the clinical skills and classroom theories in a comprehensive review to include the specifications of the content categories: patient care, imaging procedures, data acquisition and processing, and physical principles of image formation. Traditional Lecture (3 hours)
MRI 670. MRI Leadership, Education, & Management. Explores current professional issues in magnetic resonance imaging and health care delivery. Students will explore, analyze, and evaluate health care reform, professional practice issues, educational standards, and organizational behavior in the context of the daily professional practice of radiology administrators, managers, and educators. Emphasis will be placed on contemporary theories of leadership and current factors affecting health policy and healthcare administration. Online, Internet, or Web-based Lecture (2 hours)

MRI 690. Magnetic Resonance Imaging Research I. Reinforces the conceptual basis for the interpretation and critical analysis of professional literature and the research process. Emphasis is on the evaluation of magnetic resonance imaging topics and effective communication of research via written and oral presentations. Online, Internet, or Web-based Lecture (2 hours)

MRI 699. Magnetic Resonance Imaging Research II. A continuation of the research process introduced in MRI 690. The didactic emphasis is on development of research methodology and the compilation and dissemination of a final research project. Student groups complete the details unique to their research project under the direction of a faculty advisor. Online, Internet, or Web-based Lecture (3 hours)

NMT 601. Nuclear Medicine Foundations. An introduction to nuclear medicine technology emphasizing patient care; principles of nuclear radiation and safety; instrumentation and quality control; and medical law and ethics specific to NMT. Nuclear medicine mathematical applications for radionuclide activity, volume, concentration, decay, and unit conversion formulas are introduced. Techniques and procedures for proper venipuncture in nuclear medicine procedures are presented in the laboratory setting. Medical terminology is presented and includes a study of word origins, structures, abbreviations and symbols. Traditional Lecture/Lab (3 hours)

NMT 606. Nuclear Physics & Radiobiology. Presents qualitative and quantitative concepts of radiation physics and radiobiology pertaining to medical applications in nuclear medicine; atomic and nuclear structure, radioactive decay, properties of radiation; and photon interactions in matter. Additionally, the course examines physical, chemical and biological mechanisms involved in radiation to living cells and their components. Traditional Lecture (2 hours)

NMT 610. Nuclear Medicine Technology Principles. A study of the fundamental concepts of radiopharmaceutical production and mechanisms of localization; theoretical and practical concepts of nuclear instrumentation and statistics; principles of in vivo and in vitro counting and imaging, and Gamma/SPECT/PET technology and image management and reconstruction techniques. Medical terminology of nuclear concepts and procedures is presented, including definitions, spelling and pronunciation. Traditional Lecture (3 hours)

NMT 612. Applied Nuclear Medicine Imaging I. A study of anatomy, physiology, terminology and pathology related to diagnostic nuclear medicine for the skeletal, gastrointestinal, respiratory, urinary and endocrine systems. The course presents current uses of radiopharmaceuticals for organ visualization, function and radiotherapy. Principles for determining diagnostic value of imaging results are presented in the clinical laboratory setting. Cross-sectional anatomy is included. Traditional Lecture/Lab (3 hours)

NMT 624. Applied Nuclear Medicine Imaging II. A study of anatomy, terminology and pathology related to diagnostic and therapeutic nuclear medicine for the central nervous system and nuclear oncology. The course provides comprehensive studies of immunology, nuclear cardiology and related PET/CT. Principles for determining diagnostic value of imaging results are presented in the laboratory setting. Related cross-sectional anatomy is included. Traditional Lecture/Lab (4 hours)

NMT 650. Clinical Practicum I. A supervised introduction to the clinical environment providing experience in vivo and in vitro procedures; instrumentation quality control; radiopharmacy; applied radiation safety procedures; and clinical imaging. Traditional Clinical Rotation (3 hours)

NMT 651. Clinical Practicum II. A continuation of NMT 650. Directed intermediate-level clinical practice providing practical clinical experience with in vivo and in vitro procedures; instrumentation quality control; radiopharmacy; applied radiation safety procedures; and clinical imaging. Traditional Clinical Rotation (4 hours)

NMT 652. Clinical Practicum III. A continuation of NMT 651. Directed advanced-level clinical practice providing clinical experience with in vivo and in vitro procedures and therapies; PET/CT imaging and image evaluation; instrumentation quality control; radiopharmacy; applied radiation safety procedures; and department management. Traditional Clinical Rotation (4 hours)

NMT 660. Nuclear Medicine Seminar. A review of current literature and research applied to nuclear medicine case studies, along with review of didactic and clinical NMT providing an overview of topics relating to professional certification. Traditional Lecture (3 hours)

NMT 670. NMT Leadership, Education, & Management. Explores current professional issues in nuclear medicine and health care delivery. Students explore, analyze, and evaluate health care reform, professional practice issues, educational standards, and organizational behavior in the context of the daily professional practice of radiology administrators, managers, and educators. Emphasis is placed on contemporary theories of leadership and current factors affecting health policy and healthcare administration. Online, Internet, or Web-based Lecture (2 hours)

NMT 690. Nuclear Medicine Research Methods I. Reinforces the conceptual basis for interpreting professional literature and making evidence-based practice decisions. Both qualitative and quantitative research designs are explored in-depth, and students are instructed in the research process with emphasis on the literature review. Online, Internet, or Web-based Lecture (2 hours)

NMT 699. Nuclear Medicine Research Methods II. A continuation of the research process introduced in NMT 690. Didactic emphasis is on methodology, statistical analyses, and the compilation and dissemination of a final research project. Student groups complete the details unique to their research project under the direction of a faculty advisor. Online, Internet, or Web-based Lecture (3 hours)

OT 308. Structural Analysis of Human Motion. In-depth knowledge of the gross anatomical structure and functions of the human body. Emphasis is placed on the study of the musculoskeletal system and muscle innervations with particular attention to the specific muscle functions and consequences of their loss related to occupational performance. Traditional Lecture (3 hours)

OT 309. Structural Analysis of Human Motion Lab. This is the dissection laboratory to complement OT 308 Structural Analysis of Human Motion. Traditional Laboratory (3 hours)

OT 310. Intro to OT in Health Care Delivery. Basic tenets of occupational therapy are introduced. Topics include history and philosophy of the profession, theories/frames of reference, and professional behavior; terminology, and documents. The role of the occupational therapist in the context of various service delivery systems will be explored, with emphasis on the U.S. healthcare system. Traditional Lecture (3 hours)

OT 311. Group Process. The content includes analysis of individual and group interaction, communication processes, group dynamics, and opportunities for leadership skill development. Traditional Lecture/Lab (2 hours)

OT 312. Concept Fwkk Therapeutic Occupation I. Provides the student with knowledge of the Occupational Therapy Practice Framework: Domain and Process. The application of the framework is emphasized through analysis and adaptation of activities to enhance occupational performance across the life span. Traditional Lecture/Lab (3 hours)

OT 313. Kinesiology. Integrates principles of biomechanics and knowledge of anatomy as it applies to human movement and the impact of impairment on occupational performance. Content also includes an introduction to procedures for evaluation of muscular and articular structures and other application labs. Traditional Lecture/Lab (3 hours)

OT 315. Medical Conditions I. Introduction to evaluation, treatment and outcomes associated with medical conditions in pediatric and adolescent occupational therapy. Emphasis is placed on etiology, symptoms, medical intervention, and direct implications for occupational performance. Traditional Lecture (2 hours)

THE UNIVERSITY OF MISSISSIPPI MEDICAL CENTER
OT 316. Medical Conditions II. Introduces medical conditions commonly seen in adult occupational therapy. Emphasis placed on etiology, symptoms, medical intervention, and implication for occupational performance. Traditional Lecture (2 hours)

OT 317. Medical Conditions III. A continuation of OT 316. It introduces additional medical conditions commonly seen in adult occupational therapy. Emphasis is placed on etiology, symptoms, medical intervention and implication for occupational performance. Traditional Lecture (3 hours)

OT 318. Introduction to Research. Introduces concepts essential for evidenced-based practice in occupational therapy. The process of locating, reviewing, and critiquing biomedical research will be examined. Principles related to research design and statistical methods will be introduced. Traditional Lecture (2 hours)

OT 323. OT: Pediatrics/Early Childhood. Identifies the physical, psychological, social, and cultural forces which affect children's occupations within the environment from birth through early childhood. Occupational therapy theories/frames of reference and service delivery for this age group are examined. Traditional Lecture/Lab (3 hours)

OT 324. Psychiatric Medical Conditions. Introduces diagnostic categories of mental disorders as well as the medical, psychological, and sociological factors that influence mental health. Emphasis is placed on etiology, symptoms, prognosis and general intervention. Traditional Lecture (3 hours)

OT 326. OT: Middle Child/Adolescent. Identifies the physical, psychological, social, and cultural forces which affect children's occupations within the environment from middle childhood through adolescence. Occupational therapy theories/frames of reference and service delivery for this age group are examined. Traditional Lecture/Lab (4 hours)

OT 328. Neuroscience for Occupational Therapy. An in-depth study of the structure and function of the central nervous system. Motor and sensory dysfunctions are related to localized disruptions of nervous system activities. Traditional Lecture (4 hours)

OT 333. OT: Adult/Older Adult. Identifies the physical, psychological, social, and cultural forces which affect occupations within the environment throughout adulthood. The normal aging process, occupational therapy theories/frames of reference, and service delivery for this age group are examined. Clinical reasoning in assessment and treatment for adults is introduced. Traditional Lecture/Lab (4 hours)

OT 337. Pediatric Fieldwork I. Students apply didactic learning to the practice of occupational therapy in the pediatric population. The emphasis is on clinical problem-solving in assessment, treatment, outcomes, and written documentation. Combination lecture and clinical course. Traditional Clinical Rotation (2 hours)

OT 422. Orthopedic Principles in OT. The student is instructed in occupational therapy theories/frames of reference, evaluation, treatment techniques, and discharge planning for persons with orthopedic and other physical dysfunction conditions. Traditional Lecture/Lab (3 hours)

OT 426. Neurological Principles in OT. The student is instructed in occupational therapy theories/frames of reference, evaluation, treatment techniques, and discharge planning for persons with neurological conditions/disorders. Traditional Lecture/Lab (3 hours)

OT 427. Physical Dysfunction Fieldwork I. Students apply didactic learning to the practice of occupational therapy in physical dysfunction. The emphasis is on clinical problem-solving in assessment, treatment, outcomes and written documentation. Combination lecture and clinical course. Traditional Clinical Rotation (3 hours)

OT 430. Splint, Ortho., & Phys. Agent Modalities. Instruction in fabrication and application of splinting techniques and orthotics in occupational therapy practice. Basic principles and application of physical agent modalities are included. Traditional Lecture/Lab (3 hours)

OT 431. Assist. Tech & Environmental Adaptations. In-depth study of assistive technology as it impacts participation in occupations. Laboratory experiences focus on critical thinking skills related to environmental adaptation and the use of assistive technology to enhance occupational performance across all contexts. Traditional Lecture/Lab (3 hours)

OT 434. Psychosocial Dysfunction. Concentrates on the entry level OT skills required for mental health intervention across practice settings. The student is instructed in theories/frames of reference, evaluation, and treatment techniques, and discharge planning for individuals with psychosocial problems. Combination lecture and clinical course. Traditional Lecture/Lab (3 hours)

OT 435. Psychosocial Fieldwork I. Students apply didactic learning to the practice of occupational therapy in psychosocial dysfunction. The emphasis is on clinical problem-solving in assessment, treatment, outcomes and written documentation. Combination lecture and clinical course. Traditional Clinical Rotation (3 hours)

OT 441. Analysis of Legal & Ethical Issues in OT. Knowledge and application of law and ethics related to occupational therapy practice. Strategies for analyzing and resolving professional dilemmas in service delivery are introduced and applied. In addition, legal topics including liability issues, malpractice, and business and education law are presented. Traditional Lecture (3 hours)

OT 460. Research Methods. Reinforces the conceptual basis for interpreting professional literature and making evidence-based practice decisions. Both qualitative and quantitative research designs are explored in depth, and students are instructed in the research process with emphasis on the literature review. Student groups complete a literature review on a relevant topic under the direction of a faculty advisor. Traditional Lecture (3 hours)

OT 490. Special Topics. With the consent of the department chair, a student may elect to take this course on a subject of interest in special areas of occupational therapy. The student must have the support of a faculty advisor for course administration. Credits will be assigned according to the scope of the subject and/or project completed. Traditional Independent Study (1-4 hours)

OT 500. Research Methods II. A continuation of the research process introduced in OT 460. The didactic emphasis is on development of a research methodology and statistical analyses. Student groups complete the remainder of the research proposal under the direction of a faculty advisor. Traditional Lecture (3 hours)

OT 501. Research Methods III. A continuation course of OT 500. Didactic emphasis is on the compilation and dissemination of a final research report. Student groups complete the details unique to their research project under the direction of a faculty advisor. Traditional Lecture (2 hours)

OT 510. Adv Therapeutic Modalities & Apps. Instruction and application opportunities for treatment approaches inclusive of all populations across the lifespan and diagnostic categories. Topics include specialized treatment techniques and in-depth presentation of techniques introduced in earlier courses. Students examine and present a treatment topic and complete a longitudinal, case-based treatment plan. Traditional Lecture/Lab (3 hours)

OT 515. Fieldwork II A. Full-time, 12-week clinical experience in which students are responsible for providing services to clients/patients under the supervision of a qualified occupational therapy practitioner. The focus is on development of the skills necessary for entry level occupational therapy practice. Placements are selected to ensure exposure to a variety of settings and clients. Traditional Clinical Rotation (9 hours)
OT 516. Management Practices & Prof Leadership. This course exposes students to the day-to-day functions of an occupational therapist in administrative, managerial and leadership roles. Issues and resources related to professional development throughout the career are emphasized. Traditional Lecture (3 hours)

OT 530. Advanced Clinical Reasoning. Students apply different types of clinical reasoning to the occupational therapy process through case analysis. Professional development is also emphasized. Traditional Lecture (3 hours)

OT 540. Community Practice. Students will gain an understanding and appreciation of the role of occupational therapy in home and community settings as well as evidence-based practice, policy issues, and trends in models of service delivery. Topics include traditional and emerging practice in the realms of health promotion, prevention, evaluation, and intervention. Traditional Lecture/Lab (3 hours)

OT 541. Comprehensive Capstone. A comprehensive review of the curriculum in preparation for the national board examination. Includes information on the process for national certification and state licensure for the occupational therapist. Public dissemination of findings from OT 501 research projects will be required. Traditional Lecture (3 hours)

OT 542. Community Practice. Students will gain an understanding and appreciation of the role of occupational therapy in home and community settings as well as evidence-based practice, policy issues, and trends in models of service delivery. Topics include traditional and emerging practice in the realms of health promotion, prevention, evaluation, and intervention. Traditional Lecture/Lab (3 hours)

OT 548. Group Process and Leadership. Includes an analysis of individual and group interactions, communication processes, group dynamics and opportunities for leadership skill development. Traditional Lecture (2 hours)

OT 601. Functional Human Anatomy. In-depth knowledge of the gross anatomical structures and functions of the human body. Emphasis is placed on the study of the musculoskeletal system with particular attention to the specific muscle functions and consequences of their loss related to occupational performance. Traditional Lecture (5 hours)

OT 602. Functional Human Anatomy Laboratory. Dissection laboratory to complement OT 601 Functional Human Anatomy. Traditional Laboratory (2 hours)

OT 605. Intro to Occupational Therapy Practice. Basic tenets of occupational therapy are introduced. Topics include history and philosophy of the profession, theories/models of reference, ethics and professionalism, professional terminology and selected official documents of the profession. The role of the occupational therapist in the context of various service delivery systems will be explored, with emphasis on the U.S. health care system. Traditional Lecture (2 hours)

OT 610. Kinesiology for Occupational Therapy. Integrates principles of biomechanics and knowledge of anatomy as it applies to human movement and the impact of impairment on occupational performance. Content also includes an introduction to procedures for evaluation of muscular and articular structures and other application labs. Traditional Lecture/Lab (3 hours)

OT 612. Neuroscience for Occupational Therapy. In-depth examination of the structure and function of the nervous system. Localized disruptions of nervous system activities are linked to motor and sensory dysfunctions. Traditional Lecture (4 hours)

OT 614. Occupation-Based Practice I. Examines occupational therapy models, theories and frames of reference as well as the Occupational Therapy Practice Framework: Domain and Process. The application of the framework is emphasized through analysis and adaptation of activities to enhance occupational performance for individuals and populations across the life span. Traditional Lecture/Lab (3 hours)

OT 616. Occupational Therapy: Pediatrics I. Explores conditions commonly seen in pediatric occupational therapy practice from birth to middle childhood. Etiology, symptoms, medical intervention and implications for occupational performance are examined. Identifies the physical, psychological, social and cultural forces which affect children’s occupations within the environment. Emphasis is placed on occupational therapy theories/frames of reference, evaluation/intervention and additional aspects of service delivery (e.g., consultation, care coordination and transition processes). Traditional Lecture/Lab (4 hours)

OT 617. Principles of Patient Care. Introduces concepts and skills related to basic patient care including topics such as infection control, vital signs, body mechanics, positioning, transfers, wheelchairs, and specialized techniques/equipment. Traditional Lecture (2 hours)

OT 618. Research and Evidence-Based Practice I. Introduces concepts essential for evidence-based practice in occupational therapy. Evidence is located and reviewed. Principles related to research design, statistical methods, and critical appraisal will be examined. Traditional Lecture (2 hours)

OT 620. Occupation-Based Practice II. A continuation of OT614 which advances the understanding and application of models/theories and the Occupational Therapy Practice Framework: Domain and Process through advanced analysis, adaptation and implementation of activities, and maximization of resources. Focus is on evidence-based reasoning for enhancing occupational performance of individuals and populations across the life span. Traditional Lecture/Lab (3 hours)

OT 622. Medical Conditions: Physical Dysfunction. Introduces medical conditions commonly seen in adult occupational therapy practice. Emphasis is placed on etiology, symptoms, medical intervention and implications for occupational performance. Traditional Lecture (4 hours)

OT 624. Occupational Therapy: Pediatrics II. Explores conditions commonly seen in middle childhood through adolescence. Identifies the physical, psychological, social and cultural forces which affect children’s occupations within the environment. Emphasis is placed on occupational therapy theories/frames of reference, evaluation/intervention and additional aspects of service delivery (e.g., consultation, care coordination and transition processes). Traditional Lecture/Lab (3 hours)

OT 625. Pediatric Fieldwork I. Application of didactic learning to the practice of occupational therapy in the pediatric population. The emphasis is on models of practice, frames of reference, clinical problem-solving and use of evidence in evaluation, intervention, outcomes and written documentation. Traditional Clinical Rotation (2 hours)

OT 626. Occupational Therapy: Adult/Older Adult. Analyzes the physical, psychological, social and cultural forces which affect occupations in adulthood as impacted by the normal aging process. Individual and population service delivery (e.g., consultation, care coordination, transition processes and resource utilization) is examined. Traditional Lecture/Lab (3 hours)

OT 628. Research and Evidence-Based Practice II. Expands upon the conceptual basis established in OT618 for critically appraising professional literature and making evidence-based practice decisions. Both qualitative and quantitative research designs are explored in-depth, and students are instructed in the research process with emphasis on the literature review. Traditional Lecture (2 hours)

OT 629. Research Proposal I. Through small collaborative research teams, students will demonstrate the ability to critically synthesize existing literature on a topic relevant to current clinical practice, service delivery, and/or a professional issue related to occupational therapy. Completion of the literature review occurs under the direction of a faculty advisor. Traditional Lecture (1 hour)

OT 630. Management I: Legal & Ethical Principles. Investigates and applies legal and ethical principles related to occupational therapy practice and administration. Strategies for analyzing and resolving professional dilemmas in service delivery and supervision are introduced and applied. In addition, legal topics including reimbursement, liability issues, malpractice, and business and education law are presented. Professional development planning is introduced. Traditional Lecture (3 hours)

OT 632. Assist Tech & Environmental Adaptation. In-depth study of assistive technology as it impacts participation in occupations. Critical thinking skills are applied to environmental adaptation and the use of assistive technology to enhance occupational performance across all occupations. Traditional Lecture/Lab (3 hours)
OT 634. Community Health and Wellness. Topics include traditional and emerging practice in the realms of health promotion, prevention, evaluation and intervention in community-based settings. Examines and incorporates new service provision models into programming opportunities which address community needs. Emphasizes the impact of occupational therapy through advocacy, integration of resources, and collaboration. Traditional Lecture/Lab (3 hours).

OT 638. Research & Evidence-Based Practice III. Advances skills from OT628 which are necessary for effective evidence-based practice in occupational therapy. Students are also instructed in the research process with an emphasis on methodological approaches and statistical analysis. Traditional Lecture (2 hours)

OT 639. Research Proposal II. Continuation course for OT629. Students demonstrate the ability to synthesize previously reviewed literature to establish a sound methodology for the evaluation of current clinical practice, service delivery, and/or a professional issue related to occupational therapy. The successful completion of a research proposal occurs under the direction of a faculty advisor. Traditional Lecture (1 hour)

OT 640. OT: Psychiatric/Psychosocial. Introduces mental disorders as well as the medical, psychological and sociological factors that influence general health. Examines psychiatric and psychosocial principles within occupational therapy practice, including relevant theories/frames of reference and evaluation/intervention methods. Individual and population service delivery (e.g., consultation, care coordination, transition processes and resource utilization) is emphasized. Traditional Lecture (4 hours)

OT 642. Neurological Principles in OT. Examines neurological conditions and disorders within occupational therapy practice. Theories/frames of reference, evaluation and intervention techniques, and discharge planning are emphasized. Additional aspects of service delivery (e.g., consultation, care coordination, transition processes, and resource utilization) are explored. Traditional Lecture/Lab (3 hours)

OT 644. Orthopedic Principles in OT. Examines orthopedic and other physical dysfunction conditions within occupational therapy practice. Theories/frames of reference, evaluation, intervention techniques and discharge planning are emphasized. Additional aspects of service delivery (e.g., consultation, care coordination, transition processes, and resource utilization) are explored. Traditional Lecture/Lab (3 hours)

OT 645. Physical Dysfunction Fieldwork I. Application of didactic learning to the practice of occupational therapy in physical dysfunction settings. The emphasis is on models of practice, frames of reference, clinical problem-solving and use of evidence in evaluation, intervention, outcomes and written documentation. Traditional Clinical Rotation (2 hours)

OT 646. Case-Based Clinical Reasoning. Application of advanced clinical reasoning within the occupational therapy process; a case analysis approach incorporating evidence and theories/frames of reference is used. Traditional Lecture (3 hours)

OT 649. Research Project I. Preparation to transition from the classroom to the level II fieldwork setting. Students will gain background needed to complete appropriate fieldwork site requests, to understand the supervisory process for level II fieldwork, recognize professional expectations for level II fieldwork, and establish an individualized plan for successful fieldwork II performance. Traditional Lecture (1 hour)

OT 650. Orthoses & Physical Agent Modalities. Application of the principles and evidence related to the fabrication of orthoses and the use of physical agent modalities. Emphasis is on hands-on experience and gaining entry level skills in these adjunctive approaches to occupation-based practice. Traditional Lecture/Lab (3 hours)

OT 652. Specialty Interventions in OT. Analysis and synthesis of specialized interventions along with the advanced exploration of techniques introduced in earlier courses. Traditional Lecture/Lab (3 hours)

OT 654. Mgmt II: Prof Leadership and Admin. Exploration of health systems management, leadership, and professional development. Emphasis is placed on regulatory compliance, reimbursement, and policy development. Examines supervision and staff development with an emphasis on the occupational therapist and occupational therapy assistant roles. Traditional Lecture (3 hours)

OT 655. Psychiatric/Psychosocial Fieldwork I. Application of psychiatric and psychosocial didactic learning to the practice of occupational therapy within traditional, non-traditional and emerging service provision models. The emphasis is on models of practice, frames of reference, clinical problem-solving and use of evidence in evaluation, intervention, outcomes and written documentation. Traditional Clinical Rotation (3 hours)

OT 656. Fieldwork II Seminar. Preparation to transition from the classroom to the level II fieldwork setting. Students will gain background needed to complete appropriate fieldwork site requests, to understand the supervisory process for level II fieldwork, recognize professional expectations for level II fieldwork, and establish an individualized plan for successful fieldwork II performance. Traditional Lecture (1 hour)

OT 658. Research and Evidence-Based Practice IV. Concludes the series of lecture-based research courses. Emphasis in this course is placed on data analysis and synthesis of new evidence and dissemination skills (e.g., presentation and publication). Traditional Lecture (1 hour)

OT 659. Research Project II. Completion of the research project which includes data analysis, synthesis and dissemination with the support of faculty advisor(s). A scholarly report meeting the publication requirements for a peer reviewed manuscript as well as public presentation(s) are required in this course. Traditional Lecture (1 hour)

OT 660. Fieldwork II A. Full-time 12-week clinical experience in which students are responsible for providing services to clients under the supervision of a qualified occupational therapy practitioner. The focus is on development of the skills necessary for entry level occupational therapy practice. Placements are selected to ensure exposure to a variety of settings and clients. Traditional Clinical Rotation (9 hours)

OT 670. Fieldwork II B. Full-time 12-week clinical experience in which students are responsible for providing services to clients under the supervision of a qualified occupational therapy practitioner. The focus is on development of the skills necessary for entry level occupational therapy practice. Placements are selected to ensure exposure to a variety of settings and clients. Traditional Clinical Rotation (9 hours)

OT 671. Doctoral Capstone Seminar. An individualized doctoral capstone plan is collaboratively designed between students, capstone coordinator, faculty capstone advisors, and a facility's expert capstone mentor(s) to include individualized learning objectives and the initial conception of a culminating capstone project. The culminating capstone project must relate theory to practice, demonstrate a synthesis of advanced knowledge in occupational therapy, and be meaningful to the setting. Additionally, a comprehensive curriculum review for the national board exam and the processes for national certification and state licensure are included. Each student must pass a comprehensive competency examination prior to the commencement of the doctoral capstone experience. Traditional Lecture (3 hours)

OT 672. Doctoral Capstone I. Full-time 14-week doctoral capstone experience in which students will achieve specialized skills in one or more of the following areas: clinical practice skills, research skills, administration, leadership, program and/or policy development, advocacy, education, theory development or other innovative practice. Under the supervision of an expert mentor, students will execute their doctoral capstone plan established in OT671 by meeting the individualized objectives and completing a relevant culminating capstone project. Traditional Practicum/Internship (11 hours)

OT 685. Doctoral Capstone Project. Development and dissemination of a capstone portfolio that includes a comprehensive culminating project in a focused area of study. The portfolio is created in consultation with a capstone faculty advisor. The capstone portfolio will display the student's advanced knowledge in occupational therapy through the integration of curriculum content and specialized knowledge gained during the doctoral capstone experience. Traditional Practicum/Internship (2 hours)
OT 690. Special Topics. With the consent of the department chair, a student may elect to take a course on a subject of interest in special areas of occupational therapy. The student must have the support of a faculty advisor for course administration. Credits will be assigned according to the scope of the subject and/or project completed. Traditional Independent Study (1-4 hours)

PT 600. Anatomical Basis of Human Mvmnt-PT Prac. An integrated approach to regional study of the gross anatomical structure and functions of the human body with emphasis on the study of the musculoskeletal, nervous, cardiovascular, and pulmonary systems. Traditional Lecture (5 hours)

PT 601. Physiologic Basis of Physical Therapy I. The study of human physiology with special emphasis on cardiopulmonary, musculoskeletal, nervous, endocrine, and reproductive systems as well as acid base balance. Prerequisite: PT 600 Traditional Lecture (3 hours)

PT 602. Human Kinesiology and Biomechanics I. A study of normal and abnormal human movement with consideration of static and dynamic structural relationships. Emphasis is on the clinical application of kinesiologic principles and relationships. Prerequisite: PT 600 Traditional Lecture/Lab (3 hours)

PT 603. Physiologic Basis of Physical Therapy II. An examination of the client's response to physical therapy intervention in health and disease. Emphasis is on the physiologic responses and adaptations of the cardiopulmonary and musculoskeletal systems and the energy systems utilized during activity. Prerequisite: PT 601 Traditional Lecture (3 hours)

PT 604. Human Kinesiology and Biomechanics II. A study of human structure and movement in the areas of gait and posture. Both normal and abnormal gait and posture will be addressed in lecture and laboratory settings. Basic introductions and principles in the areas of motor learning and motor control will be presented. Prerequisite: PT 602 and PT 621 Traditional Lecture/Lab (3 hours)

PT 605. Pharmacology in Physical Therapy. General concepts of pharmacokinetics and pharmacodynamics. Includes a survey of the classes of pharmacological agents used in the treatment of diseases and disorders of the cardiovascular, pulmonary, musculoskeletal, integumentary, and neuromuscular systems. Examination of clinical responses to drug interactions and side effects in the physical therapy patient population and presentation of medical diagnostic measures used to assess diseases and disorders of these systems. Prerequisite: PT 601 Traditional Lecture (2 hours)

PT 606. Neurosciences in Physical Therapy. Neurological basis of central nervous system function with emphasis on motor performance. Includes applications for cranial nerve, reflex, and sensory testing. Prerequisite: PT 611 Traditional Lecture (4 hours)

PT 607. Anatomical Basis of Human Mvmnt Lab. Dissection laboratory for the study of gross anatomical structure and functions of the human body with emphasis on the musculoskeletal, nervous, cardiovascular, and pulmonary systems. Traditional Laboratory (2 hours)

PT 610. Introduction to Physical Therapy Practice. Principles and conceptual bases of communication, education, cultural diversity, documentation in the healthcare record, psychosocial aspects of care and disability, and introduction to ethical practice in a variety of healthcare settings. Prerequisite: Admission Traditional Lecture (3 hours)

PT 611. Systems Review and Clinical Dysfunction. Principles and practices related to the systems review process of physical therapy examination. Clinical pathology of body systems, with emphasis on the influence of these pathologies on the role and practice of physical therapists. Prerequisite: PT 600 Traditional Lecture (4 hours)

PT 612. Develop Basis- Functional Mvmnts-Lifespan. Study of the sequential changes of human development, maturation, and aging from conception to death with emphasis on neuromuscular and musculoskeletal systems. Prerequisite: PT 604 Traditional Lecture (3 hours)

PT 613. Applied Clinical Decision Making. A synthesis of concepts learned during the preceding clinical experience, utilizing case study presentations, sharing of clinical in - services, and professional socialization. Requisite: Concurrent enrollment in PT 651; Prerequisites: PT 605 and PT 650 Traditional Lecture (3 hours)

PT 614. Comprehensive Capstone. A review and synthesis of the patient client management model with a focus on specific clinical disorders with an emphasis on clinical decision making based on clinical experience. A secondary emphasis is on preparation for the National Physical Therapy Examination. Prerequisites: PT 613 and PT 651 Traditional Lecture (3 hours)

PT 617. Issues in Comm Health & Prev & Wellness. A synopsis of issues in community health, including epidemiological concepts and community education processes. The role of physical therapists in prevention and promotion of health is examined in relation to principles and practice across culturally diverse client populations. Prerequisites: PT 603, PT 610, PT 611, PT 640, PT 660. Traditional Lecture (2 hours)

PT 620. Acute Care in Physical Therapy I. Practice related to the role of the physical therapist in the acute care setting including introduction to radiology, lab values, pulmonary function testing, cardiac monitoring, and equipment utilized for patients in this setting. Prerequisite: PT 600 Traditional Lecture/Lab (4 hours)

PT 621. Clinical Tests & Measures in PT Practice. Theory and application of patient examination skills including muscle performance testing, goniometry, sensory testing, functional assessment, functional capacity examination, assessment of home and work environments, and application of ergonomic principles. Incorporates documentation of patient examination and evaluation in the medical record. Prerequisite: PT 601, PT 602, PT 610, PT 611 Traditional Lecture/Lab (4 hours)

PT 625. PT Practice Across Client Populations. Exploration of areas of specialty practice within physical therapy to include comprehensive management of the integumentary system, the geriatric population, women's health issues, and management of amputation. Prerequisites: PT 600, PT 605, PT 611, and PT 632. Traditional Lecture/Lab (3 hours)

PT 630. Principles of Physical Therapy Pract I. Basic principles and procedures involved in transfers, bed mobility, patient positioning, dressing, body mechanics, passive range of motion, vital signs assessment and gait training with assistive devices. Prerequisites: PT 600 and PT 610 Traditional Lecture/Lab (3 hours)

PT 631. Assessment & Mgt-Musculoskeletal Prob I. Specific assessment skills related to appendicular musculoskeletal problems. Presentation of various management techniques, such as exercise, flexibility, and mobilization, which are used in the management of these problems. Prerequisites: PT 602 and PT 611 Traditional Lecture/Lab (4 hours)

PT 632. Principles of Phys Ther Practice II. Physical, electrical, and mechanical modalities used in physical therapy treatment. Prerequisites: PT 601, PT 611, PT 630 Traditional Lecture/Lab (3 hours)

PT 633. Acute Care in Physical Therapy II. Assessment and treatment of patients in the acute care setting with a variety of medical conditions. Emphasis on the equipment utilized as well as assessment parameters as related to the management of patients in acute care settings. Prerequisites: PT 603, PT 620, PT 621 Traditional Lecture/Lab (3 hours)

PT 634. Assessment & Mgt-Musculoskeletal Prob II. Specific assessment skills related to axial and pelvic musculoskeletal problems. Presentation of various management techniques, such as exercise, flexibility, and mobilization, which are used in the management of these problems. Prerequisites: PT 604 and PT 631. Traditional Lecture/Lab (3 hours)

PT 636. Neurological Aspects Phys Ther Pract I. Basic principles of rehabilitation for the physically disabled individual. Emphasis is placed on comprehensive management of neuromuscular related conditions with focus on achieving individual functional potential through therapeutic intervention, equipment and orthotic evaluation, and patient education. Prerequisites: PT 604, PT 605, PT 606, and PT 621 Traditional Lecture/Lab (3 hours)
PT 637. Neurological Aspects Phys Ther Pract II. Introduction to current theories, clinical examination, evaluation, and management of neurological conditions with emphasis on the adult population. Includes principles of rehabilitation and neurological disease processes. Prerequisites: PT 604, PT 605, PT 606, PT 621 Traditional Lecture/Lab (4 hours)

PT 638. Neurological Aspects Phys Ther Pract III. Assessment and treatment of neurological and musculoskeletal dysfunctions presenting in the 0 to 21 years of age population in a variety of community and healthcare settings. Emphasis is placed on comprehensive management of neurological conditions and includes overview of congenital or acquired orthopedic conditions affecting the pediatric population. Prerequisites: PT 605, PT 606, PT 612, and PT 621 Traditional Lecture/Lab (4 hours)

PT 640. Legal and Ethical Issues in Healthcare. An overview of the legal structure of the healthcare system, including public and private law affecting healthcare. Concurrent ethical issues are explored, with a focus on ethical principles and decision making. Traditional Lecture (2 hours)

PT 641. Organizational Syst in Hlthcare Delivery. An overview of the structure of healthcare delivery. Emphasizes patient settings, reimbursement mechanisms, accreditation, risk management, consultation, advocacy, and quality assessment and improvement. Prerequisite: PT 640 Traditional Lecture (2 hours)

PT 642. Resource Management in Physical Therapy. Explores the business management of the physical therapy practice. Includes management theory, strategic and operational planning, risk management and quality assurance, business law, human resource management, budgeting, marketing, leadership and communication. Prerequisites: PT 640 and PT 641. Traditional Lecture (3 hours)

PT 650. Clinical Experience I. An eight week full time clinical education experience. Emphasis based on basic evaluation and treatment techniques of musculoskeletal conditions of the upper and lower extremities and medical conditions. Prerequisite: Enrolled in regular track and in good academic standing. Traditional Clinical Rotation (6 hours)

PT 651. Clinical Experience II. An eight week full time clinical education experience. The student is assigned to one of a variety of practice settings. Emphasis is on comprehensive evaluation, diagnosis, and treatment planning for a variety of patient care problems. Prerequisites: PT 650, enrolled in regular track, and in good academic standing Traditional Clinical Rotation (6 hours)

PT 652. Clinical Experience III. The final clinical education course consisting of full time long term experiences in a variety of settings. This course is the culmination of the students' previous didactic and clinical experiences and is designed to assist the student in achieving clinical competence as an entry level physical therapist. Emphasis is on professional behaviors as well as comprehensive patient management. Prerequisites: PT 651, enrolled in regular track, and in good academic standing. Traditional Clinical Rotation (6 hours)

PT 653. Clinical Experience IV. The final clinical education course consisting of full time long term experiences in a variety of settings. This course is the culmination of the students' previous didactic and clinical experiences and is designed to assist the student in achieving clinical competence as an entry level physical therapist. Emphasis is on professional behaviors as well as comprehensive patient management. Prerequisites: PT 652, enrolled in regular track, and in good academic standing. Traditional Clinical Rotation (6 hours)

PT 660. Evidence-Based Physical Therapy Pract I. Introduce medical research, including study designs, and methods that are used to support evidence based practice. Familiarize students with the interpretation of descriptive and inferential statistics. Teach legal and ethical aspects of human research and the oversight needed to conduct clinical research projects. Traditional Lecture (3 hours)

PT 661. Evidence-Based Physical Therapy Pract II. Enable the application of results from medical research to clinical decision making and advance appreciation of evidence based practice. Critical appraisal and evaluation of various types of evidence to identify the overall quality, potential sources of bias, and how these biases can influence the results. Development of the ability to discern the applicability of research findings to specific patient populations and physical therapist practice. Prerequisite: PT660 Traditional Lecture (2 hours)

PT 662. Journal Seminar II. Preceptor guided group process review of current literature related to the completion of a research project. Emphasis on the integration of the literature in the clinical practice of physical therapy. Seminar is pass/fail. Traditional Laboratory (1 hour)

PT 664. Research Methodology I. Engages students in the research process by completing a systematic review of research findings from primary sources. At the completion of this course, students will have partially completed the methodology required for their systematic review project. Prerequisite: PT660. Traditional Lecture (1 hour)

PT 665. Research Methodology II. Further engagement in the research process and completion of the systematic review project. The course will discuss written, verbal, and demonstrative methods of disseminating research deliverables within professional venues. The groups' research projects will be completed and presented at the School of Health Related Professions Research Day. Prerequisites: PT660 and PT664. Traditional Lecture (2 hours)

PT 670. Specialty Practice in Physical Therapy. Students may take an elective course in a specialty practice area of interest. These can include areas such as sports physical therapy, aquatics, advanced manual therapy skills, women's health, pediatrics, neurological therapy skills, or other areas of interest. Prerequisite: Good academic standing and permission of the instructor. Elective does not count for credit toward the DPT degree. Traditional Lecture/Lab (2 hours)

PT 670-01. Advanced Ortho and Sports PT. Students may take an elective course in a specialty practice area of interest. These can include areas such as sports physical therapy, aquatics, advanced manual therapy skills, women's health, pediatrics, neurological therapy skills, or other areas of interest. Prerequisite: Good academic standing and permission of the instructor. Elective does not count for credit toward the DPT degree. Traditional Lecture/Lab (2 hours)

PT 670-02. Neuromologic Physical Therapy. Students may take an elective course in a specialty practice area of interest. These can include areas such as sports physical therapy, aquatics, advanced manual therapy skills, women's health, pediatrics, neurological therapy skills, or other areas of interest. Prerequisite: Good academic standing and permission of the instructor. Elective does not count for credit toward the DPT degree. Traditional Lecture/Lab (2 hours)

PT 670-03. Pediatric Physical Therapy. Students may take an elective course in a specialty practice area of interest. These can include areas such as sports physical therapy, aquatics, advanced manual therapy skills, women's health, pediatrics, neurological therapy skills, or other areas of interest. Prerequisite: Good academic standing and permission of the instructor. Elective does not count for credit toward the DPT degree. Traditional Lecture/Lab (2 hours)

PT 670-04. Advanced Manual Therapy. Students may take an elective course in a specialty practice area of interest. These can include areas such as sports physical therapy, aquatics, advanced manual therapy skills, women's health, pediatrics, neurological therapy skills, or other areas of interest. Prerequisite: Good academic standing and permission of the instructor. Elective does not count for credit toward the DPT degree. Traditional Lecture/Lab (2 hours)

PT 670-05. Applied Integumentary Concepts in PT. Students may take an elective course in a specialty practice area of interest. These can include areas such as sports physical therapy, aquatics, advanced manual therapy skills, women's health, pediatrics, neurological therapy skills, or other areas of interest. Prerequisite: Good academic standing and permission of the instructor. Elective does not count for credit toward the DPT degree. Traditional Lecture/Lab (2 hours)

PT 670-10. Alternative PT Management. Students may take an elective course in a specialty practice area of interest. These can include areas such as sports physical therapy, aquatics, advanced manual therapy skills, women's health, pediatrics, neurological therapy skills, or other areas of interest. Prerequisite: Good academic standing and permission of the instructor. Elective does not count for credit toward the DPT degree. Traditional Lecture/Lab (2 hours)
of interest. Requisite: Good academic standing and permission of the instructor. Elective does not count for credit toward the DPT degree.

Traditional Lecture/Lab (2 hours)

PT 670-11. Intro to Aquatic Rehab. Students may take an elective course in a specialty practice area of interest. These can include areas such as sports physical therapy, aquatics, advanced manual therapy skills, women’s health, pediatrics, neurological therapy skills, or other areas of interest. Requisite: Good academic standing and permission of the instructor. Elective does not count for credit toward the DPT degree.

Traditional Lecture/Lab (2 hours)

PT 670-12. PT and Progressive Neurologic Disorders. Students may take an elective course in a specialty practice area of interest. These can include areas such as sports physical therapy, aquatics, advanced manual therapy skills, women’s health, pediatrics, neurological therapy skills, or other areas of interest. Requisite: Good academic standing and permission of the instructor. Elective does not count for credit toward the DPT degree.

Traditional Lecture/Lab (2 hours)

PT 670-13. Survey of PT Practice in Oncology. Students may take an elective course in a specialty practice area of interest. These can include areas such as sports physical therapy, aquatics, advanced manual therapy skills, women’s health, pediatrics, neurological therapy skills, or other areas of interest. Requisite: Good academic standing and permission of the instructor. Elective does not count for credit toward the DPT degree.

Traditional Lecture/Lab (2 hours)

PT 670-14. Applied Concepts in Assistive Technology. Students may take an elective course in a specialty area of interest. These can include areas such as sports physical therapy, aquatics, advanced manual therapy skills, women’s health, pediatrics, neurological therapy skills, or other areas of interest. Requisite: Good academic standing and permission of the instructor. Elective does not count for credit toward the DPT degree.

Traditional Lecture/Lab (2 hours)

PT 670-15. Research. Students may take an elective course in a specialty practice area of interest. These can include areas such as sports physical therapy, aquatics, advanced manual therapy skills, women’s health, pediatrics, neurological therapy skills, or other areas of interest. Requisite: Good academic standing and permission of the instructor. Elective does not count for credit toward the DPT degree.

Traditional Lecture/Lab (2 hours)

PT 670-16. Issues in Women’s Health. Students may take an elective course in a specialty practice area of interest. These can include areas such as sports physical therapy, aquatics, advanced manual therapy skills, women’s health, pediatrics, neurological therapy skills, or other areas of interest. Requisite: Good academic standing and permission of the instructor. Elective does not count for credit toward the DPT degree.

Traditional Lecture/Lab (2 hours)

PT 670-17. Human Anatomy. Students may take an elective course in a specialty practice area of interest. These can include areas such as sports physical therapy, aquatics, advanced manual therapy skills, women’s health, pediatrics, neurological therapy skills, or other areas of interest. Requisite: Good academic standing and permission of the instructor. Elective does not count for credit toward the DPT degree.

Traditional Lecture/Lab (2 hours)

PT 671. Independent Study in Physical Ther Pract. An independent study course designed to enhance the knowledge base in administrative, education, or clinical issues. Permission of the instructor and department chair is required. Credit hours assigned according to the scope of the project. Traditional Lecture (1-4 hours)

PT 672. Special Topics in Physical Therapy Pract. A student may take this course on a subject of interest or a clinical practice area of physical therapy with permission of the course faculty and department chair. Credit hours assigned according to the scope of the project. Traditional Lecture (1-4 hours)

RAD 300. Concepts of Radiologic Sciences. An overview of the foundations in radiography involving the practitioner’s role in the healthcare delivery system. An introduction to general anatomy and body systems, mobile radiography, trauma radiography, and surgical radiography are explored. Principles, practices, and policies of the healthcare organization(s), medical language, professional communication, and professional responsibilities of the radiographer will be examined and discussed. Traditional Lecture (2 hours)

RAD 306. Radiographic Procedures I. Provides a knowledge base necessary to perform standard radiographic procedures of the thoracic viscera, abdomen, upper and lower extremities, and bony thorax. Content includes the radiographic anatomy and positioning of these body structures. Laboratory experience will be used to complement the didactic portion. Traditional Lecture/Lab (3 hours)

RAD 312. Radiation Protection. Basic theories and principles related to the safe utilization of diagnostic radiographic equipment in a clinical setting. The student applies the theories and principles of safe radiation exposure. Traditional Lecture (2 hours)

RAD 318. Principles of Image Formation. Factors that govern and influence the production and recording of radiologic images. Content includes the importance of minimum imaging standards, discussion of a problem-solving technique for image evaluation, factor’s affecting image quality, imaging accessories, and technique charts. Traditional Lecture (3 hours)

RAD 324. Age Specific Patient Care. Patient care theory and techniques for a diverse patient population. Content includes age appropriate interpersonal communication, human diversity, patient transfer and immobilization techniques, vital sign monitoring, sterile and aseptic technique, infection control, and medical emergencies. Traditional Lecture (2 hours)

RAD 330. Radiologic Physics. Qualitative and quantitative concepts of radiation physics pertaining to medical applications in radiology; atomic and nuclear structure; properties of radiation; x-ray production; artificial production; photon interactions in matter; and attenuation processes. Traditional Lecture (3 hours)

RAD 336. Radiobiology. Qualitative and quantitative concepts of radiobiology pertaining to genetic and somatic effects of ionizing radiation and the mechanisms of interaction from subcellular level to organism. Traditional Lecture (2 hours)

RAD 342. Research Methods. Provides an overview of research design methodology in radiologic sciences. Emphasis is on data collection, analysis, interpretation, and effective communication of research via written and oral presentations. Traditional Lecture (2 hours)

RAD 348. Radiographic Procedures II. A continuation of RAD 306. Content includes the radiographic anatomy and positioning of the shoulder and pelvic girdles, as well as the vertebral column. Laboratory experience will be used to complement the didactic portion. Traditional Lecture/Lab (3 hours)

RAD 354. Clinical Practicum I. Supervised clinical practice experience designed for sequential development, application, critical analysis, integration, synthesis, and evaluation of concepts and theories in the performance of radiologic procedures. Content includes patient assessment; radiographic examinations of extremities (upper and lower) and girdles, chest, bony thorax, and abdomen; radiologic imaging critique; concepts of team practice and patient-centered clinical practice; total quality management; and professional development. Traditional Clinical Rotation (2 hours)

RAD 360. Clinical Practicum II. A continuation of RAD 354. Supervised clinical practice experience designed for sequential development, application, critical analysis, integration, synthesis, and evaluation of concepts and theories in the performance of radiologic procedures. Content includes patient assessment; radiographic examinations of extremities (upper and lower) and girdles, chest, bony thorax, abdomen, and vertebral column; radiologic imaging critique; concepts of team practice and patient-centered clinical practice; total quality management; and professional development. Traditional Clinical Rotation (2 hours)
RAD 400. Legal and Ethical Issues in Imaging Science. A study of legal and ethical issues in imaging sciences. Topics include ethical theories, end of life care, living wills, confidentiality, risk management and quality review, HIPAA, and implementation of the electronic health record. Online, Internet, or Web-based Lecture (3 hours)

RAD 406. Radiographic Procedures III. A continuation of RAD 348. Content includes the radiographic anatomy and positioning of the digestive system, biliary system, and cranium. Laboratory experience will be used to complement the didactic portion. Traditional Lecture/Lab (3 hours)

RAD 412. Advanced Medical Imaging Science. A study of the advanced physical principles of diagnostic radiology. Topics include image intensification, specialized radiographic units, and quality control of radiographic equipment and accessories. Traditional Lecture (2 hours)

RAD 414. Advanced Clinical Practice Skills. Focuses on the current healthcare delivery environment including patient assessment, monitoring, infection control, and management. It includes working with multicultural patients, managing problem patients, and patient education. Additional topics include an overview of considerations when working in an increasingly digital imaging environment. Online, Internet, or Web-based Lecture (4 hours)

RAD 418. Digital Image Acquisition and Display. Explores the components, principles, and operations of digital imaging systems. Factors that impact image acquisition, display, archiving and retrieval are discussed. Principles of digital imaging quality assurance and maintenance are presented. Online, Internet, or Web-based Lecture (3 hours)

RAD 418. Digital Image Acquisition and Display. Explores the components, principles, and operations of digital imaging systems. Factors that impact image acquisition, display, archiving and retrieval are discussed. Principles of digital imaging quality assurance and maintenance are presented. Traditional Lecture (3 hours)

RAD 420. Image Evaluation and Critique. Content provides a basis for analyzing radiographic images. Included are the importance of optimal imaging standards, discussion of a problem-solving technique for image evaluation, and the factors that can affect image quality. Traditional Lecture (2 hours)

RAD 424. Principles of Computed Tomography. Explores the basic physical and technical principles of computed tomography (CT) imaging. Content includes computed tomography generations, components, operations, and imaging processes with an emphasis on sectional anatomy as seen in computed tomography. Online, Internet, or Web-based Lecture (2 hours)

RAD 430. Pharmacology and Drug Administration. An overview of pharmacologic principles and practices in patient care with emphasis on imaging procedures. Topics include biopharmaceutics, pharmacokinetics, pharmacodynamics, drug classifications, radiopharmaceuticals, venipuncture, routes of drug administration, emergency medications, and cardiac monitoring. Online, Internet, or Web-based Lecture (2 hours)

RAD 430. Pharmacology and Drug Administration. An overview of pharmacologic principles and practices in patient care with emphasis on imaging procedures. Topics include biopharmaceutics, pharmacokinetics, pharmacodynamics, drug classifications, radiopharmaceuticals, venipuncture, routes of drug administration, emergency medications, and cardiac monitoring. Traditional Lecture (2 hours)

RAD 436. Radiographic Pathology. Introduces theories of disease causation and the pathophysiologic disorders that compromise healthy systems. Content includes etiology, pathophysiologic responses, clinical manifestations, radiographic appearance, and management of alterations in body systems. Online, Internet, or Web-based Lecture (3 hours)

RAD 436. Radiographic Pathology. Introduces theories of disease causation and the pathophysiologic disorders that compromise healthy systems. Content includes etiology, pathophysiologic responses, clinical manifestations, radiographic appearance, and management of alterations in body systems. Traditional Lecture (3 hours)

RAD 438. Radiographic Image Analysis. A study of specific factors of the radiographic process that affect image quality, with an emphasis on refinement of image analysis and problem-solving skills. Image analysis of the appendicular skeleton, axial skeleton, chest, abdomen, and digestive system will be explored. Online, Internet, or Web-based Lecture (4 hours)

RAD 440. Advanced Clinical Management. A study of the delivery of patient-centered care while exploring the business management of the imaging profession. Includes advanced clinical practice skills, image analysis, radiology coding, and imaging informatics. Additional topics include an overview of considerations when working in an increasingly digital imaging environment. Traditional Lecture (2 hours)

RAD 442. Clinical Research Methods. A study of research design methodology in radiologic sciences. Topics include terminology of research, qualitative and quantitative methods, statistics, basic research designs, and data analysis techniques. Emphasis is placed on critical review of radiologic sciences research studies and their application to clinical practice. Online, Internet, or Web-based Lecture (4 hours)

RAD 445. Concepts of Magnetic Resonance Imaging. A study of the basic physical principles of magnetic resonance imaging (MRI). Content includes fundamentals of magnetic resonance imaging, equipment and instrumentation, radiofrequency and gradients, image production processes, contrast media, pulse sequences, safety essentials, image quality, and procedure protocols of common magnetic resonance imaging examinations. Provides an overview of human anatomy, viewed in body sections, as it relates to the imaging professional. Pathologic diseases and conditions commonly imaged utilizing MRI will also be studied. Online, Internet, or Web-based Lecture (3 hours)

RAD 448. Radiographic Procedures IV. A continuation of RAD 406. Content includes the radiographic anatomy and positioning of the urinary system, reproductive system, central nervous system, as well as the use of advanced radiographic procedures. Traditional Lecture (2 hours)

RAD 451. Mgmt Issues in Diagnostic Health Care. A study of managerial roles and functions in healthcare organizations with emphasis in diagnostic imaging. Content includes connective processes, planning, organizing, staffing, influencing, controlling, and labor relations. Provides a foundation of managerial thoughts and processes which lead to organizational success and maximum productivity. Online, Internet, or Web-based Lecture (3 hours)

RAD 454. Clinical Practicum III. A continuation of RAD 360. Supervised clinical practice experience designed for sequential development, application, critical analysis, integration, synthesis, and evaluation of concepts and theories in the performance of radiologic procedures. Content includes patient assessment; radiographic examinations of extremities (upper and lower) and girdles, chest, bony thorax, abdomen, and vertebral column; radiologic imaging critique; concepts of team practice and patient-centered clinical practice; total quality management; and professional development. Traditional Clinical Rotation (3 hours)

RAD 457. Breast Imaging Principles. A study of the basic physical principles of breast imaging (mammography). Content includes fundamentals of breast imaging, equipment and instrumentation, image production parameters, quality control and regulations, patient care in breast imaging, breast ultrasound, digital mammography, and procedure protocols and techniques specific to breast imaging examinations. Provides an overview of breast anatomy and pathology. Online, Internet, or Web-based Lecture (3 hours)

RAD 460. Clinical Practicum IV. A continuation of RAD 454. Supervised clinical practice experience designed for sequential development, application, critical analysis, integration, synthesis, and evaluation of concepts and theories in the performance of radiologic procedures. Content includes patient assessment; radiographic examinations of extremities (upper and lower) and girdles, chest, bony thorax, abdomen, vertebral column, and gastrointestinal system; radiologic imaging critique; concepts of team practice and patient-centered clinical practice; total quality management; and professional development. Traditional Clinical Rotation (3 hours)

RAD 463. Patient Safety in Radiologic Sciences. A study of the essentials of patient safety in the healthcare environment, with emphasis on safety within the imaging profession. Content includes an introduction to healthcare safety, workplace safety, risk management, patient transfer
and transport, patient fall prevention protocols, infection control practices, medication safety, sentinel event policies and prevention, and radiation protection. Online, Internet, or Web-based Lecture (3 hours)

RAD 466. Clinical Practicum V. A continuation of RAD 460. Supervised clinical practice experience designed for sequential development, application, critical analysis, integration, synthesis, and evaluation of concepts and theories in the performance of radiologic procedures. Content includes patient assessment; radiographic examinations of extremities (upper and lower) and girdles, chest, bony thorax, abdomen, vertebral column, urinary system, gastrointestinal system, reproductive system, and central nervous system; radiologic imaging critique; concepts of team practice and patient-centered clinical practice; total quality management; and professional development. Traditional Clinical Rotation (3 hours)

RAD 472. Seminar I. An overview of various topics in radiologic sciences. Traditional Lecture (1 hour)

RAD 475. Seminar II. A continuation of RAD 472 and provides an overview of various topics in radiologic sciences. Traditional Lecture/Lab (1 hour)

RAD 478. CT Applications and Sectional Imaging. A study of the basic physical principles of computed tomography (CT) imaging. Content includes fundamentals of computed tomography, equipment and instrumentation, data acquisition, image processing and reconstruction, patient safety, image quality, and procedure protocols of common computed tomography examinations. Provides an overview of human anatomy, view sections of the body sections, as it relates to the imaging professional. Online, Internet, or Web-based Lecture (4 hours)

RAD 484. Radiologic Sciences Directed Study. Involves a directed study designed to provide registered radiologic technologists the opportunity to demonstrate their expanded capabilities resulting from previous didactic and clinical experience gained in radiologic sciences. Requires the student to utilize the knowledge, skills, and insights gained from previous courses taken in the Advanced Standing Radiologic Sciences Track and requires the student to develop a comprehensive ePortfolio of material that includes, but is not limited to, directed reading essays, testing assignments, CITI Basic Course assignments, an MSDH Healthcare Law presentation, and a Curriculum Vitae. The student will work with a supervising faculty member and a mentor/preceptor. Prerequisite: Senior standing and permission of the program director are required. Online, Internet, or Web-based Lecture (4 hours)

RAD 490. Special Topics. Interdisciplinary elective. Content varies. May be repeated for credit. Prerequisite: Permission of instructor Online, Internet, or Web-based Lecture (1-4 hours)

**FACULTY**

Abraham, Kayla C., BS, MA; Assistant Professor – Occupational Therapy
Adah, Felix, BS, MS, PhD; Professor – Physical Therapy
Alpe, Kristy, BS, MSBA, DHA; Assistant Professor – Health Sciences
Arnold, Amber, BSN, MSN, DNP; Assistant Professor – Health Administration
Bahl, Ryan, BS, MS, DPT; Assistant Professor – Physical Therapy
Bagwell, Jana K., BS, MS; Assistant Professor – Medical Laboratory Science
Bailey, Jessica H., BS, MA, PhD; Professor – Health Administration

Barnes, Lisa, BS, DPT, PhD; Professor – Physical Therapy
Berry, Shamsi, BS, MS, PhD; Assistant Professor – Health Informatics and Information Management
Benghuzzi, Hamed A., BS, MS, PhD; Professor – Diagnostic and Clinical Health Sciences
Brown, Lee, BS, MHIM; Assistant Professor – Radiologic Sciences

Bullock, Shelia, BSN, MBA, DHA; Assistant Professor – Health Informatics and Information Management
Burrell, Angela, BSN, MSN, PhD; Assistant Professor – Health Administration
Butler, Rebecca, BS, ME; Assistant Professor – Health Informatics and Information Management
Casey, Cynthia, BSN, MSN, DNP; Associate Professor – Health Sciences
Cole, Kristy; BS, OTD; Assistant Professor – Occupational Therapy

Colson, Sherry, BS, DPT; Associate Professor – Physical Therapy
Crawford, Kelly, BS, MSN, DHA; Instructor – Occupational Therapy
Davis, Peggy, BS, MS, MBA, MD; Associate Professor – Diagnostic and Clinical Health Sciences
Davis, Robin, BS, MS; EdD; Associate Professor – Occupational Therapy
Dishongh, Cynthia, BS, MHS; Assistant Professor – Health Administration
Dobbins, Thomas, BS, MPH, MD; Assistant Professor – Health Administration
Edgerton, Seena Shazowee, BS, MBA, DHA; Associate Professor – Radiologic Sciences
Flowers, Meredith; BS, DPT; Assistant Professor – Physical Therapy
Franklin, Elizabeth, BA, Med, PhD; Associate Professor – Health Administration

FACULTY  

Gordy, Judy, PhD; Assistant Professor – Radiologic Sciences
Gray, Mark R., BA, MS, PhD; Associate Professor – Radiologic Sciences
Hamadain, Elgenaid, BS, MS, PhD; Professor – Diagnostic and Clinical Health Sciences
Heard, III, Kenneth M., JD; Assistant Professor – Health Sciences
Huang, Min, BS, PhD, MD; Professor – Physical Therapy
Ibrahim, Jamil, BA, MBA, PhD; Associate Professor – Health Sciences

Ketchum, Mike, BS, MSED, DHA; Associate Professor – Radiologic Sciences
King, Ed, BA, BST, MST; Associate Professor – Clinical Health Sciences
Kuebler, Joy, BS, MS, DPT; Professor – Physical Therapy
Ladner, Megan, BS, MS; Assistant Professor – Occupational Therapy
Lauderdale, Melanie, BS, DPT; Associate Professor – Physical Therapy

Litton, Nicole, BA, MPPA, JD; Instructor – Health Administration
Luehfing, Monte, BS, MS, DHA; Assistant Professor – Health Informatics and Information Management
McElhaney, Rob, BSBA, MPA, PhD; Assistant Professor – Health Administration
McGaughey, Kim, BS, MHS; Associate Professor – Health Informatics and Information Management
McGaughey, Debbie; BSN, MSN; Assistant Professor – Health Sciences
McGraw, Ryan, BS, MPT, DPT; Associate Professor – Physical Therapy
McKay, Kevin, BA, MA, PhD; Assistant Professor – Radiologic Sciences

McVey, Emily, BAE, MD; Professor – Physical Therapy
Moore, Kristi, BS, MS, PhD; Associate Professor – Radiologic Sciences
Murray, Angela, BS, MSN, PhD; Associate Professor – Health Informatics and Information Management
Morgan, Christy M., BS, MSHA, PhD; Professor – Occupational Therapy

Morton, Lisa, BS, MLIS, PhD; Professor – Health Informatics and Information Management
Norris, Mitzi, BS, MS, PhD; Professor – Health Administration
Parish, Robin, BS, MA; Assistant Professor – Occupational Therapy
Panell, William, BS, DPT; Associate Professor – Physical Therapy
Pennington, Sharon, MHIM, MD; Assistant Professor – Health Informatics and Information Management
Perkins, Bevilyn, BS, MS; Instructor – Medical Laboratory Science
Ratcliff, Molly R., BBA, MS; Instructor – Health Sciences
Reneker, Jennifer, BS, MSPT, PhD; Associate Professor – Physical Therapy
Reulet, Britney, BS, MSED; Assistant Professor – Health Sciences
Richards-Moore, LaToya, BS, MS, PhD; Professor - Medical Laboratory Science
Rogers, Penny, BS, MAT, DHA; Associate Professor – Occupational Therapy
Rutledge, Brian, BA, MHSA, PhD; Associate Professor – Health Administration
Schmitz, Travis, BS, MBA, PhD; Assistant Professor – Health Sciences
Sisson, Taylor; BS, MBA, DHA; Assistant Professor – Health Administration
Slaughter, Janet, BS, DPT; Associate Professor – Physical Therapy
Stephens, Chelsea, BS; Instructor – Radiologic Sciences
Street, Asher, BS, MS, DHA; Assistant Professor – Radiologic Sciences
Street, Lorraine, BS, MOT, PhD; Professor – Occupational Therapy
Tardy, Felicia M., BS, MS, PhD; Associate Professor – Medical Laboratory Science
Taylor, Juanyce, BS, MEd, PhD; Associate Professor – Health Administration
Taylor, Susan, BA, BS, MS, PhD; Professor – Health Administration
Taylor, Tonia B., BS, PhD; Associate Professor – Occupational Therapy
Thompson, Robin B., MSN; Assistant Professor – Health Sciences
Tubbs, Carol, BS, BA, MA; Associate Professor – Occupational Therapy
Vance, Stacy H., BS, MS, PhD; Professor – Medical Laboratory Science
West, Sherry J., BS, MS, DHA; Associate Professor – Radiologic Sciences
Whitfield, Candice, BA, MPH, MPA; Instructor – Health Sciences
Wilcox, Kimberly Curbow, BS, MS, PhD; Professor – Physical Therapy
Wilkins, Renee, BS, MS, PhD; Associate Professor – Medical Laboratory Science
Willis, Kimberly, BS, DPT; Associate Professor – Physical Therapy
Woodall, William, PT, EdD; Professor – Physical Therapy
Young, Dorthy, BS, MHSA, PhD; Instructor – Health Informatics and Information Management
Zhang, Lei, MBA, PhD; Professor – Health Administration
### 2019-2020 Academic Calendar

#### SUMMER SEMESTER

<table>
<thead>
<tr>
<th>Month</th>
<th>Day</th>
<th>Event</th>
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</thead>
<tbody>
<tr>
<td>May</td>
<td>27</td>
<td>Mon</td>
</tr>
<tr>
<td>28</td>
<td>Tues</td>
<td>Classes begin for D2, D3, D4 and DH4</td>
</tr>
<tr>
<td>28</td>
<td>Tues</td>
<td>$100 Late Registration Fee for 2019-2020 Summer Term Effective Today</td>
</tr>
<tr>
<td>June</td>
<td>May 30- June 2</td>
<td>Thurs-Sun</td>
</tr>
<tr>
<td>7</td>
<td>Fri</td>
<td>Dental Hygiene-Last day to register or add a course</td>
</tr>
<tr>
<td>10</td>
<td>Mon</td>
<td>Dental Hygiene-Last day to withdraw from a course or from school without receiving a withdrawal grade and to receive a tuition refund</td>
</tr>
<tr>
<td>19</td>
<td>Wed</td>
<td>Registration begins for 2019-2020 Fall Semester</td>
</tr>
<tr>
<td>19-22</td>
<td>Wed-Sat</td>
<td>AADR Annual Meeting, Vancouver, BC, Canada</td>
</tr>
<tr>
<td>July</td>
<td>4</td>
<td>Thurs</td>
</tr>
<tr>
<td>5</td>
<td>Fri</td>
<td>Classes Resume</td>
</tr>
<tr>
<td>5</td>
<td>Fri</td>
<td>Dental Hygiene-Mid-term grades due</td>
</tr>
<tr>
<td>12</td>
<td>Fri</td>
<td>Dental Hygiene-Last day to withdraw from a course and receive a “W” grade if failing</td>
</tr>
<tr>
<td>29</td>
<td>Mon</td>
<td>$50 Late Registration Fee for 2019-2020 Fall Semester Effective Today</td>
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<tr>
<td>29</td>
<td>Mon</td>
<td>Dental Hygiene-Final examinations begin</td>
</tr>
<tr>
<td>August</td>
<td>2</td>
<td>Fri</td>
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<tr>
<td>2</td>
<td>Fri</td>
<td>Dental-Last day of Summer term</td>
</tr>
<tr>
<td>6</td>
<td>Tues</td>
<td>Summer grades due in SAP by 5:00 pm</td>
</tr>
<tr>
<td>8</td>
<td>Thurs</td>
<td>SEPC D2, D3, D4 Summer term</td>
</tr>
<tr>
<td>6-8</td>
<td>Tues-Thurs</td>
<td>Dental Hygiene-Orientation for new students</td>
</tr>
<tr>
<td>6-9</td>
<td>Tues-Fri</td>
<td>D1 orientation</td>
</tr>
<tr>
<td>7</td>
<td>Wed</td>
<td>Deadline for completion of General Orientation</td>
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</tbody>
</table>

#### Fall Semester

<table>
<thead>
<tr>
<th>September</th>
<th>August</th>
<th>12</th>
<th>Mon</th>
<th>Dental Hygiene-Classes begin</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
<td>Mon</td>
<td>ASDA Recognition Day</td>
<td></td>
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<tr>
<td>12</td>
<td>Mon</td>
<td>$100 Late Registration Fee For 2019-2020 Fall Semester Effective Today</td>
<td></td>
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<tr>
<td>13</td>
<td>Tues</td>
<td>All classes begin D1, D2, D3, D4</td>
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<tr>
<td>15-16</td>
<td>Thurs-Fri</td>
<td>Faculty retreat</td>
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<tr>
<td>16</td>
<td>Fri</td>
<td>Dental Hygiene – Last day to register for the Fall semester</td>
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<tr>
<td>23</td>
<td>Fri</td>
<td>Last day to submit an application for December degree</td>
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<tr>
<td>23</td>
<td>Fri</td>
<td>Dental Hygiene-Last day to add a course</td>
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<tr>
<td>29</td>
<td>Thurs</td>
<td>Dental Hygiene-Last day to withdraw from a course or from school without receiving a withdrawal grade and to receive a tuition refund</td>
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<tr>
<td>October</td>
<td>2</td>
<td>Wed</td>
<td>Dental Hygiene-Mid-term grades due</td>
<td></td>
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<tr>
<td>10</td>
<td>Thurs</td>
<td>ADA Success Program D1, D2, D3, D4</td>
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<tr>
<td>10</td>
<td>Thurs</td>
<td>D1 Ethics Signing Ceremony</td>
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<tr>
<td>25</td>
<td>Fri</td>
<td>Dental Hygiene-Last day to withdraw from a course and to receive a “W” grade if failing</td>
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<tr>
<td>September</td>
<td>2</td>
<td>Mon</td>
<td>Labor Day holiday observed</td>
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<tr>
<td>3</td>
<td>Tues</td>
<td>Classes resume</td>
<td></td>
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<tr>
<td>4-9</td>
<td>Wed-Mon</td>
<td>ADA FDI World Dental Congress, San Francisco, CA</td>
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<tr>
<td>October</td>
<td>2</td>
<td>Wed</td>
<td>Dental Hygiene-Program Focus Day</td>
<td></td>
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<tr>
<td>4</td>
<td>Mon</td>
<td>Registration begins for 2019-2020 Spring Semester</td>
<td></td>
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</tr>
<tr>
<td>15</td>
<td>Fri</td>
<td>Dental Hygiene-Fall break begins at 5:00 pm</td>
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<tr>
<td>28-29</td>
<td>Thurs-Fri</td>
<td>Dental-Thanksgiving holidays</td>
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<tr>
<td>November</td>
<td>1</td>
<td>Fri</td>
<td>Dental Hygiene-Program Focus Day</td>
<td></td>
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<tr>
<td>4</td>
<td>Mon</td>
<td>Registration begins for 2019-2020 Spring Semester</td>
<td></td>
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<tr>
<td>15</td>
<td>Fri</td>
<td>Dental Hygiene-Fall break begins at 5:00 pm</td>
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<tr>
<td>28-29</td>
<td>Thurs-Fri</td>
<td>Dental-Thanksgiving holidays</td>
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<tr>
<td>December</td>
<td>2</td>
<td>Mon</td>
<td>Classes resume</td>
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<tr>
<td>2</td>
<td>Mon</td>
<td>Dental Hygiene-Final examinations begin</td>
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<tr>
<td>6</td>
<td>Fri</td>
<td>Dental Hygiene-Final examinations end; Christmas and New Year’s holidays begin at 5:00 pm</td>
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<tr>
<td>9</td>
<td>Mon</td>
<td>Dental Hygiene-Final grades due in SAP by 5:00 pm</td>
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<tr>
<td>13</td>
<td>Fri</td>
<td>Last Day of Classes/ Clinics D1, D2, D3, D4</td>
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<tr>
<td>14</td>
<td>Sat</td>
<td>End of the fall semester</td>
<td></td>
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<tr>
<td>17</td>
<td>Tues</td>
<td>Dental-Fall semester grades due in SAP</td>
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<tr>
<td>23</td>
<td>Mon</td>
<td>$50 Late Registration Fee For 2019-2020 Spring Semester Effective Today</td>
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<td></td>
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<tr>
<td>Date</td>
<td>Event Description</td>
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<tr>
<td>January, 2020</td>
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<tr>
<td>2 Thurs</td>
<td>SEPC Fall Semester Meeting for D1, D2, D3, D4 Students</td>
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<tr>
<td>6 Mon</td>
<td>Dental and Dental Hygiene-Classes resume</td>
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<tr>
<td>6 Mon</td>
<td>$100 Late Registration Fee for 2019-2020 Spring Semester Effective Today</td>
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<tr>
<td>9 Thurs</td>
<td>Diversity Training</td>
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<tr>
<td>10 Fri</td>
<td>Last day to register for spring semester</td>
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<tr>
<td>14 Tues</td>
<td>Grand Rounds resumes</td>
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<tr>
<td>17 Fri</td>
<td>Last day to submit an application for May degree</td>
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<tr>
<td>20 Mon</td>
<td>Martin Luther King’s birthday holiday observed</td>
<td></td>
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<tr>
<td>21 Tues</td>
<td>Classes resume</td>
<td></td>
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<tr>
<td>23 Thurs</td>
<td>Dental Exhibit Day</td>
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<tr>
<td>23 Thurs</td>
<td>Dental Hygiene-Last day to withdraw from a course or from school without</td>
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<tr>
<td></td>
<td>receiving a withdrawal grade and to receive a tuition refund</td>
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<tr>
<td>February</td>
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<tr>
<td>3 Mon</td>
<td>ADA Give Kids a Smile Day</td>
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<tr>
<td>3-7 Mon-Fri</td>
<td>Service Learning Week</td>
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<tr>
<td>7 Fri</td>
<td>Alumni and Friends Day</td>
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<tr>
<td>18 Tues</td>
<td>Research Day</td>
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<tr>
<td>21 Fri</td>
<td>Dental ACD White Coat Ceremony and D4 ACD Ethics Seminar</td>
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<tr>
<td>March</td>
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<tr>
<td>2 Fri</td>
<td>Dental Hygiene-Program Awareness Day</td>
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<tr>
<td>2 Fri</td>
<td>Dental Hygiene-Mid-term grades due</td>
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<tr>
<td>9-13 Mon-Fri</td>
<td>Dental, Dental Hygiene-Spring break</td>
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<tr>
<td>14-17 Sat-Tues</td>
<td>American Dental Education Association Annual Meeting, National Harbor, MD</td>
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<tr>
<td>16 Mon</td>
<td>Classes resume</td>
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<tr>
<td>19 Thurs</td>
<td>Dental Impressions Program</td>
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<tr>
<td>19-21 Thurs-Sat</td>
<td>Hinman Dental Meeting, Atlanta, GA</td>
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<tr>
<td>20 Fri</td>
<td>Dental Hygiene-Last day to withdraw from a course and receive a “W” grade if failing</td>
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<tr>
<td>April</td>
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<tr>
<td>8 Wed</td>
<td>D4 Student Financial Wellness</td>
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<tr>
<td>9 Thurs</td>
<td>Hembree Honor Society Banquet</td>
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<tr>
<td>9 Thurs</td>
<td>Dental Hygiene-Easter holiday begins at 5:00 pm</td>
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<tr>
<td>13 Mon</td>
<td>Registration begins for 2020-2021 Summer Term</td>
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<tr>
<td>14 Tues</td>
<td>Dental Hygiene-Classes resume</td>
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<tr>
<td>17 Fri</td>
<td>Last day to submit an application for August, 2020 degree</td>
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<tr>
<td>27 Mon</td>
<td>Dental Hygiene-Final examinations begin</td>
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<tr>
<td>30 Thurs</td>
<td>Omicron Kappa Upsilon Dental Honor Society Banquet</td>
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<td>May</td>
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<tr>
<td>1 Fri</td>
<td>Dental Hygiene-Final examinations end; last day of spring semester</td>
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<tr>
<td>4 Mon</td>
<td>Dental Hygiene-Final grades due in SAP by 5:00 pm</td>
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<tr>
<td>5 Tues</td>
<td>Dental Awards Day</td>
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<tr>
<td>8 Fri</td>
<td>Last day of classes/clinics for D1,D2,D3,D4 (Note: D3 Orientation May 18-20)</td>
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<tr>
<td>12 Tues</td>
<td>Dental-Spring semester grades due</td>
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<tr>
<td>12 Tues</td>
<td>$50 Late Registration Fee for 2020-2021 Summer Term Effective Today</td>
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<tr>
<td>TBD</td>
<td>Dental, Dental Hygiene-CDCA retake exam</td>
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<tr>
<td>14 Thurs</td>
<td>Dental-SEPC Meeting D3 &amp; D4 Students/D4 Checkout begins</td>
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<tr>
<td>14 Thurs</td>
<td>Dental-SEPC Meeting D1 &amp; D2 Students</td>
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<tr>
<td>18-20 Mon-Wed</td>
<td>D3 Orientation</td>
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<tr>
<td>20 Wed</td>
<td>D4 Checkout Deadline 5:00pm</td>
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<tr>
<td>21 Thurs</td>
<td>Dental/Dental Hygiene-MDA Senior Honors Banquet</td>
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<tr>
<td>22 Fri</td>
<td>Commencement</td>
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</tbody>
</table>
SCHOOL OF DENTISTRY

David A. Felton, DDS, Dean
Robert Scott Gatewood, DMD, Associate Dean for Academic Affairs
Jason A. Griggs, PhD, Associate Dean for Research
Scott M. Phillips, DMD, Assistant Dean for Clinical Affairs
John B. Smith, DMD, Assistant Dean for Admissions and Interim Assistant Dean for Student Affairs

HISTORY
The long-range plan for the development of the Medical Center included the creation of a dental school in the 1971-1979 period. In the regular session of 1973, the Mississippi Legislature authorized the Board of Trustees to establish a School of Dentistry at the Medical Center for the “encouragement of the study of dentistry toward the doctor of dental medicine degree (DMD) as well as the continued education of the state’s dental health professionals, and the encouragement of dental research and the improvement of dental health.”
The School of Dentistry enrolled its first students in 1975, and the first class was graduated in May, 1979. The dental education building, which adjoins the main Medical Center complex by an enclosed walkway, was completed in 1977. The contemporary, five-story structure was dedicated in public and scientific ceremonies in March 1978.

PROGRAMS
The School of Dentistry offers a course of instruction leading to the degree of Doctor of Dental Medicine (DMD). The curriculum extends over four calendar years and is accredited by the American Dental Association Commission on Dental Accreditation. The commission is a specialized accrediting body recognized by the American Dental Association Commission on Recognition of Postsecondary Accreditation and by the United States Department of Education. The Commission on Dental Accreditation can be contacted at (312) 440-2719 or at 211 East Chicago Avenue, Chicago, IL 60611.
Master of Science and Doctor of Philosophy degrees in Biomedical Materials Science are offered by the School of Graduate Studies in Health Sciences. These graduate programs are open to dentists, engineers and other scientists and medical professionals. They focus on the fundamental principles of materials science and the unique requirements associated with the use of materials in a living system, including the oral environment.

The School of Dentistry offers a Bachelor of Science degree in Dental Hygiene. This degree program, previously a part of the School of Health Related Professions, educates dental professionals who provide preventive services and promote the overall health and well-being of the oral environment. An advanced standing Baccalaureate degree program enables practicing licensed dental hygienists to update their educational background, enhance their didactic skills, improve their clinical decision-making skills and receive the Bachelor of Science in Dental Hygiene. The program, offered across five semesters, is designed for, but not limited to, part-time, nontraditional students. Online coursework is the method of content delivery.

VISION
The University of Mississippi School of Dentistry will be a nationally recognized center of excellence in dental education, patient care, research, and services in order to improve health outcomes and eliminate dental healthcare disparities for the citizens of Mississippi.

MISSION
The mission of the University of Mississippi School of Dentistry is to foster an environment of lifelong learning, collaborative teaching, service, and research through partnerships within the Medical Center, and with community organizations and dental health practitioners throughout the State of Mississippi. The School of Dentistry is committed to acquiring and retaining a diverse community of students, residents, fellows, faculty and staff, which exemplifies qualities of leadership and dedication in preparing competent, ethical dental health professionals for the state of Mississippi and who work to improve health outcomes and eliminate health disparities.

CORE VALUES
Integrity
- Honesty and fairness in our actions
- Building trust within our relationships
- Courage to do “what is right”
Excellence
- Realize and commit to our full potential
- Achievement and performance set to the highest standards
- Collaborative teaching within the Medical Center
Leadership
- Willingness to take responsibility
- Creating a vision, setting goals to make a difference
Research
- Promotion of innovative research by faculty and students
Professionalism
- Ethical conduct, character and spirit for the advancement of our professions
Continuous Improvement
- Dedication to lifelong learning while recognizing the need to change for improvement
- Establishing and monitoring goals to enhance our value to the profession and the citizens of Mississippi
Diversity
- Accepting our differences while working together as a cohesive group and recognizing the value and strength derived through diversity
Caring
- Concern for and recognizing the needs of others
- Kindness and compassion shown in all interactions
GIVING TO THE UNIVERSITY OF MISSISSIPPI SCHOOL OF DENTISTRY

Alumni and friends of the University of Mississippi School of Dentistry are encouraged to make gifts in support of educational, clinical and research efforts. These gifts may be unrestricted and used in the school's areas of greatest need, or restricted to specific departments or programs. The gifts may also be given now or deferred until a future time agreed upon by the donor and the School of Dentistry. The school recognizes donors at various levels of annual giving as well as offering special recognition to those who have achieved extraordinary lifetime giving levels.

DOCTOR OF DENTAL MEDICINE

ADMISSION TO THE DENTAL CURRICULUM

The authority to select applicants for admission to the Dental program is vested in the Dental School Admissions Committee (DSAC) and the Dean of the School of Dentistry. DSAC is appointed by the Dean of the School of Dentistry and includes clinical and basic science faculty of the School of Dentistry and the School of Medicine, representatives of the dental private practice, UMMC School of Dentistry students and other administrative personnel in the various departments at the University of Mississippi Medical Center. All correspondence and records regarding the admissions process are filed in the Office of Student Records and Registrar, become the property of the University of Mississippi Medical Center and cannot be returned or forwarded to the applicant or another school. Applicants and Admission Committee members are required to sign a confidentiality agreement which grants the committee members authority to review all applicant information when making decisions on selection of candidates. All applicant information reviewed shall be confidential.

Selection of applicants is made on a competitive basis, without regard to race, color, religion, sex, age, disability, marital status, national origin, sexual orientation, genetic information, or veteran status. Decision and consideration are given to both cognitive and noncognitive components. Cognitive components include online overall GPA, overall science GPA, overall DAT (academic average), overall science DAT and masters GPA if applicable. Noncognitive components include honesty/integrity, ethics/values, respect for others, critical thinking, communication skills, altruism, motivation for dentistry, accountability, support system, maturity, excellence, vision of practice, participation in Health Careers programs, leadership, self-appraisal and research. Recommendations from college science faculty, dentists that have been shadowed and community service directors are also considered. Multiple mini-interviews with members of the Admissions Committee are required.

For admission purposes, the School of Dentistry at the University of Mississippi Medical Center gives preference to residents of Mississippi, as defined by Miss. Code §§ 37-103-7, 37-103-13 and BIL Policy 610. As such, the School of Dentistry currently accepts admission applications only from individuals who are U.S. citizens or lawful permanent residents. The School of Dentistry may choose to not accept applications from students who cannot demonstrate residency as defined by Miss. Code § 37-103-7 and 37-103-13. In recent years, nonresidents have not been considered for admission to DMD program in the School of Dentistry.

Applicants must complete all required course work at an accredited U.S. or Canadian college or university. Full-time members of the U.S. military must obtain orders to be based in Mississippi prior to starting first-year classes. All questions pertaining to resident status should be addressed to the Office of Student Records and Registrar, University of Mississippi Medical Center, 2500 North State Street, Jackson, MS 39216-4505.

INTERVIEWS – Applicant files are reviewed by the School of Dentistry Admissions screeners. Applicants whose credentials indicate potential for success in the UMMC dental school program are invited for an interview session which includes multiple mini-interviews with members of the DSAC. Applicants must not present themselves for interviews until requested to do so by the Admissions Committee. Prescreening factors include, but are not limited to, metrics (grades and DAT scores), shadowing experiences (minimum of 100 hours of shadowing is required with at least four different dentists), research experience, commitment to community service (volunteer work with at least four different organizations is recommended) as well as professionalism, leadership, and other non-cognitive attributes. Interviews are scheduled during specific periods, and applicants are notified in advance of such periods.

APPLICATION PROCEDURE – The UMMC School of Dentistry is now a participant of the ADEA Associated American Dental Schools Application Service, AADSAS. Applicants can apply online. Contact information for ADEA AADSAS:

• Phone: (617) 612-2045 (Applicant inquiries only)
• E-mail: mailto:aadsasinfo@aadsasweb.org
• Website: http://portal.aadsasweb.org/

It is not necessary that an applicant complete the entire application at once. The applicant may save the application and work on it over a period of time. Once it is submitted, however, only minor changes can be made online. Check with AADSAS to determine what information can be edited after submission of the application.

Upon verification of an applicant's primary application, the applicant will be provided with a link to complete the UMMC School of Dentistry's supplemental application. The supplemental application fee is $50.

Application Timetable: There are no exceptions to the below listed deadlines.

• Begin working on application: May 14, 2019
• Begin submitting application: June 4, 2019
• Application deadline: AADSAS deadline: SEPTEMBER 23, 2019 (Application, all documentation and fees required by AADSAS must be received by AADSAS.)
• UMMC School of Dentistry deadline: OCTOBER 21, 2019 (All application materials, including secondary application, fees, official transcripts and letters of recommendation, must be received.)
• Earliest date of acceptance notification: DECEMBER 2, 2019

DENTAL ADMISSION TEST (DAT) – Applicants for admission to the UMMC School of Dentistry must take the American Dental Association Dental Admission Test (DAT). The test must be scheduled to be taken by computer at Prometric Testing Centers. Information regarding the American Dental Association Dental Admission Test may be obtained from the pre-dental advisor in most colleges or from the American Dental Association, 211 East Chicago Avenue, Chicago, Illinois 60611. By following a well-planned schedule, the pre-dental student should be ready to take the test at the end of the second full year of college work; the DAT is generally taken by March of the third year of college work. DAT scores more than 3 years old are not accepted. Candidates seeking to retake the DAT must wait 90 days before a re-test is allowed.

COURSE REQUIREMENTS – The applicant must show credit for at least three years of college work, totaling no fewer than 90 successful semester hours (grade of "C" or better), completed in a regionally accredited United States or Canadian college or university.

In addition, all applicants must meet the following minimum requirements:

<table>
<thead>
<tr>
<th>Course</th>
<th>Minimum Requirements</th>
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<tbody>
<tr>
<td>English</td>
<td>2 semesters / 3 quarters</td>
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<tr>
<td>Inorganic Chemistry</td>
<td>2 semesters / 3 quarters (Must include laboratory)</td>
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THE UNIVERSITY OF MISSISSIPPI MEDICAL CENTER
Statistics or Biostatistics  
Mathematics  
Biochemistry  
Microbiology  
Zoology (I and II)  
Organic Chemistry  
Chemistry  
Physics  
Biology  
Microbiology  
Organic Chemistry

Statistics or Biostatistics  
Mathematics  
Biochemistry  
Microbiology  
Zoology (I and II)  
Organic Chemistry  
Chemistry  
Physics  
Biology  
Microbiology  
Organic Chemistry

Physics  
General Biology or Zoology (I and II)  
Microbiology  
Biochemistry  
Mathematics  
Statistics or Biostatistics

PLEASE NOTE: While not required, these courses are highly recommended: foreign language, sociology, psychology, speech, humanities, philosophy, embryology, histology, immunology, cell biology, physiology, comparative anatomy, gross anatomy, neuroanatomy.

There is no time limit on the validity of a baccalaureate degree; however, the Admissions Committee has concerns when prerequisite courses have been taken ten (10) or more years ago. If a science course is being used for any course requirement (for any method) and was taken ten (10) or more years ago, it must be repeated.

Unacceptable Courses – None of the minimum 90 acceptable semester hours of collegiate course work listed or described or recommended above may be met by the following: correspondence courses; courses in physical training, military science, or dogmatic religion; courses in mathematics or science designed for non-science majors; or course credit granted without college-level testing and grade. A limited number of distance learning credits may be accepted for liberal arts electives; however, none will be accepted for required science and math courses.

Courses taken outside science and math departments (course numbers other than BIOL, CHEM, PHYS or MATH) are not acceptable as required courses.

Approved Elective Courses – It is recommended that the student develop proficiency in a specific area while in undergraduate school and acquire a background in the humanities and social sciences, consulting with a pre-dental/pre-health profession advisor concerning specific courses.

CREDIT TRANSFERRED FROM A COMMUNITY COLLEGE – A maximum of 65 semester hours of credit from a junior college may be applied toward admission. However, it is strongly recommended that as many required science courses as possible be completed at a senior college or university to improve chances for admission.

TRANSFER STUDENTS ADMISSION WITH ADVANCED STANDING – The University of Mississippi School of Dentistry does not accept transfer students from other dental schools except under exceptional circumstances. The School of Dentistry’s Executive Committee reserves the right to determine those exceptional circumstances and the criteria and procedures related to a transfer student’s admission. Graduates of foreign dental schools are not eligible for advanced standing consideration.

COMPLETION OF DEGREES – An applicant enrolled in a degree-granting program at any college or university is expected to complete the requirements for and earn that degree before enrollment in dental school. Unless prior approval has been granted by the Admissions Committee, this applies to both undergraduate and graduate degrees.

CONDITIONAL ACCEPTANCE – Acceptance to the dental school is conditional; the Admissions Committee may rescind an offer of acceptance at any time before matriculation if an applicant fails to maintain expectations upon which the acceptance was based. Examples include, but are not limited to, a significant decline in academic performance, failure to complete prerequisites or other coursework or degrees in progress, patterns of unprofessional behavior and incidents discovered in a criminal background check.

SPECIAL STUDENT
No student may enroll for courses in the School of Dentistry as a special part-time student without being admitted by the Admissions Committee and receiving approval from the Associate Dean for Academic Affairs to attend class(es).

TECHNICAL STANDARDS FOR ADMISSION
The Dean and faculty’s recommendation that a student be granted the DMD degree by the University of Mississippi Medical Center signifies that the recipient of that degree possesses the knowledge, skills and attitudes to provide care across a wide spectrum of dental health needs and to function effectively in varied clinical settings. The dental practitioner must exhibit a unique combination of scientific and health care knowledge, technical abilities, communication and interpersonal skills as well as professional attitudes and behaviors in order to deliver the dental health care that is required and expected of today’s dental professional.

The University of Mississippi School of Dentistry has a responsibility for the welfare of patients treated at the school and a responsibility to graduate the best possible practitioners. Therefore, the School of Dentistry maintains certain minimum technical standards for admission to the school. Applicants must possess a basic core of skills and abilities that will allow them to successfully complete the dental curriculum and benefit fully from their professional education. As an integral part of their education, students are required to provide treatment for patients who seek care at the School of Dentistry. The school has the responsibility of ensuring the safety of those patients. This includes the completion of treatment safely and within an acceptable amount of time.

It is the responsibility of the candidate for admission to review the technical standards for admissions. To receive academic accommodations at UMMC, all students must contact the Office of Academic Support and complete the appropriate process. http://www.ummc.edu/academic_support

Motor Skills: All applicants must meet the following technical standards: Candidates must have sufficient motor function to conduct various diagnostic and treatment procedures; to manipulate dental instruments and handpieces. These behaviors require both gross and fine muscular movements and coordination, as well as sight, touch and manual dexterity and fully functioning wrists, hands, fingers and arms. Candidates must be able to ensure that basic life support emergency procedures, including CPR, can be performed on all patients; transfer and position disabled patients personally or with assistance from auxiliary personnel; position themselves in an appropriate sitting or standing position so as to render dental care; position dental equipment including carts, stools and dental chair; operate hand or foot controls utilizing fine movements; operate high and low speed dental handpieces during dental treatment requiring controlled movements of less than one millimeter; utilize hand instrumentation including surgical instruments for dental procedures on hard and soft tissues; perform all necessary procedures in required educational exercises including activities in the preclinical laboratories; execute motor movements necessary to arrive at a diagnosis and treatment plan; and provide patient care including emergency treatment; perform motor functions to elicit information from patients or from simulations through palpation, auscultation, percussion and other diagnostic procedures utilizing instrument manipulation.

Sensory Skills: Candidates must have functional use of the senses of vision, hearing, touch and smell in order to observe and learn effectively in the classroom, laboratory and clinical settings and, ultimately, to provide oral health care in a practice setting. These sensory skills must be sufficient to allow the student to acquire information through physical, laboratory and clinical means; to visualize intraoral and extroral
structures; to observe a patient accurately both at hand and at a distance; and to obtain information from written documents, films, slides and video. Candidates must be able to perform educational exercises, dental examinations, and treatment utilizing functions of vision (acuity, accommodation and adequate color differentiation), touch (tactile sense using direct and indirect palpation), hearing (distinguishing sounds of auscultation and percussion, and discerning audible signs of distress from a patient) and smell (enabling observation and discernment of normal and abnormal odorous conditions related to either the patient or environment) in order to correctly discriminate between normal and abnormal tissues or conditions during examination, diagnostic and treatment procedures; read charts, records, small print and handwritten notations; and interpret radiographs and other graphic images with and without assistive devices.

Communication Skills: Candidates must have sufficient fluency in the English language to be able to speak, understand, read and write so as to obtain information from texts and lectures; communicate concepts; perceive and describe patient behaviors and emotional states; communicate effectively and sensitively with patients and all members of the health care team both orally and in writing. Candidates must be able to discuss, explain and exchange information with the patient at a level necessary to develop a health history to address health problems, to arrive at diagnoses and treatment plans and to give direction before, during and after treatment; to retrieve information from texts and lectures; to communicate concepts on written and oral examinations and to other health care workers/providers; and to communicate effectively in spoken and written English in classroom, laboratory and clinical settings.

Cognitive Skills: Candidates must possess those cognitive skills necessary to problem solve in all educational and clinical settings, to accumulate, comprehend and apply information as part of learning and in the establishment of a diagnosis and treatment plan, and to provide oral health care. Candidates must demonstrate the ability to acquire, analyze, synthesize, integrate, measure, calculate and manage data and background knowledge in developing understanding and concepts, and to do so in educational and clinical settings; to perform these cognitive skills in a critical and logical problem solving format and to do so within a specific time limited framework; to comprehend three-dimensional and spatial relationships of structures; to make rational decisions regarding patient care; and to provide treatment within an acceptable time frame so as to ensure safety of the patient.

Behavioral Skills: Candidates must demonstrate sufficient behavioral and social skills, professionalism and emotional health to successfully accomplish the responsibilities related to care of the dental patient and to perform to the fulfillment of the full range of academic and clinical duties of a student. Candidates must be able to manage patients with a wide variety of moods and do so in a tactful, congenial and compassionate manner so as to avoid alienation and antagonism; possess sufficient physical ability to meet the demands of ongoing, concurrent classroom, laboratory and clinical educational exercises; adapt to a changing environment, display flexibility and function appropriately in the face of those uncertainties inherent in dental education; possess emotional health sufficient to carry out tasks, have good judgment and behave in a professional, reliable, mature and responsible manner; exhibit appropriate motivation and a genuine interest in caring for others; exercise good judgment in prompt completion of responsibilities attendant to the educational process and to the diagnosis, treatment planning and care of patients; possess interpersonal skills and attributes of integrity, empathy, stability and punctuality to be able to function effectively as part of the dental health care team.

ACCEPTED APPLICANT INFORMATION

TEXTBOOKS, LABORATORY SUPPLIES AND CLINIC COATS – Students must purchase dental articulator, dentoform, laboratory coats and clinic coats and other required equipment and supplies as specified throughout the course of study. These items are required purchases through the Medical Center Bookstore. A list of required textbooks will be provided to students prior to their first semester. Various options for purchasing print and/or electronic texts will be provided. Those who have not purchased the school’s required supplies and instruments for any semester will not be permitted to begin classes for that semester.

ACADEMIC REGULATIONS

Curriculum – The dental school administration reserves the right to make changes in curricula and regulations and required equipment and supplies when those changes are determined to be in the best interest of the students and the school.

Examinations – Examinations may be written, oral, practical, simulations, standardized patients or other means or combinations. The student may be excluded from an examination for failure to pay tuition or fees. Make-up examinations for failure of a course must have permission of the Student Evaluation and Promotion Committee (SEPC).

Grades –

1. The School of Dentistry employs a numerical grading system based on zero to 100. Some courses are graded as Pass/Fail.
2. A student must achieve a grade of 70 or more in each course and a grade of Pass in each Pass/Fail graded course. Students must satisfactorily complete all requirements stated for each course in the syllabus and all Clinical Practice guidelines in each Clinical Practice syllabus in order to become eligible for promotion.
3. If work is incomplete for reasons beyond a student’s control, a temporary grade of “Incomplete” is reported when grades are due. The “I” must be replaced with a final grade prior to the termination of the following semester.
4. If a course extends beyond the end of a semester, the SEPC and the relevant course director will notify students of unsatisfactory progress.
5. Transfer of acceptable course credit attained in programs other than as a student at the University of Mississippi School of Dentistry will be recorded as a “Transfer” grade on the official transcript.
6. All students will be allowed to view their final grades on the SAP – Student Connections portal. Students may challenge grades within 30 days of issuance of final grades; otherwise, grades will stand as recorded.
7. The determination of class rank is made by using the 0-100 scale grade point average, which is derived by:
   a. multiplying the grade in a course by the clock hours of that course; and
   b. by dividing these totals (grades x clock hours-of all courses) by total number of clock hours (of all courses, except remedial or repeat courses).
8. The determination of letter grade or four point published grade point average is derived by:
   a. multiplying the numerical grade in the course by the semester hours of that course; and
   b. dividing the totals in “a” by the total number of semester hours.

In order to be eligible for the Dean’s Honor List, a student must have attained: 1) an average of 85 or higher for the academic year; 2) must be in the top 20% of the class; 3) must have completed stated guidelines for the academic year; and 4) must have received all passing grades for the academic year.
Withdrawal – Students who are unable to return to school at the beginning of any semester or who must discontinue their work during the year for legitimate reasons ordinarily will be permitted to withdraw in good or satisfactory standing with approval of the Dean. Students who withdraw must complete School of Dentistry check out procedures as per the SOD Business Office and Office of Academic Affairs. Approved withdrawal, if completed on or before the last day specified in the academic calendar, will not be recorded on the student’s record. Withdrawals authorized after this date will be recorded as a “W” if student performance is satisfactory and as an “F” if the student performance is unsatisfactory at the time of withdrawal.

Students who have withdrawn in good standing must receive approval for readmission from the SEPC on the basis of their status at the time of withdrawal. Students who have been absent for more than one academic year, must apply to the Admissions Committee for readmission. This readmission application must be made before November 1 of the year prior to enrollment.

Leave of Absence – Leaves of absence are granted at the discretion of the Dean and will be for a period of up to one year.

Scholarship, Promotion, and Graduation – Student promotion depends on the satisfactory completion of each year’s work and overall satisfactory performance. Promotions within the School of Dentistry are considered on the basis of recommendations by individual instructors, on departmental evaluations and the student's total record.

Students in the School of Dentistry should be aware of the information in the course syllabi which details practices, procedures and provisions of the school pertaining to academic and clinical performance and related matters.

Listed below are the minimum acceptable standards of scholastic performance, promotion and graduation:

1. Scholastic performance and promotions, first, second, and third years:
   a. achieve a grade of 70 or more in each numerically graded course, a grade of Pass in each Pass/Fail graded course, and satisfactorily complete all requirements stated for each course in the syllabus and all Clinical Practice guidelines in each Clinical Practice syllabus and for the classes of 2019, 2020, and 2021, register and take the National Board Dental Examination Part II during the academic graduating year.
   b. for the class of 2021, achieve an overall score of PASS on the National Board Dental Examination, Part I to be eligible for continuation in the third year.
   c. Fourth-year eligibility requirements for the Doctor of Dental Medicine degree:
      a. achieve a grade of 70 or more in each course and satisfactorily complete all requirements stated for each course in the syllabus, including all Clinical Practice 675 guidelines in each Clinical Practice 675 syllabus and for the classes of 2019, 2020, and 2021, register and take the National Board Dental Examination Part II during the academic graduating year.
   d. for the class of 2022 and later, students must register for and take the Integrated National Board Dental Examination during the academic graduating year.
   e. merit a recommendation from the SEPC to the Dean for eligibility to receive the Doctor of Dental Medicine degree. The School and University make no actual or implied guarantee that any student completing most or all of the required work will be granted a dental degree. Factors other than academic achievement are and may be used to determine the eligibility for a student to be granted a dental degree.

Due Process – Due process for students is defined in the procedures identified in the Student Handbook.

TUITION AND REQUIRED FEES

The tuition rates for the 2019-2020 academic year are $31,167 for Mississippi residents, which includes laboratory and library usage. An instrument fee of $2,738 will be charged to first-year dental students for the 2019-2020 academic year. The total amount is divided into either two or three semester charges, depending on the individual course calendars for each year of dental school. Note: All amounts are subject to change pending information from the Institutions of Higher Learning (IHL). Please contact the Department of Student Accounting at (601) 984-1060 for more information.

Computers – Entering dental students are required to have a computer that meets certain specifications outlined by the School of Dentistry. Without this laptop, students will not be eligible to begin classes. Students entering dental school are expected to possess basic computer competencies. These include, but are not limited to, use of a computer, use of e-mail, use of Internet browsers and use of software for word processing and data backup. Each student will be provided an institutional e-mail account and will be responsible for frequently checking this account and responding to e-mail sent to that address. Please consult the Accepted Applicants information posted on the SOD Student Affairs website for more information.

Privacy Screens - The Health Insurance Portability and Accountability Act (HIPAA) requires the University of Mississippi Medical Center to appropriately safeguard protected health information (PHI). The School of Dentistry, in a reasonable and effective initiative to better protect PHI, requires privacy screens to be installed on computer monitors or other electronic device viewing screens in any public environment in which protected health information is being viewed. In addition, all computer monitors and other electronic device viewing screens should be positioned so that the monitor/viewing screen is facing away from patients or others in the area.

Failure to conform to this policy will result in penalties including loss of clinical access/privileges and up to dismissal.

Materials/Supplies – Dental students are provided numerous types of dental materials/supplies during their dental education and some items are included as part of their tuition and fees. However, additional educational supplies above the normal threshold may be purchased on an individual basis from the preclinical storeroom. Students will be charged for any supplies that exceed the normal allowance. Students are required to purchase dental articulator, dentoform, laboratory coats and clinic coats as well as other instruments and supplies as specified throughout the course of study. These items are required purchases through the Medical Center bookstore. Required textbooks may be obtained in various electronic or printed versions.

Those who have not purchased the school’s required supplies and instruments for any semester will not be permitted to begin classes for that semester.

Note: Requirements for computers, materials, and supplies are subject to change, and any changes will be communicated to students prior to their taking effect.
LOANS
Dental Alumni Student Emergency Loan Fund provides small, low-interest loans to students repayable in 90 days.
Dental Memorial Loan Fund is made possible by various memorial funds contributed to the School of Dentistry. It is awarded to a Mississippi resident based on academic performance and potential.
George C. and Laura B. McKinstry Scholarship/Loan Fund was established in 1973 by Dr. McKinstry in memory of his father and mother to provide low-interest loans to needy students in the School of Dentistry.

SCHOLARSHIPS
Ottlie Schillig Memorial Scholarship was established in 1984 through a gift to the Medical Center from the Schillig Trust. Miss Schillig, a native of Port Gibson, was a noted concert singer. At least one scholarship is available each year to the School of Dentistry. All recipients must be in good academic standing and preference is given to those students who intend to practice in smaller Mississippi towns and communities.

Summer Foundation Scholarship Fund was established in 1977 by Mrs. E.H. Sumners of Eupora, MS, to provide scholarship assistance for students from Webster, Montgomery, Attala, Carroll and Choctaw counties who are enrolled at the University of Mississippi Medical Center.

Dean’s African-American Scholarship was established in 2001. Selection will be made by the School of Dentistry Scholarship Committee, and prospective recipients must have a GPA of at least 3.0. Preference will be given to Mississippi residents. If the recipient remains in good academic standing, the scholarship will be renewed for each year the recipient is in dental school. The committee will recommend candidates, with the final selection made by the Dean.

Robert M. Hearin Support Foundation Minority Scholarships, established by the Robert M. Hearin Support Foundation, are awarded to first-year African-American dental students in Mississippi. Recipients are selected by the School of Dentistry Scholarship Committee. Selection is based on academic achievement, the student’s potential for success in dentistry, and accepted institutional financial aid guidelines. The scholarship is renewable each year as long as the recipient remains in good academic standing. Recipients must commit to residence and practice dentistry in Mississippi for a period of five years.

Robert M. Hearin Support Foundation Best and Brightest Scholarships, established by the Robert M. Hearin Support Foundation, are awarded to two first-year students. Recipients are selected by the School of Dentistry Scholarship Committee. Selection is based on academic metrics. The scholarship is renewable each year as long as funds are available and the student maintains a set academic average with no ethical violations. Recipients must commit to practice dentistry in Mississippi for a period of five years.

Pierre Fauchard Academy Dental Student Scholarship Award is awarded to a D3 student. This individual has demonstrated the greatest potential for developing into an outstanding leader in the dental profession. The student need not have the highest grades nor be the most technically proficient, but one who has leadership qualities in the university, dental school, community or other worthy activity. The qualities of integrity, imagination, initiative and communicative skills enter into the selection process as well as the recipient’s need for financial aid.

Dr. James W. Rice and Grace Vaughan Rice Scholarship in Dentistry is established as an academic scholarship under accepted guidelines of the Department of Financial Aid at the University of Mississippi Medical Center. The recipient should be a senior student with the highest cumulative academic average over the first three years of dental school from among those students otherwise eligible for the award. The recipient should have financial need as determined by the School of Dentistry in consultation with the Office of Financial Aid. The recipient must have demonstrated the ability to relate to patients, staff and faculty in a positive, constructive manner. The recipient must be of good moral character and exhibit the highest ethical and professional standards.

James T. Baird Memorial Scholarship Fund was established in 2000 through a gift to the Medical Center. This is a one-time scholarship given to a first-year dental student provided that funds are available. All recipients must be in good academic standing, and preference is given to those students who intend to practice in smaller Mississippi towns and communities.

L.W. Brock Scholarship is funded by an endowment. Five percent (5%) of the earnings will be used to fund scholarships. A recipient must be in the top 1/3 of the class and demonstrate financial need. A recipient will receive no less than $500. This is not a renewable scholarship, as annual earnings cannot be predicted.

Pearl & Otis Walters Scholarship Fund is funded by endowment earnings. The recipient is chosen by the School of Dentistry Scholarship Committee and the selection is based on academic ability, perceived service and contribution to the profession in the state, character and intention to practice in a smaller community. These funds continue as long as the student remains in satisfactory academic standing.

Danny Niolet Scholarship was established in 2013 by the Niolet family and is designated for a first-year dental student who is entering dental school as a second career with special consideration given to students from the Mississippi Gulf Coast. This scholarship fund will be funded by endowment earnings.

Helen Reeves Turner, MD, PhD, Scholarship was established in 2013 and is awarded each year to a deserving student from one of the Medical Center Schools. The recipient of this award, selected by the dean or his designee, exemplifies Dr. Turner’s outstanding attributes of leadership, education and service.

Dr. James C. Luper Scholarship was established in 2016. This scholarship is available to students completing their D2 and D3 years. Students must be in good academic standing with no ethical violations, must be in the top 50% of their class, must be eligible for promotion to the next class and have plans to practice general dentistry in the state of Mississippi. Students must have passed all courses with no remediation. This scholarship cannot be combined with the Robert M. Hearin Support Foundation Scholarship, the Robert M. Hearin Foundation Best and Brightest Scholarship, or the Mississippi Rural Dentists Scholarship. Recipients must practice general dentistry in Mississippi for one year for each year the scholarship is received.

Mississippi Rural Dentists Scholarship Program - In 2013, the Mississippi Legislature authorized the Mississippi Rural Dentists Scholarship Program, creating a unique longitudinal program that identifies rural college students who aspire to return to their roots to practice general dentistry. Academic enrichment, faculty and dentist mentoring plus solid dental school financial support through the Mississippi Rural Dentists Scholarship Program will enable capable young Mississippian to provide adequate dental care in rural areas of Mississippi. Additional information is available at this link or by contacting Mississippi Rural Dentists Scholarship Program, University of Mississippi School of Medicine, 2500 North State Street Jackson, MS 39216-4505, 601. 815.9022.

AWARDS and HONORS
Academy of Dental Materials – This award is presented to the senior who has demonstrated excellence in the field of dental materials science.
Academy of Dentistry for Persons with Disabilities (Special Care Dentistry Award) – This award is presented to the student or students whose projects, achievements and attitudes have demonstrated a sincere interest and concern for the dental needs of persons with disabilities and special patients while an undergraduate dental student.
Academy of Dentistry International – This award is presented to a 4th year dental student who has demonstrated outstanding compassion for serving patients through patient care and patient education. This student has made missions trips internationally and has volunteered in...
numerous charity/free clinics. This student has exhibited leadership characteristics and has been active in community service throughout their dental school training.

**Academy of General Dentistry Award** – This award, sponsored by the Mississippi Academy of General Dentistry, is presented to the senior who exhibits the greatest potential for becoming an outstanding general practitioner.

**Academy of Operative Dentistry** – This award is presented to the senior who has demonstrated outstanding achievement in operative dentistry.

**Academy of Osseointegration** – This award is presented to the senior who is recognized as an outstanding dental student in implant dentistry.

**ADA/Dentsply Student Clinician Research Program Award** – This award is presented to recognize a deserving student for outstanding accomplishment and achievement in the field of research.

**Jeffrey Alexander Award for Academic Achievement in Pre-Clinical Sciences** – This award is presented to a first-year student who has demonstrated academic achievement in the pre-clinical sciences.

**Alliance of the Mississippi Dental Association Award** – This award is presented to a third-year dental student who has demonstrated initiative toward community dental health.

**American Academy of Implant Dentistry** – This award is presented to the student who demonstrates the most interest, academically and clinically, in implant dentistry.

**American Academy of Oral and Maxillofacial Pathology** – This award is presented to the senior dental student who has demonstrated exemplary aptitude and achievement in Oral and Maxillofacial Pathology.

**American Academy of Oral and Maxillofacial Radiology** – This award is presented to a senior who has demonstrated special interest and accomplishment in Oral and Maxillofacial Radiology.

**American Academy of Oral Medicine** – This award is presented to the senior who has demonstrated proficiency in the clinical management of medically complex patients, the diagnosis and non-surgical management of medically-related conditions of the oral and maxillofacial regions, and promise, academic achievement and interest in the discipline of oral medicine.

**American Academy of Pediatric Dentistry** – This award is presented to the senior who has been judged by the faculty to be the most outstanding in the field of dentistry for children.

**American Academy of Periodontology** – This award is presented to the senior who has shown the highest level of academic and clinical achievement related to periodontics.

**American Association for Dental Research Student Research Day Award** – This award recognizes the best presentation at the School of Dentistry annual Research Day.

**American Association of Endodontists** – This award is presented to the senior who has shown outstanding interest and achievement in endodontics.

**American Association of Oral and Maxillofacial Surgeons, Dental Student Award** – This award is presented to the senior who has demonstrated outstanding performance in undergraduate study and clinical training in the area of oral and maxillofacial surgery and anesthesia.

**American Association of Oral and Maxillofacial Surgeons, Dental Implant Student Award** – This award is presented to the senior who has demonstrated outstanding performance in undergraduate study and clinical training in the area of dental implant placement.

**American Association of Oral Biologists** – This award is presented to the senior dental student who has made significant contributions to the advancement of oral biology and has demonstrated the potential for further achievement in this field.

**American Association of Orthodontists** – This award is presented to the senior dental student who has demonstrated exceptional interest in the development of the oro-facial complex.

**American Association of Public Health Dentistry** – This award is presented to the senior who has demonstrated special interest and achievement in community dentistry and dental public health.

**American College of Dentists, Mississippi Section, Student Award** – This award is presented to the dental student who has demonstrated a commitment to help people with special needs or as a community volunteer and has excelled in special needs patient care.

**American College of Prosthodontists Achievement Award** – This award is presented to a graduating dental student who has excelled in the area of prosthodontics.

**American Dental Society of Anesthesiology/Horace Wells Award** – This award is presented to the senior dental student who has demonstrated proficiency in the field of dental anesthesia.

**ASDA Award of Excellence** – This award honors the spirit of volunteerism and recognizes student participation or leadership in service to their school and local community.

**Brian D. Stone Memorial Award:** This award, sponsored by Dental Lifeline Network and established by Drs. Joy and Justin Stone, is presented to a senior dental student who has demonstrated a commitment to help people with special needs or as a community volunteer and has excelled in special needs patient care.

**Eleanor Bushee American Association of Women Dentists Award** – This award is presented to a senior dental student who is a member of the American Association of Women Dentists and who has demonstrated outstanding leadership and academic excellence.

**Care Planning and Restorative Sciences Prosthodontics Achievement Award** – This award is presented to the senior dental student who has demonstrated outstanding performance in the area of occlusion and approaches life with a positive mental attitude.

**Class Marshal for Commencement** – The selection as class marshal for commencement is based on commitment and service to the senior class, school and university.

**Clinical Achievement in Oral Surgery** – This award is presented by the Department of Oral-Maxillofacial Surgery and Pathology to recognize students who have demonstrated outstanding skills and interest in oral surgery.

**Community Preventive Dentistry Award** – This award is presented by the Department of Periodontics and Preventive Sciences to the senior who has shown outstanding achievement and potential in preventive dentistry.

**Dean’s Scholastic Achievement Award** – This award is presented by the Dental Alumni Chapter of the University of Mississippi Alumni Association to the student in the senior class who has the highest cumulative academic average for the first three years of dental school.

**Delta Dental Student Leadership Award** – This award is presented to a senior who has demonstrated a desire to serve the community and will be a strong leader in dentistry and in their community.

**Dental Physiology Award** – This award is presented to the dental student who has the highest grade point average in the dental physiology course.
Dentsply Merit Award in Removable Prosthodontics – This award is presented to the senior who has demonstrated exceptional ability in the field of removable prosthodontics.

Robert R. Finch Oral Pathology Award – This award, initiated by the family of the late Robert R. Finch, DDS, professor of oral pathology and first assistant dean for educational programs, is presented to the senior who has shown outstanding interest, accomplishment and promise in the field of oral pathology.

Hiram A. Gatewood, Sr. Memorial Award – This award is given to a third-year dental student who possesses the academic, clinical, leadership, and moral qualities necessary in the practice of general dentistry. Preference will be given to the student who is from or who plans to practice in a small-town setting.

Bradford A. Gordon Oral Pathology Merit Award – This award was established by the Class of 1988 and sponsored by the Dental Alumni Chapter of the University of Mississippi Alumni Association, honors the late Brad A. Gordon, DMD, a 1985 graduate of the School of Dentistry. The award is presented to the student who, as judged by the senior class, typifies the traits most associated with Dr. Gordon: determination, perseverance and an overwhelming will to succeed even in the face of adversity. The name of the recipient will be engraved on a plaque which hangs in the School of Dentistry.

HAANI Best of the Best Prosthodontic Award – This award is presented to the graduating senior who has excelled in the study and clinical application of prosthodontics.

Hinman Student Research Award – This award is presented to a deserving senior who has exhibited leadership and through research, demonstrates dedication to the advancement of dental literature, and has excelled academically and clinically in dental school.

Hinman Society Award: This award is sponsored by the Hinman Dental Society and is presented to third year dental students who are student members of the American Dental Association and in the top 10% of their class. The recipient receives a monetary scholarship and a trip to the Hinman Dental Meeting.

International College of Dentists Student Humanitarian Award: This award is presented to the senior who has demonstrated significant leadership and exemplary character traits when participating in humanitarian service or projects, exhibits an altruistic attitude to assist the underserved or less fortunate and has demonstrated the potential to continue leadership roles after graduation.

International College of Dentists Student Leadership Award – This award is presented to the senior who has demonstrated leadership in dental schools student government, excellence in academics and has demonstrated the potential to continue leadership roles after graduation.

International College of Oral Implantologists – This award is presented to the senior dental student who displays the greatest interest and commitment to implantology/implant dentistry.

Jackson Free Clinic Student Service Award: This award is presented to a fourth-year dental student who has donated both time and resources to ensure the success of the Jackson Free Clinic. Through the Jackson Free Clinic, this student is committed to serving a population that is often overlooked, while instilling the virtues of altruism as an important aspect as a future healthcare professional.

Jackson Free Clinic Student Service Award: This award is presented to a first, second, or third-year dental student who has donated both time and resources to ensure the success of the Jackson Free Clinic. Through the Jackson Free Clinic, this student is committed to serving a population that is often overlooked, while instilling the virtues of altruism as an important aspect as a future healthcare professional.

Lynn Frances Johnston Memorial Award – This award, established by the class of 1983, honors the late Lynn Frances Johnston, D.M.D., a 1983 graduate of the UMMC School of Dentistry. The award is presented to a first-year dental student based on academic achievement, ethical standards and professional behavior.

Dr. Zandra Dorr Klein Memorial Award – This award was established in 2003 by the family and friends of Dr. Zandra Dorr Klein. The award goes to a deserving female third-year student who has shown outstanding academic accomplishment and has performed at a high level in clinical periodontics.

June A. Larsen Memorial Award in Clinical Oral Radiology – This award was initiated by the Employee of the Quarter Committee and is supported by the family of the late June A. Larsen, chief oral radiographic technician and first employee of the quarter at the UMMC School of Dentistry. The award is presented to a third-year dental student who has demonstrated outstanding compassion and technical skills in clinical oral radiology.

Mississippi Dental Association Award – This award is presented to the senior who demonstrates strong commitment to the goals of dentistry, leads in the area of volunteering for dental related activities, and demonstrates strong personal goals to help further the goals of the dental profession in Mississippi while attending the University of Mississippi School of Dentistry.

Mississippi Dental Society Award: [Award of Excellence] – This award is presented to a fourth-year dental student who has excelled both academically and clinically and who has demonstrated leadership in the area of community service and dental public health.

Pierre Fauchard Academy Senior Student Award – This award is presented to a deserving senior who has exhibited leadership and through accomplishments, has demonstrated dedication to the advancement of dental literature, and has excelled academically and clinically in dental school.

Quintessence Award for Clinical Achievement in Periodontics – This award is presented to a senior dental student to recognize outstanding achievement in dental studies in the area of periodontics.

Quintessence Award for Clinical Achievement in Restorative Dentistry – This award is presented to the senior to recognize outstanding clinical achievement in restorative care.

Quintessence Publishing Co. Award for Research Achievement – This award is presented to a senior dental student for outstanding achievement in research.

J. Julius Ratliff Award of the MS Association of Orthodontists – This award, sponsored by the MS Association of Orthodontists, is presented to the senior with the highest academic average who has been accepted into an advanced education program in orthodontics.

Regions Bank Award – This award is presented to a Mississippi resident based on academic excellence and overall performance.

Restorative Dentistry Award – This award is presented to a senior dental student who has demonstrated outstanding skills in providing comprehensive restorative care.

Southeastern Academy of Prosthodontics Award – This award is presented to the senior who has demonstrated outstanding achievement in the area of prosthodontics.

Dr. Chris Spraberry Award for Pre-Clinical Excellence: This award is presented to a third-year student who has demonstrated outstanding achievement and excellence in pre-clinical sciences leading to the practice of general dentistry.

Trailblazer Award – This award is presented to recognize and celebrate a student whose accomplishments and commitment have made a profound difference in or impacted positively, the lives of others, at UMMC.

Trustmark Bank Award – This award is presented to the senior dental student demonstrating great interest and outstanding performance in preventive and health maintenance management.

Omega Kappa Upsilon Dental Honor Society – Seniors are selected for this national dental honor society on the basis of high scholastic achievement, exemplary traits of character and qualities for professional growth and achievement.
THE CURRICULUM IN DENTISTRY

The diploma is awarded summa cum laude, Wallace V. Mann Jr. Award, to the graduate who ranks first in the class in academic achievement; requirements of the School of Dentistry’s curriculum; and who have discharged all financial obligations to this school.

The degree of Doctor of Dental Medicine is conferred upon candidates of good moral character who have properly fulfilled all academic

DOCTOR OF DENTAL MEDICINE DEGREE

The diploma is awarded magna cum laude to the second ranking graduate; and cum laude to the graduates who rank third and fourth.

The second, third, and fourth years have summer programs of approximately ten weeks. Because of an ongoing evaluation by the Curriculum Committee, clock hours and placement of courses may be different from that listed in the following distribution of instruction by clock hours.

THE CURRICULUM IN DENTISTRY

The curriculum consists of four academic years. Each year contains two semesters (fall and spring) of approximately 18 weeks each; additionally, the second, third, and fourth years have summer programs of approximately ten weeks. Because of an ongoing evaluation by the Curriculum Committee, clock hours and placement of courses may be different from that listed in the following distribution of instruction by clock hours.

### DISTRIBUTION OF INSTRUCTION BY SEMESTER HOURS

<table>
<thead>
<tr>
<th>FIRST YEAR</th>
<th></th>
<th>Fall</th>
<th>Spring</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>DENT 600-A Gross Anatomy (Lec)</td>
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<tr>
<td>DENT 600-B Gross Anatomy (Lab)</td>
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<tr>
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</table>

THE UNIVERSITY OF MISSISSIPPI MEDICAL CENTER
EARN A BACHELOR OF SCIENCE DEGREE. The program moved to the School of Dentistry in 2017 and offers two programs of study: (1) The entry-level, traditional baccalaureate program is a dental hygiene program for students who want to earn a dental hygiene license; (2) The dental hygiene program. 

THE UNIVERSITY OF MISSISSIPPI MEDICAL CENTER
hygiene advanced standing online program (DHAS program) is designed to allow a licensed dental hygienist to receive credit for previous professional educational experiences and to earn a baccalaureate degree in dental hygiene from the University of Mississippi Medical Center. Both programs are offered across five semesters.

GENERAL ADMISSION REQUIREMENTS
Selection of applicants is made on a competitive basis, and equal educational opportunity is offered to all students who meet the entrance requirements without regard to race, creed, sex, color, religion, marital status, sexual orientation, age, national origin, disability or veteran status. For admission purposes, the School of Dentistry Dental Hygiene Program at the University of Mississippi Medical Center gives preference to residents of Mississippi, as defined by Miss. Code §§ 37-103-7, 37-103-13 and IHL Policy 610. Out-of-state applicants will be considered only if there are positions available after all qualified Mississippi applicants are accepted. The number of students admitted to the Dental Hygiene program is dependent upon the educational resources available to support the program. The School of Dentistry currently accepts admission applications only from individuals who are U.S. citizens or lawful permanent residents. The School of Dentistry may choose to not accept applications from students who cannot demonstrate residency as defined by Miss. Code §§ 37-103-7 and 37-103-13.

Meeting qualifications does not ensure admission as selection of applicants is on a competitive basis. No applicant is accepted until the admissions process is complete, which may include an interview by members of the appropriate departmental admissions committee. Applicants should not present themselves for interviews until requested as interviews are scheduled as required. Those applicants whom the appropriate departmental admissions committee deems it advisable to interview are notified well in advance.

Transfer of Credits - All prerequisite courses may be taken at either the University of Mississippi, Oxford campus, or any other regionally accredited institution of higher education. (If transferring from a Mississippi community college, please see the Articulation Agreement between the Mississippi Board of Trustees of State Institutions of Higher Learning and the Mississippi State Board for Community and Junior Colleges for program-specific transfer. Depending upon the undergraduate program, up to 60 semester hours of academic credit is the maximum which may be applied toward admission to departments where a degree is granted by the University of Mississippi Medical Center.

Technical Standards – The program admissions committees of the School of Dentistry, in accordance with Section 504 of the 1973 Vocational Rehabilitation Act and the Americans with Disabilities Act (PL101-336), have established technical standards for the essential functions of students in the school's educational programs. A copy of these technical standards can be found on each department's web page; click on the Admissions link to see the link for the department's Technical Standards.

Verbal and written communication skills are vital to success in the academic programs in the School of Dentistry; therefore, applicants whose native language is not English are required to take the Test of English as a Foreign Language (TOEFL) examination and demonstrate competence in written and spoken English. Information on the TOEFL examination may be obtained from the Educational Testing Service, (877) 863-3546.

Background Check - Mississippi Law requires all health care workers, including students, to successfully complete a criminal history background check, including fingerprinting, prior to beginning clinical activities. Students will receive information about the Medical Center process for completing the criminal history background checks from their recruiting schools. Be advised that a felony conviction may affect a student's continued enrollment in the School of Dentistry and a graduate's eligibility to sit for certification, registration, or licensure examinations. Affected students should contact the School of Dentistry for more information.

SCHOLARSHIPS AND LOANS
E.H. Sumners Foundation Scholarships were established in 1977 by Mrs. E.H. Sumners of Eupora, MS, to provide scholarship assistance for students from Webster, Montgomery, Attala, Carroll and Choctaw counties who are enrolled at the Medical Center.

Federal-State Loan Programs, in which the Medical Center participates, are administered through the Office of Student Financial Aid.

Fedil Co-operative Association, Inc. Loan program offers low-interest, long-term loans to residents of Mississippi who have completed a minimum of two years of college work. Students may borrow up to $1,000 per nine-month academic year.

Linda Barkett, DMD Scholarship Endowment is awarded to a senior dental hygiene student in good academic standing with a minimum GPA of 3.25 and who has demonstrated outstanding clinical skills, patient care and community service.

Russ-Russell Memorial Loan Fund was established by colleagues in memory of Dr. C.R. Russ and Dr. J.V. Russell. This fund provides low-interest loans to qualified dental hygiene students who demonstrate financial need.

William D. Mobley Memorial Scholarship Fund was established in 1976 by Forrest C. Mobley, a 1930 graduate of the university, in memory of his father. This fund provides scholarships for University of Mississippi Medical Center students pursuing a dental hygiene education.
AWARDS AND HONORS
Alliance of the Mississippi Dental Association Outstanding Dental Hygiene Student Award is presented to the student in the dental hygiene department who is judged by the faculty to be the outstanding student as demonstrated by academic performance, departmental and school activities, professional service and community involvement.

Colgate STAR Award, sponsored by Colgate, is presented to a senior dental hygiene student who best exhibits the interest, understanding and leadership expected in the area of community oral health.

Dean's Award is presented to graduating students in any discipline, whose activities in the areas of academics, scholarship, school, community or professional service are exemplary and bring honor to the school. The award is presented at the discretion of the dean.

Dean's List recognizes undergraduate students for superior academic achievement. Eligibility is based upon at least 12 semester hours in the preceding semester on the Medical Center campus with a semester average of 3.50 or above.

Latin Honors are awarded to undergraduate students who have been continuously enrolled as full time students and have achieved a cumulative GPA average 3.50 or higher during the duration of the entire undergraduate career. Latin Honors awarded include Cum Laude (3.50-3.74 GPA), Magna Cum Laude (3.75-3.89 GPA), or Summa Cum Laude (3.90-4.0 GPA).

Linda Barkett, DMD Scholarship Award is presented to a senior dental hygiene student in good academic standing with a minimum GPA of 3.25 and who has demonstrated outstanding clinical skills, patient care and community service.

Mississippi Dental Hygienists' Association Clinical Achievement Award is presented by the Mississippi Dental Hygienists' Association to the senior dental hygiene student who demonstrates outstanding confidence, competence and interpersonal skills in clinical performance.

Phi Kappa Phi is a national honor society recognizing and promoting academic excellence in all fields of higher education and engaging the community of scholars in service to others. Initiates are selected on the basis of academic achievement.

Sigma Phi Alpha Dental Hygiene National Honor Society honors seniors who rank the highest in scholarship, service and leadership. This student must also exhibit potential qualities for future growth and attainment.

Trustmark National Bank Dental Hygiene Scholastic Award is presented to the graduating dental hygiene student who is graduating with the highest academic average. A minimum 3.50 grade point average is required for this award.

ACADEMIC REGULATIONS
The regulations published in the Bulletin are a digest of the rules of the University and School of Dentistry Dental Hygiene Program. Changes may be made in the regulations at any time to promote the best interests of the university and its students. Students are responsible for knowing the published regulations, policies and standards of the University and the School.

Registration -- In order for the student to receive credit for any course, the student must be registered for that course in the Office of Student Records and Registrar.

Attendance -- Enrollment in the School of Dentistry Dental Hygiene Program obligates students to attend all class meetings and complete all assigned course work. No right or privilege exists which permits a student to be absent from any given number of class meetings or to collaborate on any assigned course work or exams unless given permission from the course instructor.

No Show Policy -- A "no show student" is defined as an individual registered for a course who fails to begin attendance or actively participate. Any student receiving financial aid reported as a "no show" by the course instructor will have their financial aid adjusted to reflect actual enrolled hours.

Classroom Behavior -- Students are expected to behave respectfully toward class instructors, guest lecturers and fellow students. Cell phones must be turned off or placed on silent mode. Food and drink are only permitted in designated areas. Disruptive behavior in an academic situation or purposely harming academic facilities also is grounds for academic discipline.

Standards of Honesty -- The School of Dentistry Dental Hygiene Program is conducted on a basis of common honesty. Dishonesty, cheating, plagiarism or knowingly furnishing false information to the School are regarded as particularly serious offenses and may result in disciplinary action.

Grading -- In determining the final grade to be assigned to each student at the end of a course, all important attributes of each student's performance in the course are given consideration. This includes cognitive, psychomotor and other attributes such as deportment, interpersonal relationships, attitudes toward course work and other factors which in the opinion of the faculty are important to the student's future role as a health care professional.

Undergraduate programs:
Final grades will be expressed using this letter system: "A" - Excellent, 90-100; "B" - Good, 80-less than 90; "C" - Average, 75-less than 80; "D" - Below average, 70-less than 75; "F" - Failure, below 70. The quality point value of each letter grade is A-4; B-3; C-2; D-1; and F-0.

Grade Challenge -- The responsibility for evaluating student work and assigning grades lies with the instructor of a course. However, a student may challenge a grade in order to initiate a review process for the student to better understand the reason(s) why the grade was assigned, the instructor to be made aware of and correct possible errors, and academic administrators to review the basis on which a grade has been awarded and, to correct, when appropriate, grades assigned by arbitrary or capricious action or other reasons not related to academic performance.

In all cases of a disputed grade, the student has the burden of proof that the assigned grade was not appropriate. It is for this reason that students should first speak with the instructor. If satisfaction is not found after speaking with the instructor, the student should speak with the program director who will advise the student to submit a written petition to include a copy of the syllabus and any assignment/grading rubrics along with copies of any tests, quizzes, assignments or other written work completed for which the student is challenging the grade. If the student is still not satisfied, the department chair and/or dean's office will review the action of the program director and/or department chair to see if the grade being challenged was appropriately assessed. If, in the opinion of the program director, department chair and/or the dean's office, deficiencies in instruction are so grave as to warrant such a change, the proper remedy will usually involve alternative assignments or examinations to allow the student the opportunity to demonstrate the appropriate level of competency in that area in order to earn a different grade than the grade originally assigned. The decision of the dean's office is final.

Grade Forgiveness -- Grade forgiveness is separated into two categories:
1. Admission Forgiveness (i.e., prerequisite GPA calculations); and
2. Progression Forgiveness (i.e., repeated SOD dental hygiene curriculum coursework).

The Dental Hygiene Program allows for admission forgiveness but not progression forgiveness.
Repeat Courses – A repeated course is defined as the opportunity for a student to repeat a single course within a program without readmission or reclassification. However, due to the complexity of the curriculum, the school allows for, but does not mandate, repeat courses within the program. Repeat courses require approval of the program chair and academic dean. The following guidelines are followed for repeat courses:

1. A student must obtain written approval from the department chair and academic dean to repeat a course.
2. When a student is approved to repeat a course, both grades are counted in GPA calculations.
3. A student must have a grade of “F” to be eligible to repeat the course.

Course Withdrawal – Registration for a course makes the student responsible for attending that class until the course is completed or until, with the permission of the dean or designee, the student withdraws from the course. Official withdrawal is facilitated by the dean or designee submitting official notice of withdrawal to the Offices of the Registrar, Student Financial Aid and Student Accounting.

An approved withdrawal, if completed on or before the last day specified in the academic calendar, will not be recorded on the student’s record. Withdrawals authorized after the last day specified in the academic calendar will be recorded as a “W.”

1. Withdrawals authorized after the three quarters point of the semester, specified in the academic calendar, will be recorded as an “F” if failing a course at the time of withdrawal. Failure to officially withdraw will result in the recording of a failing grade in the course in which the student is registered.

Academic Progress – It is the student’s responsibility to ascertain his or her academic progress and seek assistance from the course instructor if the student finds himself or herself performing inadequately.

The program faculty reserves the right to recommend promotion, probation, reclassification, or dismissal of any student. The school reserves the privilege of promoting only those students who, in the judgment of the program faculty, satisfy requirements of scholarship and personal suitability for the profession.

Promotion – Promotion is contingent upon successful academic performance, including demonstration of professional attributes. Recommendations for promotion and graduation are made by program faculty to the dean.

Probation

Upon the recommendation of undergraduate program faculty, a student may be placed on probation when either the student’s semester or overall cumulative grade point average falls below 2.00 or the student has failed to meet professional expectations.

Dismissal

Upon recommendation of undergraduate program faculty, a student may not be permitted to continue enrollment when:

1. The student has received a grade of “F”;
2. The student’s overall cumulative grade point average is less than 2.00 on all course work completed at the University of Mississippi Medical Center;
3. The student’s grade point average is less than 2.00 in each of two consecutive grading periods;
4. The student has failed to meet professional expectations; or
5. The student incurs an unexplained or unexcused absence from all classes and school and departmental activities for a period of two continuous weeks.

Appeal of Dismissal – The appeal procedure is designed to provide the student with a clearly defined avenue for appealing his or her dismissal if he or she believes the dismissal was an arbitrary or capricious action or for other reasons not related to academic performance. The appeal procedure is as follows:

1. The student must submit a written request for an appeal to the dean within five (5) calendar days from the time that the notice of dismissal is sent by e-mail. Failure to make a written appeal within the five calendar day time period shall constitute a waiver of the appeal right and shall result in the sanction becoming final as recommended. The written request for an appeal must set forth the substantive basis for the appeal and be documented in an official letter to the dean. The official letter of appeal can be sent as an email attachment, by regular mail, or hand delivered to the dean.
2. The dean may uphold or deny the appeal or appoint a committee to hear the appeal and forward its written recommendation to the dean. If the dean appoints a committee to hear the appeal, the student will be informed of the time and place of the appeal hearing. The student must appear in person at the hearing to present the appeal to the appeals committee.
3. During an appeal hearing the student shall be permitted, at his or her expense, to have an advisor at the hearing and through all other stages of the disciplinary process. The role of the advisor/legal counsel shall be limited to an advisory capacity only. He/she will not be permitted to make opening or closing statements, question witnesses, or make oral argument. The student is entitled to present witnesses or other evidence, and make opening and concluding statements on his or her own behalf. If the student elects to bring legal counsel to the hearing, he/she must give prior notice to the dean.
4. The decision of the dean will be made in writing and will be sent by e-mail to the student. The dean’s decision shall be final.

Leave of Absence – On the recommendation of a department chair and the approval of the dean, a student in good academic standing may be granted a leave of absence for approved medical, personal, or military reasons. The request for leave of absence must be appropriately documented, and in the case of medical leave, reviewed by the director of the Student-Employee Health Services. Leave may not exceed one (1) calendar year. Because of the intensity of the curriculum, phasing of the courses, and rapid changes in allied health education, a student may be required to restart courses from the beginning upon returning from leave. Students who fail to return to the academic program within the specified time will be automatically withdrawn from the program. If the student has courses in progress at the time leave of absence is granted, a letter grade of F may be assigned to these courses. A student on leave of absence will not be assigned any academic or clinical responsibilities. Upon return from leave of absence, the student will re-enroll and pay all tuition and fees appropriate for the period of re-enrollment. No leave of absence will be granted without proper prior approvals.

Program Withdrawal – Registration in an academic program makes the student responsible for completion of the course of study or until, with the permission of the dean or designee, the student withdraws from the curriculum. Official withdrawal is facilitated by the dean or designee submitting official notice of withdrawal to the Offices of the Registrar, Student Financial Aid and Student Accounting.

An approved withdrawal, if completed on or before the last day specified in the academic calendar, will not be recorded on the student’s record. Withdrawals authorized after this date will be recorded as a “W” unless the student has completed the course, in which case the final grade in the course will be recorded. Withdrawals authorized after the three quarters point of the semester, specified in the academic calendar, will be recorded as an “F” if failing a course at the time of withdrawal. Failure to officially withdraw will result in the recording of a failing grade in the course(s) in which the student is registered.
COUNSELING
UMMC contracts with Humana Behavioral Health (formally known as LifeSynch), which is our Student Assistance Program. Services are provided for all students and household members. Services are available 24 hours a day and 7 days a week at NO COST to you. If you choose to call, you will talk with a trained professional who will ask you about your situation and connect you with experts who can help. When appropriate, you will be referred to a local professional for up to three face-to-face sessions at no cost to you. Your personal information will be kept confidential. Student Assistance Program confidentiality complies with state and federal requirements. For more information: call 866-219-1232 or visit the website: https://humana.eapwl.com/login?returnUrl=/ To log in to the website – please use UMMC as the username and UMMC as the password.

STUDENT GOVERNMENT
The students in the School of Dentistry Dental Hygiene Program participate in all campus-wide student activities and have representatives on the University of Mississippi Medical Center Associated Student Body and the School of Dentistry Student Government Council. The council provides the administration and faculty with student opinion on matters affecting student welfare.

ABOUT THE PROFESSION OF DENTAL HYGIENE
Registered dental hygienists are licensed oral health care professionals. Dental hygienists provide preventive services that limit the extent of cavities and periodontal disease as well as promote the overall health and well-being of the oral environment and head and neck region. Dental hygienists assess general and oral health by using a variety of diagnostic aids (comprehensive health histories, head, neck and oral examinations, radiographs and indices). Using the information obtained from the assessment process, the hygienist develops a care plan in conjunction with the patient’s goals and needs, provides oral health education and performs preventive (fluorides, sealants) and therapeutic services (non-surgical periodontal therapy). Baccalaureate graduates are employed as clinical practitioners, educators, researchers, administrators, managers, preventive program developers and consultants. Registered (licensed) dental hygienists practice according to the requirements of individual state dental practice acts.

ACCREDITATION STATUS
The dental hygiene program is accredited by the Commission on Dental Accreditation (CODA), 211 East Chicago Avenue, Chicago, IL 60611-2678. CODA’s phone number is (800) 621-8099.

TRADITIONAL DENTAL HYGIENE
The traditional baccalaureate degree program in dental hygiene is an entry-level program for students who want to obtain a dental hygiene license. Upon completion of the two-year program, students receive a bachelor of science degree and are prepared to apply for and obtain their initial dental hygiene licensure.

PROGRAM ADMISSION REQUIREMENTS
In addition to the general admission requirements above, candidates seeking admission to the Dental Hygiene Program must:

1. Have completed a minimum of 60 semester hours of academic credit from a regionally accredited institution of higher learning;
2. Have a minimum overall cumulative grade point average of 2.50 on a 4.00 scale;
3. Complete 8 hours observation of a licensed or registered dental hygienist in two separate clinical environments;
4. Complete an interview and hands-on test;
5. Submit ACT scores;
6. Complete 12 hours of the science and 24 hours of the non-science prerequisite courses prior to the February 15 application deadline to the program; and
7. Successfully complete (a grade of C or better) the following minimum prerequisite number of required courses below:

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<td>General Biology or Zoology with Lab</td>
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<td>General Chemistry with Lab</td>
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<tr>
<td>College Algebra</td>
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<td>Fine Arts</td>
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<tr>
<td>General Psychology</td>
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<tr>
<td>Intro to Sociology</td>
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<tr>
<td>Speech</td>
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<td>Humanities</td>
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<td>Anatomy and Physiology with Lab(^1)</td>
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<td>Microbiology with Lab</td>
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<td>Nutrition</td>
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<td>Abnormal, Adolescent/Child, Educational or Developmental Psychology</td>
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\(^1\)One course in anatomy plus one course in physiology or anatomy and physiology combined for two courses.

PROGRAM APPLICATION DEADLINE
All application documents and application fees must be received by the Office of Student Records and Registrar by February 15 for the next academic year’s fall admission. General application information may be found in the General Application Procedures section above.

TUITION AND REQUIRED FEES
Tuition for the Bachelor of Science in Dental Hygiene, is $363.66 per semester hour, up to a maximum charge per semester of $4,363.92 for Mississippi residents. An additional $702.87 per semester hour, up to a maximum of $8,434.44 per semester, is charged to non-residents. Students enrolled the online program will be charged a $150.00 distance learning fee each semester. Non-resident tuition will not be charged for students in online programs.
EXPENSES
In addition to tuition, fees, health insurance and professional association dues, students should be prepared to spend $4,040 the first year and $1,115 the second year at the University of Mississippi Medical Center for necessary books, uniforms and instruments. Additionally, students should be prepared to spend approximately $1,940 for licensure testing fees during the senior year. Online students should be prepared to pay a distance education fee of $150 each semester.

DEGREE AND LICENSURE
Candidates for the dental hygiene degree must have completed the prescribed curriculum with an overall cumulative grade point average of 2.00 or better on a 4.00 scale on all work at the University of Mississippi Medical Center. Following satisfactory completion of all requirements, students will be awarded the Bachelor of Science in Dental Hygiene from the University of Mississippi and are eligible to apply to sit for national and state or regional board clinical examinations for licensure as a registered dental hygienist. A degree cannot be granted unless the student has spent the equivalent of at least one full academic year in residency; earned a minimum of 30 semester hours of residence credits; and completed the required course of study in the School of Dentistry with the appropriate overall cumulative grade point average on all work at the University of Mississippi Medical Center.

PROFESSIONAL COURSE OF STUDY

JUNIOR YEAR - Fall
DH 309 Dental Anatomy and Occlusion 2
DH 312 Primary Preventive Dentistry 3
DH 313 Radiology I 2
DH 315 Oral Histology & Embryology 2
DH 317 Medical Emergencies in the Dental Office 2
DH 321 Head & Neck Anatomy 2
DH 332 Scientific Foundations in DH 3

JUNIOR YEAR – SPRING
DH 302 Principles and Practice I 3
DH 305 Dental Hygiene Instrumentation 3
DH 316 Pathophysiology 3
DH 328 Radiology II 2
DH 331 Periodontics I 2

SENIOR YEAR – SUMMER
DH 326 Principles and Practice II 2
DH 327 Patient Care I 2
DH 406 Dental Public Health I 1
DH 407 Pharmacology I 1
DH 420 Pain & Anxiety Management 2

SENIOR YEAR - FALL
DH 405 Patient Care II 3
DH 408 Pharmacology II 2
DH 409 Dental Public Health II 2
DH 416 Oral Pathology 2
DH 417 Evidence-Based Dental Hygiene I 1
DH 418 Principles & Practice III 2
DH 431 Periodontics II 1

SENIOR YEAR - SPRING
DH 413 Public Health Dentistry III 1
DH 423 Biomaterials in Dentistry 2
DH 433 Patient Care III 4
DH 444 Practice Management & Specialties 4
DH 445 Evidence-Based DH II 1
DH 446 Case Studies 1

Total Required Hours 63

ADVANCED STANDING DENTAL HYGIENE (Online)
The Advanced Standing Baccalaureate Degree program in dental hygiene is intended to enhance the quality and education of dental hygienists. It enables practicing licensed dental hygienists to update their educational background, enhance their didactic skills, improve their clinical decision-making skills and receive the Bachelor of Science in Dental Hygiene. The program, offered across five semesters, is designed for, but not limited to, part-time, nontraditional students. Online coursework is the method of content delivery.

PROGRAM ADMISSION REQUIREMENTS
In addition to the admission standards of the institution and the general admission requirements outlined above, candidates seeking admission to the advanced standing dental hygiene program must:
1. Have completed a minimum of 60 semester hours of academic credit from a regionally accredited institution of higher learning;
2. Have completed a dental hygiene program accredited by the American Dental Association Commission on Dental Accreditation;
3. Submit a copy of a dental hygiene license;
4. Have a minimum cumulative GPA of 2.50 on a 4.00 scale; and
5. Successfully complete (a grade of C or better) the following minimum prerequisite requirements:

<table>
<thead>
<tr>
<th>Prerequisite Courses</th>
<th>Number of Courses</th>
<th>Semester Hours</th>
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</thead>
<tbody>
<tr>
<td>English Composition</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>Social or Behavioral Science(^1)</td>
<td>2</td>
<td>6</td>
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<tr>
<td>College Algebra, Quantitative Reasoning or Higher Mathematics</td>
<td>1</td>
<td>3</td>
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<tr>
<td>Humanities and Fine Arts(^2)</td>
<td>3</td>
<td>9</td>
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<tr>
<td>Natural Science(^3)</td>
<td>2</td>
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<tr>
<td>Electives</td>
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<tr>
<td>Total Prerequisites</td>
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<td>60</td>
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\(^1\)Social and Behavioral Sciences include courses such as anthropology, economics, political science, psychology or sociology.  
\(^2\)Humanities and Fine Arts include courses such as art history, dance, history, modern languages, music, philosophy, religion or theatre.  
\(^3\)Natural Sciences include courses such as astronomy, biology, chemistry, geology, physics or physical science.

**PROGRAM APPLICATION DEADLINE**

All application documents and application fees must be received by the Office of Student Records and Registrar by June 15 for fall admission. General application information may be found in the General Application Procedures section above. The School reserves the right to consider and accept applications after the established deadline if places are available. To determine if a deadline has been extended, call the Office of Student Records and Registrar after the deadline at (601) 984-1080.

**EXPENSES**

In addition to tuition, general fees and health insurance, students should be prepared to spend approximately $600 per year for textbooks. Online students should be prepared to pay a distance education fee of $150 each semester. While no fee exists for proctored testing at UMMC, students may be asked to pay a fee if using a site at one of the state’s other proctoring centers. Proctoring fees can range from $20 to $50 per exam at off-campus sites.

**PROFESSIONAL COURSE OF STUDY**

<table>
<thead>
<tr>
<th>Course</th>
<th>Semester Hours</th>
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<tbody>
<tr>
<td>DH 303 Professional Writing</td>
<td>3</td>
</tr>
<tr>
<td>DH 311 Current Trends in Preventive Care</td>
<td>3</td>
</tr>
<tr>
<td>DH 319 Pathophysiology/Special Needs Patients</td>
<td>4</td>
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<tr>
<td>DH 401 Research Methods</td>
<td>3</td>
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<tr>
<td>DH 412 Pharmacology</td>
<td>3</td>
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<tr>
<td>DH 428 Dental Hygiene Case Studies</td>
<td>4</td>
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<tr>
<td>DH 430 Advanced Practice Management</td>
<td>3</td>
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<tr>
<td>DH 434 Dental Hygiene Practices</td>
<td>2</td>
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<tr>
<td>DH 440 Community Dental Health</td>
<td>4</td>
</tr>
<tr>
<td>DH 455 Capstone Study(^*)</td>
<td>4</td>
</tr>
</tbody>
</table>

*Upon the successful completion of DH455, students will be awarded an additional 30 semester hours of transfer elective credit based on required course work completed in the previous program that enables them to sit for and earn their professional credential.

**DEGREE**

Candidates for the dental hygiene degree must have completed the prescribed curriculum with an overall cumulative grade point average of 2.00 or better on a 4.00 scale on all work at the University of Mississippi Medical Center. Following satisfactory completion of all requirements, students will be awarded the Bachelor of Science in Dental Hygiene from the University of Mississippi.

**COURSES OF INSTRUCTION**

**BMS 701A. Fundamentals of Materials Science A.** An introduction to the fundamental concepts of bonding, crystalline structure, crystal defects and short range order as they relate to polymers, metals and ceramics. Nucleation and growth, equilibrium and non-equilibrium phase transformations and solidification on non-crystalline systems will be discussed. This will be followed by discussion of the mechanical properties of materials (fatigue, creep, elastic and plastic behavior, stress relaxation, etc.) and their relationship to structure. Alloy theory and other strengthening mechanisms, including composite theory, will be dealt with at an introductory level. The thermodynamics and kinetics of surfaces undergoing oxidation and aqueous corrosion will be discussed. Prerequisite: BMS 708 or consent of instructor. (3 Semester hours Fall) Traditional Lecture (3 hours)

**BMS 701B. Fundamentals of Materials Science B.** This course is a continuation of topics covered in BMS 701A. An introduction to the fundamental concepts of bonding, crystalline structure, crystal defects and short range order as they relate to polymers, metals and ceramics. Nucleation and growth, equilibrium and non-equilibrium phase transformations and solidification on non-crystalline systems will be discussed. This will be followed by discussion of the mechanical properties of materials (fatigue, creep, elastic and plastic behavior, stress relaxation, etc.) and their relationship to structure. Alloy theory and other strengthening mechanisms, including composite theory, will be dealt with at an introductory level. The thermodynamics and kinetics of surfaces undergoing oxidation and aqueous corrosion will be discussed. Prerequisite: BMS 701A, BMS 708, or consent of instructor. (3 Semester hours Fall) Traditional Lecture (3 hours)

**BMS 703A. Experimental Methods in Mat. Sci. A.** An introductory theory and laboratory course designed to acquaint students with the variety of equipment used to evaluate the structure and properties of materials. Scanning electron microscopy, mechanical testing, thermal analysis, light microscopy, x-ray scattering and other chemical and physical characterization techniques will be covered. The course will include both didactic and laboratory exercises and will meet an average of once per week for two semesters. The course will be taught simultaneously with BMS 701A and will involve the concurrent hands-on synthesis, processing, and characterization of materials and determination of the properties being taught in that course. Prerequisite: BMS 701A or consent of instructor. Traditional Lecture/Lab (1 hour)

**BMS 703B. Experimental Methods in Mat. Sci. B.** This course is a continuation of topics covered in BMS 703A. An introductory theory and laboratory course designed to acquaint students with the variety of equipment used to evaluate the structure and properties of materials. Scanning electron microscopy, mechanical testing, thermal analysis, light microscopy, x-ray scattering and other chemical and physical characterization techniques will be covered. The course will include both didactic and laboratory exercises and will meet an average of once per week for two semesters. The course will be taught simultaneously with BMS 701B and will involve the concurrent hands-on synthesis, processing, and characterization of materials and determination of the properties being taught in that course. Prerequisite: BMS 703A or consent of instructor. Traditional Lecture/Lab (1 hour)
DENT 600A. Human Gross Anatomy Lecture. An introduction to acquiring and managing extramural funding for sponsored projects with emphasis on NIH research grants. The following topics will be covered: searching for sponsors, including an overview of NIH funding mechanisms; grant writing, including development of specific aims and hypothesis, writing a literature review, presenting preliminary data, describing methods and timelines, and making a budget; the submission and review process; revising unsuccessful applications; starting a new laboratory; and submitting progress reports and competing continuations. Students will write and revise a grant application during this course. Traditional Lecture (2 hours)

DENT 600B. Human Gross Anatomy Lab. A hands-on exploratory discovery course based on a complete dissection of the human body. Human cadaver, skeletal, and cross-sectional anatomical materials are provided for dissection and study. The students will be responsible for the complete dissection of specific regions. Traditional Laboratory (7 hours)

DENT 601A. Human Micro Anatomy Lecture. A didactic component consisting of (1) an in-depth structural, functional and developmental survey of cells, tissues and organs; and (2) an analysis of the basic concepts of developmental anatomy of oral and facial structures. Clinical correlations are included where appropriate. Furthermore, this course provides a basis for understanding other subject areas, including head and neck portion of Dental Gross Anatomy, physiology, pathology, and the clinical dental sciences. Traditional Lecture (4 hours)

DENT 601B. Human Micro Anatomy Lab. A hands-on microscopic course consisting of (1) an in-depth light and electron microscopic study of cells, tissues and organs; and (2) an intensive modular directed study of the microscopic composition and development of oral and facial structures. Clinical correlations are included where appropriate. Furthermore, this course provides a basis for understanding other subject areas, including head and neck portion of Dental Gross Anatomy, physiology, pathology, and the clinical dental sciences. Traditional Laboratory (4 hours)

DENT 604. Biochemistry. Fundamental course in biochemistry including chemistry of amino acids and proteins, nucleic acids, carbohydrates and lipids, enzyymology, metabolism and metabolic regulation, membrane structure and function, oxidative phosphorylation, hormonal control mechanisms, molecular biology and protein synthesis. This course also includes a number of lectures on oral biology and dental biochemistry including blood clotting, dental caries, connective tissue, and calcium and phosphorous metabolism. Traditional Lecture (7 hours)

DENT 606-1. Oral Lesions I. An introduction for dental students to Oral and Maxillofacial Pathology, the study of disease processes that affect oral and paraoral structures. The relationship between embryologic development of the head and neck and developmental disorders, reactive responses to physical and chemical injury and sequelae of immunologic and infectious diseases are featured, as well as oral cancer and oral manifestations of systemic disorders. Clinical, radiographic and histopathologic characteristics of disease will be presented in a discussion format to help the student build a foundation for future clinical practice. Traditional Lecture (3 hours)

DENT 606-2. Oral Lesions II. Clinical pathological conferences in which various disease processes involving both the soft and hard tissues of the oral and paraoral environs are discussed. Emphasis is placed on students’ ability to describe the lesion(s) presented, the accepted treatment modality, and to arrive at a reasonable differential diagnosis. Traditional Lecture (3 hours)

DENT 607-1. Basic Life Support I. In-depth knowledge of basic life support including recognition of signs and symptoms of cardiopulmonary emergencies and principles and techniques of cardiopulmonary resuscitation. Instruction includes lectures, slide and film presentations, and demonstration-practice on resuscitation training manikins. Traditional Lecture (1 hour)

DENT 607-2. Basic Life Support /Medical Emergencies. This course is designed to teach the student to perform 1 and 2 person rescuer Adult cardiopulmonary resuscitation (CPR) including use of an Automated External Defibrillator (AED), 1 and 2 person rescuer Infant cardiopulmonary resuscitation, and to render first aid to choking victims. The course is also designed to teach the student the established protocol for common medical emergencies in the dental setting. Traditional Lecture (2 hours)

DENT 610-1. Perio Diseases-Introduction & Concepts. Introduction to the periodontal curriculum. It is designed to help students gain an understanding of periodontal health and health maintenance as well as the underlying disease processes that occur if health deteriorates. Key concepts of prevention, examination and diagnosis will be covered. Additionally experimental learning will be incorporated where the students will have simulated learning on a dentoform when then take those skills and treat actual patients as part of a rotation into the periodontics clinic. Traditional Lecture (3 hours)

DENT 610-2. Perio Diseases-Non Surgical Therapies. Periodontal decision-making and non-surgical therapies. Students are given preparatory information for the clinic and for management of mild to moderate cases of periodontal diseases. Preventive and health-directing approaches will be emphasized. Students will also be introduced to critical analysis of important journal articles. Case presentations will predominate the educational offerings. The course format will encompass lecture, workshops and small group discussions. Active participation in the Periodontics clinic, when assigned on Tuesday morning, will provide an essential learning component of the course whereby students gain first-hand experiences in patient examination, diagnosis, planning and patient care that supplement didactic teachings. Traditional Lecture (4 hours)

DENT 610-3. Perio Diseases-Adv & Surgical Therapies. A study of evidence-based decision making and contemporary management of advanced periodontal diseases. They will also be introduced to critical analysis of periodontal journal articles via seminar format. A variety of surgical principles and techniques will be address in lectures and in the simulation laboratory. Traditional Lecture (4 hours)

DENT 611-1. Service Learning I. This course is a full week of service learning for all four dental classes. It consists of providing free dental services to patients from the state’s free dental clinics and shelters that provide for homeless men, women, and children. Immediate treatment will be given to the patients’ chief complaints in an effort to relieve any pain. Adults will receive free preventive dental treatment, amalgam restorations, extractions, anterior endodontics, and complete dentures. Dental as well as hygiene students will be directly involved with providing dental preventive and restorative services commensurate with their level of education. The week concludes with Give Kids a Smile day where children from three public schools in the area are given free examinations, cleanings, sealants, and referrals if necessary. Traditional Lecture (4 hours)

DENT 611-2. Service Learning II. This course is a full week of service learning for all four dental classes. It consists of providing free dental services to patients from the state’s free dental clinics and shelters that provide for homeless men, women, and children. Immediate treatment will be given to the patients’ chief complaints in an effort to relieve any pain. Adults will receive free preventive dental treatment, amalgam restorations, extractions, anterior endodontics, and complete dentures. Dental as well as hygiene students will be directly involved with providing dental preventive and restorative services commensurate with their level of education. The week concludes with Give Kids a Smile day where children from three public schools in the area are given free examinations, cleanings, sealants, and referrals if necessary. Traditional Lecture (4 hours)

DENT 611-3. Service Learning III. This course is a full week of service learning for all four dental classes. It consists of providing free dental services to patients from the state’s free dental clinics and shelters that provide for homeless men, women, and children. Immediate treatment will be given to the patients’ chief complaints in an effort to relieve any pain. Adults will receive free preventive dental treatment, amalgam restorations, extractions, anterior endodontics, and complete dentures. Dental as well as hygiene students will be directly involved with providing dental preventive and restorative services commensurate with their level of education. The week concludes with Give Kids a Smile day where children from three public schools in the area are given free examinations, cleanings, sealants, and referrals if necessary. Traditional Lecture (4 hours)
restorations, extractions, anterior endodontics, and complete dentures. Dental as well as hygiene students will be directly involved with providing dental preventive and restorative services commensurate with their level of education. The week concludes with Give Kids a Smile day where children from three public schools in the area are given free examinations, cleanings, sealants, and referrals if necessary. Traditional Lecture (4 hours)

DENT 611-4. Service Learning IV. This course is a full week of service learning for all four dental classes. It consists of providing free dental services to patients from the state's free dental clinics and shelters that provide for homeless men, women, and children. Immediate treatment will be given to the patients' chief complaints in an effort to relieve any pain. Adults will receive free preventive dental treatment, amalgam restorations, extractions, anterior endodontics, and complete dentures. Dental as well as hygiene students will be directly involved with providing dental preventive and restorative services commensurate with their level of education. The week concludes with Give Kids a Smile day where children from three public schools in the area are given free examinations, cleanings, sealants, and referrals if necessary. Traditional Lecture (4 hours)

DENT 612. Neuroanatomy. A study of both the gross external and internal structural entities that comprise the human nervous system with an emphasis on relevance to dental practice. Through a combination of didactic, small group active learning sessions, and self-guided lab modules, the student gains an appreciation for normal nervous system anatomy. Structure correlations that yoke internal nervous system structures with sensory and motor systems are presented. Special emphasis is placed on understanding the relationship of cranial nerve composition and distribution that register sensations arising from the face and oral cavity, including dental structures, as well as central connections of the cranial nerves encountered in the dental practice. Clinical correlations are included where appropriate. This course provides a basis for understanding other subject areas, including head and neck portion of Dental Gross Anatomy, physiology, pathology, and the clinical dental sciences. Traditional Lecture (2 hours)

DENT 614-1. Pain, Fear and Anxiety Control I. The perception of pain, the psychology of fear and anxiety and their impact on dentistry are presented. Alleviation and control of pain are presented in the context of alternative methods based on the individual patient. Basic methods taught are behavioral and pharmacological with emphasis on local anesthetics. Local anesthetics techniques are taught using lecture, video tapes, and demonstrations. Traditional Lecture (2 hours)

DENT 614-3. Pain, Fear and Anxiety Control III. Methods used in control of pain, fear and anxiety in dentistry are presented in lecture, clinical participation and demonstration. The course emphasizes the use of nitrous oxide and oxygen analgesia with clinical participation. Traditional Lecture (2 hours)

DENT 616-1A. Dental Caries I, Lecture. An introductory lecture course in operative dentistry. Detection and resolution of dental caries by conservative operative dentistry methods is presented. The theory of operative dentistry, principles of cavity preparation, instruments and restorative materials are covered in this course. Traditional Lecture (4 hours)

DENT 616-1B. Dental Caries I, Lab. A laboratory component introducing operative dentistry. Students are taught how to utilize the dental operator and equipment. The course includes the use of artificial teeth to develop essential psychomotor skills necessary for the restoration of teeth. Students prepare and restore with dental amalgam, composite resins, glass ionomer, and IRM various class I, II, III, V restorations in preclinical laboratory. Traditional Laboratory (7 hours)

DENT 616-2A. Esthetic Problems I, Lecture. A continuation of Dental Caries IA. This lecture component is a multidiscipline approach to cosmetic dentistry including philosophy, esthetic problems, diagnosis and treatment planning, adhesive materials, whitening, anterior and posterior composite restorations, tooth alignment, jaw relationships, and dental photography. Traditional Lecture (2 hours)

DENT 616-2B. Esthetic Problems I, Lab. A continuation of Dental Caries IB. This laboratory component includes fabrication of whitening trays, esthetic direct composite restorations on dentoform teeth, utilization of esthetic proportions in building teeth, color, smile analysis, and composite materials testing. Traditional Laboratory (3 hours)

DENT 616-3A. Dental Caries III - Indirect Rest, Lecture. The lecture component that introduces the student to the preparation and restoration of teeth with pin retained complex amalgam restorations and single unit indirect metal crowns, covering all elements of preparation design and material selection for these type restorations. Traditional Lecture (2 hours)

DENT 616-3B. Dental Caries III - Indirect Rest, Lab. The laboratory component that introduces the student to the hands-on preparation and fabrication of pin retained complex restorations as well as fabrication of multiple single unit indirect metal crowns. Fabrication of acrylic temporaries associated with the metal crowns is also introduced. Traditional Laboratory (5 hours)

DENT 616-4A. Preclinical Pediatric Dentistry, Lecture. A didactic component with an associated laboratory. Lectures focus on the problems associated with dental caries and their sequelae in the child patient, and also present material needed to diagnose and treat the child patient. Some lectures present specific techniques to be performed in the laboratory and others present associated topics. Traditional Lecture (2 hours)

DENT 616-4B. Preclinical Pediatric Dentistry, Lab. The laboratory component where students perform basic restorative procedures on a pediatric typodont. Some of the projects are to be turned in as well as a laboratory practical exam. Traditional Laboratory (2 hours)

DENT 616-5A. Indirect Esthetic Restoration & Digital. An introduction to restorative procedures for indirect restorations using CAD/CAM technologies. Traditional Lecture (1 hour)

DENT 616-5B. Indirect Esthetic Restoration & Digital. An introduction to fabrication techniques for indirect restorations using CAD/CAM technologies. Traditional Laboratory (2 hours)

DENT 617-1. Intro Biomed Lit Skills Case-Based Den. Assistance is given to students in using the biomedical literature to identify the best practice standards for treating patients by analyzing a case study, developing searchable clinical questions, and locating evidence-based information. Special emphasis is placed on the services and materials available at the Medical Center. Traditional Lecture (1 hour)

DENT 617-2. Adv Biomed Lit Skills for Case-Based Den. This instructional program is a continuation of Biomedical Literature Skills-1. Using case studies, students search specialized databases for evidence-based information for clinical decision-making. Students are introduced to the statewide biomedical knowledge-based electronic infrastructure. Traditional Lecture (1 hour)

DENT 618-1A. Preclinical Complete Denture Pros Lecture. The etiology of edentulism along with anatomic, physiologic, and socio-economic implications which affect treatment of the complete denture patient. Discussion of clinical techniques and demonstrations of clinical steps are viewed in video segments. This is to aid the student in understanding the overall process in construction of complete dentures. Traditional Lecture (2 hours)

DENT 618-1B. Preclinical Complete Denture Pros Lab. Students get experience fabricating custom impression trays for impressions, making record bases and occlusion rims, and subsequently mounting casts and setting and arranging several different occlusal schemes for complete denture fabrication. Traditional Laboratory (6 hours)

DENT 618-2A. Preclinical Fixed Prosthodontics Lecture. Presentation of information regarding tooth preparations for full coverage crowns. Traditional Lecture (2 hours)

DENT 618-2B. Preclinical Fixed Prosthodontics Lab. Students practice tooth preparations for full coverage metal-ceramic and all-ceramic restorations on typodont teeth. Traditional Laboratory (5 hours)
DENT 618-3A. Preclin Removable Part Dent Prosth Lec. Review of problems of the partially edentulous patient. Components of removable partial dentures are learned. Theory of removable partial denture design and biomechanical considerations are discussed and designs are completed for different types of partially edentulous situations. Traditional Lecture (2 hours)

DENT 618-3B. Preclin Removable Part Dent Prosth Lab. Practice in the preclinical laboratory in preliminary and final impression making, fabricating of special trays for final impressions of the partially edentulous patient, wrought wire daps and bending, and fabrication of partially edentulous record bases and occlusion rims. Practical experience is obtained in rest seat preparation exercises on a simulated patient in the SIM LAB under clinical conditions. Traditional Laboratory (3 hours)

DENT 618-6A. Fixed Prosthodontics Topics Lec. A lecture component covering topics associated with full coverage crowns and fixed partial dental prostheses (i.e. rationale, materials, techniques, preparation, and delivery procedures). Traditional Lecture (3 hours)

DENT 618-6B. Fixed Prosthodontics Topics Lab. A laboratory component which complements 618-6A. Traditional Laboratory (1 hour)

DENT 619. Materials Science. Fundamental principles which relate composition, structure and processing of metals, polymers, ceramics and composites to their properties and uses are presented. In addition, biocompatibility and safety-related issues for use of materials in vivo are discussed. Selected topics in dental materials properties and processing are also introduced. The course builds on basic chemistry and physics courses to prepare the students for topics in materials science which will be presented in other preclinical courses within the curriculum. Traditional Lecture (3 hours)

DENT 620-1A. Dent Morph and Occlusion Lec. A lecture course introducing the student to dental terminology and presenting a detailed study of the morphological characteristics of the permanent and primary teeth. This study also includes the intra-arch relationships of the teeth and their effects on the health of the dental supporting structures. A study of the eruption sequence of the primary and permanent teeth, as well as a study of pulp morphology for each permanent tooth is presented. Traditional Lecture (4 hours)

DENT 620-1B. Dent Morph and Occlusion Lab. A laboratory course introducing students to the reproduction in wax of the accurate morphological characteristics of the permanent teeth and establishing normal intra-arch and inter-arch tooth relationships. Students must also identify teeth (dry specimens). Traditional Laboratory (5 hours)

DENT 621-A. Occlusal Disorders, Lecture. Presentation of information that exposes the third year dental students to more advanced occlusal considerations of patients. Definitions, etiology, pathophysiology and differential diagnosis of occlusal dysfunctions of the masticatory system are discussed. Emphasis is placed on conditions that the beginning general dentist should recognize and be able to treat as part of an overall comprehensive therapy for routine patients. The student dentists are exposed to various types of splints that can be used to treat acute patient problems involving muscular, TMD or disc dysfunction prior to dental therapy that may alter the patient's occlusion. Students are presented information on centric relation techniques and appropriate cases to utilize the techniques. Traditional Lecture (1 hour)

DENT 621-B. Occlusal Disorders, Lab. A laboratory and clinical based course with the overall objective of fabricating a flat plane splint on partners and understanding how these are adjusted intra-orally to help correct some of the disorders presented in 621-A. Students improve their impression taking skills and are exposed to more in depth principles using centric records, bite registration techniques, and face bows. Student cases are mounted on articulators where students are exposed to more in depth settings of the articulator and their correlation to patient factors. Students fabricate anterior guide tables and subsequent maxillary splints. Finally, the students are exposed to principles and techniques for occlusal adjustments and selective grinding procedures. Traditional Laboratory (2 hours)

DENT 622-1. Methods in Problem-Oriented Dentistry I. An introduction to the important concept of “problem oriented dentistry” and its relevance and application to both patient care and dental education. The course is presented in formal lectures, group seminars, and clinical sessions. Methods are presented for (1) communicating with the patient, (2) obtaining a complete health history; (3) determining the vital signs, (4) performing extraoral and intraoral examinations, and (5) taking a comprehensive diagnostic radiographic survey. This course also presents the general principles of dental radiology and discusses the medically compromised dental patient. The intent of this course is to expose the students to the problem oriented dental record, the procedures and techniques to collect the patients' data-base, and an overview of the activities in the different dental school clinics. Traditional Lecture (6 hours)

DENT 622-2. Methods in Problem-Orient Dentistry II. Rotation through the Oral Radiology Clinic for purposes of making, processing, mounting, and interpreting oral radiographs. Traditional Lecture (1 hour)

DENT 622-4. Methods IV- Practice Administration. The course is designed to provide basic information to the senior dental student on various topics important for the new dentist in managing his/her professional career and personal life. Topics presented cover a wide area of subjects but time limitations will not permit in-depth coverage. The course will primarily be presented by lectures. There will be exercises that will cover topics discussed. Lecturers from outside the school will participate in the course and present information in their areas of expertise. Traditional Lecture (5 hours)

DENT 623-1. Clinical Problem Solving I. Students are required to attend Grand Rounds presentations and to participate in scheduled CPS team meetings and clinical sessions. The student assists and observes an assigned D-3 student or other team member providing patient care and becomes familiar with team patient care, the problem-oriented dental record, departmental clinical protocols, and chairside assisting. Grand Rounds presentations and CPS team meetings grades are recorded separately, and each must have a passing grade in order to pass the CPS course. Traditional Lecture (6 hours)

DENT 623-2. Clinical Problem Solving II. Students are required to attend Grand Rounds presentations and participate in scheduled CPS team meetings and clinical sessions. An in-depth knowledge of the patient admissions process is acquired. Four-handed dentistry techniques with the student as chairside dental assistant are emphasized. Grand Rounds presentations and CPS team meetings grades are recorded separately, and each must have a passing grade in order to pass the CPS course. Traditional Lecture (11 hours)

DENT 623-3. Clinical Problem Solving III. Students are required to attend Grand Rounds presentations and to participate in scheduled CPS team meetings and clinical sessions. Grand Rounds presentations and CPS team meetings grades are recorded separately, and each must have a passing grade in order to pass the CPS course. Traditional Lecture (12 hours)

DENT 623-4. Clinical Problem Solving IV. Students are required to attend Grand Rounds presentations and to participate in scheduled CPS team meetings and clinical sessions. The Grand Rounds presentation is evaluated by the quality of the supporting document that must be satisfactorily completed and submitted prior to the receipt of a final course grade. D4 students will guide and assist other team members with becoming familiar with team patient care, the problem-oriented dental record, departmental clinical protocols, and chairside assisting. The D4 team captain must also participate in D2 clinical interpretations as required by some departmental guidelines. Supporting Grand Rounds documentation, Grand Rounds participation and CPS team meetings grades are recorded separately, and each must have a passing grade in order to pass the CPS course. Daily clinical attendance is also required to pass the CPS course. Traditional Lecture (12 hours)

DENT 624A. Implant Dentistry Lec. Basic information for this treatment modality regarding indications, contra-indications, patient selection, potential complications, and referral mechanisms is presented along with an overview of implant materials design, placement procedures and tissue interfaces. Traditional Lecture (2 hours)
DENT 641. Microbiology and Immunology. Basic concepts in microbiology and immunology are presented and correlated with disease processes having a bacterial, viral, mycotic or parasitic etiology. Special emphasis is given to diseases of importance in dental medicine. The course includes lectures, laboratory demonstrations, simulations and examinations. Traditional Lecture (4 hours)

DENT 642-1. Introduction to Dental Ethics. An introduction to dental ethics designed to allow the student the opportunity to explore societal needs and professional obligations to ethical behavior. This course prepares the student for beginning the journey of a health care professional and provides foundation knowledge for the more advanced third year course. Traditional Lecture (1 hour)

DENT 642-2. Ethics II. The course introduces health law and the Mississippi Dental Practice Act. It also is a continuation of the Introduction to Dental Ethics. Emphasis is placed on the relationship and obligations, both ethical and legal, of the dentist and the patient. Case studies are used to delineate principles of ethics in the dentist-patient relation. Traditional Lecture (1 hour)

DENT 642-4. Ethics IV. Emphasis will be on the role of integrity in our daily professional lives and how ethical reflection may contribute to our understanding of our professional roles and obligations. Traditional Lecture (1 hour)

DENT 643-1. Orthodontics I. Fundamentals of orthodontics and complementary topics. Subjects include dentofacial growth and development, normal occlusion, classification of malocclusion, and a historical and contemporary perspective of the orthodontic specialty’s relation to the profession of dentistry. Diagnostic and clinical concepts are illustrated with diverse clinical case presentations. Practical exercises in cephalometric and mixed dentition analysis are performed. The biomechanical principles of removable and fixed appliances are presented in preparation for the course Orthodontics II. Traditional Lecture (3 hours)

DENT 643-2. Orthodontics II. Case selection and appliance design for the treatment of uncomplicated malocclusions are discussed in a laboratory setting. Students take impressions and produce a set of orthodontic study casts. Several common fixed and removable appliances are fabricated. Traditional Lecture (3 hours)

DENT 644-1. Private Practice Practicum. Students will participate in extramural practice rotations throughout the state to observe clinical and business operations. Traditional Practicum/Internship (3 hours)

DENT 644-4. Community Outreach Dental Externship. The Community Outreach Dental Externship (CODE) is a six week off-campus rotation for senior dental students. This program is designed to complement the student’s clinical activities at the School of Dentistry and to provide additional clinical experiences regarding dental procedures, business operations and interactions with the dental office personnel. The off-campus rotation sites are primarily private dental offices with the supervising dentist being Clinician-Educators, affiliated with the School of Dentistry. Students are expected to be present during the normal office working hours four days per week at the off-site office, returning to provide care for their patients of record at the School of Dentistry the remaining day of the week. Students will complete specified rotation goals
prior to being permitted to participate in the program. Students will be granted credit toward the School of Dentistry’s program requirements for a specified number of the procedures completed at these sites. Traditional Clinical Rotation (15 hours)

**DENT 645. Advanced Topics**. A review of clinical disciplines to help identify the students’ strengths and weaknesses regarding basic concepts. Integration of all clinical disciplines are presented concurrently. Students’ abilities to approach patient care integrating knowledge from all disciplines during diagnosis, treatment planning, treatment, and outcomes evaluations should be improved. New concepts, techniques, and materials are presented. Traditional Lecture (1 hour)

**DENT 646-1. Socioeconomic Factors I**. An introduction to the philosophy of scientific reasoning, including biostatistics, epidemiology and research methodology. Examples from the dental literature are used to illustrate concepts. Overviews of the socioeconomic factors in Mississippi, and current and proposed health care systems and practices as they relate to population oral health needs and demands will be included. Traditional Lecture (1 hour)

**DENT 646-2. Socioeconomic Factors II**. A survey of systems of health care delivery in the United States, with an emphasis on dental delivery systems. Students will review health policy concerns at the individual, state and national levels, and compare various organizational and financial approaches to providing health care. Traditional Lecture (2 hours)

**DENT 647. Evidence Based Dentistry**. Provides the student with an understanding of what constitutes good research in an effort to promote Evidence-Based Dentistry (EBD). The main objective of this course is to develop the ability to weigh the relative merits of different types of research. Specific goals are: 1) to develop the ability to properly evaluate the evidence-based literature to aid in developing best practices for the dental profession, 2) to develop the knowledge of the basic tools and concepts used in the practice of research, 3) to understand the importance of research study design, and 4) to recognize the appropriate data analysis for the major research designs. Traditional Lecture (3 hours)

**DENT 650. Clinical Practice I**. Clinical practice for third year students involving the techniques and procedures required for the practice of general dentistry. Clinical experience is the student’s responsibility with patients assigned for comprehensive care. Evaluations are made on daily clinic attendance and number of patient clinical experiences. Traditional Lecture (72 hours)

**DENT 650-11. PsychoMotor Skills Review**. An opportunity for skills review in the simulation laboratories for students who have been out of school for up to one year due to a leave of absence. The schedule and preclinical projects are determined on an individual basis to prepare the student for re-entry into the curriculum. This course may be taken during the second, or third years. Traditional Clinical Rotation (1 hour)

**DENT 665. Aging**. Basic information about the aging process and its impact on the general health status of individuals. Special emphasis is placed on effects of aging in health and disease on the oral health status. Lecture material is presented on the biological process associated with normal aging, psychological changes that occur with aging, social and cultural impact of aging, changes of general health status with advancing age, and the impact of age on dental care. Lecturers will be comprised of experts from the University of Mississippi Medical Center campus. Traditional Lecture (2 hours)

**DENT 675.1. Admissions**. A clinical based course developing the skills of interviewing patients, ascertaining pertinent medical and dental issues, and performing comprehensive diagnostic evaluations. These evaluations include oral and medical history, physical examination, oral and facial examination, and the interpretation of radiographs. The student develops skills to assimilate information into appropriate treatment plans for the individual patients, as well as for all patients with similar types of problems. They also develop skills to present comprehensive treatment plans to patients in a manner that patients can appreciate. Traditional - EL Clinical Rotation (6 hours)

**DENT 675-10. Acute Illness**. Clinical experience in management of patients with emergent dental conditions. Students gain experience in the provision of appropriate dental care, consultation with other providers, understanding current medications and interactions, and modification of treatment as needed in each individual case. Traditional - EL Clinical Rotation (6 hours)

**DENT 675-11. Comprehensive Patient Care**. An assessment of the D4 students’ ability to provide comprehensive treatment to their patients during their years of clinical patient care. Traditional - EL Clinical Rotation (1 hour)

**DENT 675-12. D4 General Dentistry Assessment**. This course is designed as a comprehensive assessment of a D4 student’s readiness to enter the practice of general dentistry. It will encompass all clinical disciplines as well as legal aspects of practicing dentistry in Mississippi. Traditional Clinical Rotation (1 hour)

**DENT 675-2. Oral Pathology/Radiology**. Instruction and practice in how to properly prescribe and make intra-oral and extra-oral radiographs and how to interpret radiographic images and construct a differential diagnosis of pathology visualized on these radiographic images. Traditional - EL Clinical Rotation (5 hours)

**DENT 675-3. Orthodontics**. This course is designed to introduce the dental student to clinical orthodontics. The student treats two orthodontic cases, presents two case presentations and recognizes how to manage orthodontic problems. Traditional - EL Clinical Rotation (4 hours)

**DENT 675-4. Oral & Maxillofacial Surgery**. Provides the student with basic skills necessary to provide basic oral surgery patient care. This includes medical assessment of the patient, physical exam, radiographic interpretation, diagnosis and planning care. Care is delivered in the oral surgery suite. Both full time and part time oral and maxillofacial surgeons provide clinic coverage and instruction. The student should be able to safely deliver basic oral surgical care upon successful completion of the requirements for this course. Traditional - EL Clinical Rotation (4 hours)

**DENT 675-5A. Pediatric Dentistry**. Clinical experience in managing and treating pediatric dental patients. It is expected that patients are treated comprehensively following an appropriately sequenced treatment plan. This course provides students with experience to treat children in the following areas: patient care management, biologic and physical growth, nutrition, behavior management, and treatment planning. Students are expected to complete all of the care on each patient’s treatment plan as their primary provider as the development of a provider-patient relationship is essential in Pediatric Dentistry. It is as important for the patient to begin to trust their health care provider as it is for the dental student to learn how to manage behavior of the patient and technically treat any dental needs of the patient. Traditional Clinical Rotation (6 hours)

**DENT 675-5B. Advanced Experiences in Pediatric Dent**. A clinical rotation focused on providing essential experiences in management of a diverse patient population. Students are allowed to interact and gain experience in management of pediatric patients that present at the Blair E. Batson Hospital for Children’s Dental Specialty clinic. During this time the student will work closely with the pediatric residents and pediatric dentistry faculty as they provide comprehensive dental care to pediatric patients. Traditional Clinical Rotation (1 hour)

**DENT 675-6. Periodontics**. Students gain extensive clinical experience in periodontal evaluation, decision-making, non-surgical, surgical management, and health maintenance. Additionally, they are required to attend weekly mentor meetings. Traditional - EL Clinical Rotation (16 hours)

**DENT 675-7A. Operative Dentistry**. Instruction in how to diagnose, plan, and treat patients by utilizing direct filling materials such as amalgam, composite and glass ionomer type restorations. Traditional - EL Clinical Rotation (12 hours)

**DENT 675-7B. Fixed Prosthodontics**. Instruction in how to diagnose, plan, and treat patients needing fixed restorations (inlays, onlays, crowns, and fixed partial dental prostheses) Traditional - EL Clinical Rotation (10 hours)
DENT 675-7C. Removable Prosthetics. Allows students to diagnose, plan, and treat patients needing removable prosthetics (conventional and immediate dentures, implant retained or tooth retained overdentures, interim and transitional partial dentures including acrylic, flexible resin and thermostoic resin partial dentures, implant retained partial dentures and conventional partial dental prostheses). Traditional - EL Clinical Rotation (14 hours)


DENT 679. Mission First. Clinical rotation where D4 students gain experience treating patients in an inner-city volunteer clinic serving the Greater Jackson area. Students treat an underserved population under the supervision of licensed dentists. Traditional Clinical Rotation (1 hour)

DENT 697-1. Review of Head and Neck Anatomy. An opportunity to dissect and/or review the anatomy of the head and neck with special emphasis the anatomical basis for clinical procedures, including local anesthesia. Students will also review recent articles concerning clinical anatomy research. Traditional Lecture (1-3 hours)

DENT 697-10. Endodontic Externship. An experience of advanced endodontics through the observation of a graduate endodontic residency program at another school. The student will be exposed to treatment planning, literature review, and case presentation seminars with additional clinical experience on advanced endodontic treatment techniques. Traditional Lecture (3-6 hours)

DENT 697-12. Private Practice Externship Elective. An externship that allows a student to experience a variety of private practice environments that he/she may be considering as a career. The student must have completed all prerequisites, competencies, and goals for all 675 clinical courses to qualify to take this course. Traditional Practicum/Internship (3 hours)

DENT 697-13. Regional Licensing Exam Prep Course. A lab course in which the student practices (with faculty guidance) for endodontic and fixed prostodontic procedures to be performed on the manikin portion of the regional licensing exam. Traditional Laboratory (2 hours)

DENT 697-5. Miss State Dental Board Observership. D4 students are invited to attend Mississippi State Dental Board meetings with a faculty member. By attending, the students see first hand, how the board functions and they observe both formal and informal hearings. Traditional Lecture (1-2 hours)


DENT 698-10. Advanced Clinical Orthodontics. This elective course is designed to introduce the dental student to orthodontic practice. The student will understand office staffing, scheduling, inventory and sophisticated orthodontic armamentarium. Traditional Clinical Rotation (3 hours)

DENT 698-13. Agd-Residency Internship. This internship will be offered to the dental students in good academic standing in the spring of their rising D4 year. Students will shadow residents, and limited procedures can be performed at the discretion of the covering attending. Exposure to different population groups like special needs, HIV, cardiac, liver, kidney disease or transplant patients will be provided in addition to healthy community patients. Traditional Lecture (3 hours)

DENT 698-17. Intro to Scanning Electron Microscopy. The theory and practical aspects of performing compositional analysis and mapping using the energy dispersive x-ray spectrometer will be covered. At completion of the course, the student should be able to use the integrated SEM/EDS system to qualitatively determine composition as well as understanding the use of calibration to produce quantitative results. Use of the system for digital image acquisition and elemental mapping will be covered. Traditional Lecture (3 hours)

DENT 698-20. Externships. These are typically one to two weeks in length. They are located at other dental schools, hospitals, or allied health facilities. They must be approved by the Dean and all clinical department chairs, therefore requiring submission of a request for the program at least three months in advance. Traditional Lecture (2 hours)

DENT 698-34. Oral-Maxillo Facial Surgery Externship. On-Site, UMMC. Students should expect to be involved in didactic and clinical instruction in oral and maxillofacial surgery. Experience with an advanced oral and maxillofacial surgery management of medically compromised patients in the clinical and hospital setting should be expected. The externship involves call responsibilities, patient rounds, ER / hospital consults and OR exposure in Oral and Maxillofacial Surgery. Summer, Fall or Spring semesters. Traditional Clinical Rotation (1-3 hours)

DENT 698-41. Periodontics Externship. Gives rising D4 students interested in pursuing specialty training in Periodontics the opportunity to visit a graduate program in the specialty. Externships are arranged by the student in consultation with the externship coordinator. Externships are generally one week in duration and may be completed at any accredited Periodontics specialty program in the United States. Traditional Lecture (1-3 hours)

DENT 698-48. Dental Mission Externship. Designed to give D-3 and D-4 students elective credit for participation in volunteer dental mission projects. Students arrange to participate in a project, usually though not exclusively through a church-related group. Projects are community-based and each has specific goals. Up to 40 hours of elective credit may be earned, depending on the length of the project. Participation usually occurs in the Summer and Fall semesters. In order to receive credit, THE SUPERVISING DENTISTS ON THE PROJECT MUST BE A MEMBER OF THE FACULTY OF THE SCHOOL OF DENTISTRY, EITHER FULL-TIME, OR PART-TIME, OR AS A PRECEPTOR. In no cases will a student receive credit unless the supervising dentist is officially affiliated with the School of Dentistry. Traditional Lecture (1-3 hours)

DENT 698-8. Elect Preceptorship Mil or Pub Hlth Den. This elective is for those D4 students that have met the qualifications and are selected for training at a military or public health clinic. The student must actively participate in the patient care and operation of the clinic to which they are assigned. The student must also give an oral presentation to the course coordinator detailing the operation of that clinic when the student returns to the School of Dentistry. Traditional Lecture (3 hours)

DENT 699-1. Conduct of Research. Permits exposure of dental students to research. This exposure may be a first time event or may be a continuation of previous research experiences. Traditional Lecture (1-3 hours)

DH 302. Principles and Practice I. This introductory didactic and laboratory course begins preparing students for the "Dental Hygiene Process of Care." Emphasis is placed on infection control protocol, data collection, patient assessment, treatment modalities, and professionalism. Traditional Lecture/Lab (3 hours)

DH 303. Professional Writing. Techniques and practice in intermediate composition strategies, including development, research, and analysis. A study of rhetoric in healthcare and methods for adapting to the needed rhetorical situation by the hygienist. Online, Internet, or Web-based Lecture (3 hours)

DH 305. Dental Hygiene Instrumentation. Development and application of the fundamentals of instrumentation. Traditional Lecture/Lab (3 hours)

DH 309. Dental Anatomy and Occlusion. A study of dental anatomy and physiology. Focus is on developmental and anatomical differences among teeth, root morphology, anomalies, and includes an introduction to static and dynamic occlusion. Traditional Lecture (2 hours)

DH 311. Current Trends in Preventive Care. Focuses on expanding the dental hygienist's understanding of primary prevent measures used to promote oral health. Included are biofilm control, an update on remineralization/demineralization, motivational interviewing, case management by risk assessment (CAMBRA), prevention for the oral cancer patient, treating dentinal sensitivity, oral malodor, and current use of pit and fissure sealants. Online, Internet, or Web-based Lecture (3 hours)
DH 312. Primary Preventive Dentistry. Focuses on the science and practice of preventive dental care. The etiology and associated risk factors of common oral diseases are presented. The measures that promote oral health and prevent disease are emphasized: tooth brushing, toothpastes, and mouth rinses, interproximal cleaning, diet modification, fluorides, sealants, and oral risk assessments. Also included are health promotion theories and prevention of oral disease in various life stages. Traditional Lecture (3 hours)

DH 313. Radiology I. Study of radiology and its use in dentistry as a diagnostic aid. Theories of exposure, processing, evaluation, and interpretation of normal and abnormal structures are taught for both digital and film-based image capture. An emphasis is placed on normal anatomic structures viewed in periapical and panoramic surveys. Traditional Lecture (2 hours)

DH 315. Oral Histology and Embryology. A study of the histology of teeth and surrounding structures. A survey of the elements of embryology of the head and neck, especially related to the development of the teeth, dental arches, salivary glands, buccal mucosa, pharynx, and tongue. Traditional Lecture (2 hours)

DH 316. Pathophysiology. A study of the pathology and oral health management of disease. Topics include functions of the cells, tissues, organs, and organ systems and how they relate to the disease process, along with the inflammatory process and immunologic response. Emphasizes normal and pathological responses to illness as related to the evaluation and treatment of the dental patient. Online, Internet, or Web-based Lecture (3 hours)

DH 317. Medical Emergencies in the Dental Office. A comprehensive study in the prevention, management, recognition, treatment, and disposition of medical emergencies that may occur in the dental office. Traditional Lecture (2 hours)

DH 319. Pathophysiology/Special Needs Patients. A study of the pathology and oral health management of disease and injuries. Topics include functions of the cells, tissues, organs, and organ systems and how they relate to the disease process, along with the inflammatory process and immunologic response. Emphasizes normal and pathological responses to illness as related to the evaluation and treatment of the dental patient. Specific emphasis on dental hygiene care of patients with various systemic, mental, physical disorders, and special needs. Online, Internet, or Web-based Lecture (4 hours)

DH 321. Head and Neck Anatomy. A detailed study of the skeletal, muscular, vascular and neural features of the head and neck. Traditional Lecture (2 hours)

DH 326. Principles & Practice II. Expands on Dental Hygiene Principles & Practice I through additional lecture and laboratory sessions. Additional clinical procedures and practice will include nutritional counseling, sharpening of instruments, placement of chemotherapeutic and desensitizing agents, placement of sealants, caries detection techniques, use of ultrasonics and air polishers, and taking impressions for study models and bleaching trays. Prerequisites: Fall Junior year courses. Traditional Lecture/Lab (2 hours)

DH 327. Patient Care I. The development and application of clinical skills in assessment, care plans, implementation, and evaluation of care. Prerequisite: DH 326 Traditional Clinical Rotation (2 hours)

DH 328. Radiology II. Expands the student’s knowledge of the didactic portion of DH 313 Radiology I. Radiographic surveys via the paralleling technique are exposed and evaluated. Panoramic radiographs are also exposed. Traditional Lecture/Lab (2 hours)

DH 331. Periodontics I. An introduction to periodontics. The focus is on biological and clinical aspects of periodontology including histopathology, etiology, and diagnosis and treatment planning of periodontal diseases. Traditional Lecture (2 hours)

DH 332. Scientific Foundations. A study of the functions of the cells, tissues, organs, and organ systems and how they relate to the disease process. The inflammatory process including the immunologic response and healing will be included. Traditional Lecture (3 hours)

DH 401. Research Methods. An introduction to research design emphasizing systematic investigation involving human subjects as it relates to data collection, analysis, and interpretation of findings. The course is intended to critically review current dental hygiene research culminating in a literature review on a specific topic. Online, Internet, or Web-based Lecture (3 hours)

DH 405. Patient Care II. Students will expand on the application of patient care to a diversified population. Emphasis on establishing competence in preventive and therapeutic procedures. Prerequisites: DH 326 and DH 327 Traditional Clinical Rotation (3 hours)

DH 406. Dental Public Health I. An introduction to the history, principles, and ethics of dental public health in the US and worldwide. Included in this course are concepts of dental health preventive modalities and cultural competency. Traditional Lecture (1 hour)

DH 407. Pharmacology I. This course presents introductory principles of pharmacology and pharmacotherapeutics. Characteristics and uses of major drug groups in relation to patient care are discussed. Traditional Lecture (1 hour)

DH 408. Pharmacology II. A study of drug actions and their mechanisms when introduced to the body under specific conditions and the reactions of the body to these drugs. Special emphasis is placed on pharmacological knowledge that will provide more effective care of the patient by the dentist. Traditional Lecture (2 hours)

DH 409. Dental Public Health II. This course will provide readings, discussion, and practical experiences related to planning, implementation, and evaluation of the teaching/learning process in community settings. An emphasis on field work experiences across various populations will occur. Traditional Lecture/Lab (2 hours)

DH 412. Pharmacology. A study of drug actions and their mechanisms when introduced to the body under specific conditions and the reactions of the body to these drugs. Special emphasis is placed on pharmacological knowledge that will provide more effective care of the patient by the dental hygienist. Online, Internet, or Web-based Lecture (3 hours)

DH 413. Dental Public Health III. This course will provide a continuation of the didactic knowledge and skills obtained in DH 406 and DH 409 with a continued focus on practical experiences in community settings. Epidemiology and dental public health theory is also a focus of this course. Traditional Lecture (1 hour)

DH 416. Oral Pathology. This course is a study of the definition, distribution, causality, resolution, and outcomes of pathological conditions affecting the head and neck with emphasis on the oral and perioral areas. Traditional Lecture (2 hours)

DH 417. Evidence-Based Dental Hygiene I. This course provides students with a practical knowledge of the research process and serves as an introduction to research design. Primary emphasis consists of critical reviews of dental hygiene research studies and their application to clinical practice. Traditional Lecture (1 hour)

DH 418. Principals & Practice III. Expands on the Dental Hygiene Principles & Practice courses with continued discussion on theoretical, practical, and ethical concepts in dental hygiene. Specific emphasis is on dental hygiene care of patients with various systemic, mental, physical disorders, and special needs will be covered. Prerequisites: All courses in previous semester. Prerequisites: All courses in the senior fall semester. Traditional Lecture (2 hours)

DH 420. Pain and Anxiety Management. The course describes methods used to control pain, fear and anxiety in the dental office. The safe and effective administration of nitrous oxide sedation and administration of local anesthesia is covered. Content areas include anatomy, physiology, pharmacology, and emergency management as they relate to the administration of local anesthetics, nitrous oxide, and pain control. Traditional Lecture/Lab (2 hours)

DH 423. Biomaterials in Dentistry. Introduction to biomaterials employed in dentistry. Techniques and materials utilized in the clinical environment will be practiced in the Principles and Practice II lab. Prerequisites: All courses in previous semesters. Traditional Lecture (2 hours)
DH 428. Dental Hygiene Case Studies. Current technology used to prepare and present multimedia presentations regarding selected dental hygiene clinical scenarios. A component of the course involves legal and ethical issues that arise in clinical practice. Online, Internet, or Web-based Lecture (4 hours)

DH 430. Advanced Practice Management. A study of the delivery of client-centered care practice while emphasizing business methods, records systems, accounting and collection of fees, economics, conflict management, and accommodations to the evolving healthcare system. Online, Internet, or Web-based Lecture (3 hours)

DH 431. Periodontics II. Builds on the foundation knowledge presented in Periodontology I with emphasis on recognition, therapeutic surgical and nonsurgical treatment of periodontal disease. Prerequisites: DH 331 and DH 327 Traditional Lecture (1 hour)

DH 433. Patient Care III. A continuation of comprehensive patient care services with emphasis on establishing entry-level competence in preventive and therapeutic procedures. Traditional Clinical Rotation (4 hours)

DH 434. Dental Hygiene Practices. Concepts of advanced dental hygiene instrumentation, instrument sharpening, and solutions for common instrumentation difficulties, ergonomic techniques, appointment planning, and instrument sequencing are included. Online, Internet, or Web-based Lecture (2 hours)

DH 440. Community Dental Health. Development and utilization of skills in the area of community-based program planning, implementation, and evaluation. History, principles, and ethics of public health and dental public health are discussed, along with an emphasis on disease prevention, distribution of oral diseases, principles of dental epidemiology, and the use of dental indexes. Students will implement a community-based program utilizing program planning and evaluation skills. Online, Internet, or Web-based Lecture (4 hours)

DH 444. Practice Mgmt and Dental Specialties. This course provides students with the legal, practical and ethical concepts in the provision of oral health care and the foundational concepts for the business aspects of the profession. Content on dental and dental hygiene specialties and sub-specialties are discussed. Traditional Lecture (4 hours)

DH 445. Evidence-Based Dental Hygiene II. This course is designed to provide students with an opportunity to expand research knowledge in two dimensions: principles and applications. Students will develop evidence-based decision making skills for identifying, searching for, and interpreting scientific research that can be used in the delivery of patient care. The course will culminate with the development and presentation of a table clinic at a professional meeting. Traditional Lecture (1 hour)

DH 446. Case Studies. A review of the oral health literature related to patient care. Emphasis is placed on clinical reasoning and decision-making in the treatment of a periodontal or unique clinic patient, resulting in a written and verbal presentation. Traditional Lecture (1 hour)

DH 455. Capstone Study. Students examine, synthesize, and develop solutions to issues faced in oral health care. In cooperation with the course advisor and/or program director, students will select a contemporary topic in dental hygiene and develop a comprehensive project or paper evaluating solutions to the particular issue and present the paper to faculty according to course guidelines. Online, Internet, or Web-based Lecture (4 hours)

**FACULTY**

Abdelkarim, Ahmad, DDS, MS, CAGS, PHD; Associate Professor and Chair - Orthodontics

Abill, Laura F., BS, MS, DMD; Assistant Professor - Advanced General Dentistry

Bain, Jennifer, DDS; Associate Professor and Chair, Periodontics and Preventive Sciences

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Knight, Inge, CDT; Instructor - Care Planning and Restorative Sciences

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Tolbert, Charles C., DMD; Associate Professor - Care Planning and Restorative Sciences
Vance, Jimmy Dale, DMD; Assistant Professor - Care Planning and Restorative Sciences
Vasser, Jason, DMD; Assistant Professor - Orthodontics
Wang, Niping, DMD; Assistant Professor - Periodontics and Preventive Sciences
Velasco-Martinez, Ignacio, DDS; Assistant Professor – Oral-Maxillofacial Surgery and Pathology
Whitlock, Acie, DMD; Professor - Endodontics
Williamson, Randall S., PhD; Assistant Professor - Biomedical Materials Science; Director - Biomedical Materials Science Shared Instrumentation Facility
Woods, Tina R., DMD; Assistant Professor - Oral-Maxillofacial Surgery and Pathology
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<td>24</td>
<td>Friday</td>
<td>2019 Commencement</td>
</tr>
<tr>
<td>SUMMER SEMESTER</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>May</td>
<td>28</td>
<td>Tuesday</td>
<td>Classes begin</td>
</tr>
<tr>
<td></td>
<td>28</td>
<td>Tuesday</td>
<td>$100 Late Registration Fee For 2019-2020 Summer Semester Effective Today</td>
</tr>
<tr>
<td>June</td>
<td>7</td>
<td>Friday</td>
<td>Last day to register</td>
</tr>
<tr>
<td></td>
<td>10</td>
<td>Monday</td>
<td>Last day to withdraw from a course or from school without receiving a withdrawal grade and to receive a tuition refund</td>
</tr>
<tr>
<td></td>
<td>14</td>
<td>Friday</td>
<td>Deadline for completion of all requirements for August 2019 degree</td>
</tr>
<tr>
<td></td>
<td>19</td>
<td>Wednesday</td>
<td>Registration begins for 2019-2020 Fall Semester</td>
</tr>
<tr>
<td>July</td>
<td>4</td>
<td>Thursday</td>
<td>Independence Day Holiday observed</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>Friday</td>
<td>Classes resume</td>
</tr>
<tr>
<td></td>
<td>29</td>
<td>Monday</td>
<td>$50 Late Registration Fee For 2019-2020 Fall Semester Effective Today</td>
</tr>
<tr>
<td>August</td>
<td>2</td>
<td>Friday</td>
<td>Last day of summer semester</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>Monday</td>
<td>Last day to submit grades</td>
</tr>
<tr>
<td>FALL SEMESTER</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>August</td>
<td>12</td>
<td>Monday</td>
<td>Classes begin</td>
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<tr>
<td></td>
<td>12</td>
<td>Monday</td>
<td>$100 Late Registration Fee For 2019-2020 Fall Semester Effective Today</td>
</tr>
<tr>
<td></td>
<td>16</td>
<td>Friday</td>
<td>Last day to register for fall semester</td>
</tr>
<tr>
<td></td>
<td>23</td>
<td>Friday</td>
<td>Last day to add a course</td>
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<tr>
<td></td>
<td>29</td>
<td>Thursday</td>
<td><em><strong>Last day to submit an application for December 2019 degree</strong></em></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Last day to withdraw from school or form a course without receiving a withdrawal grade and to receive a tuition refund</td>
</tr>
<tr>
<td>September</td>
<td>2</td>
<td>Monday</td>
<td>Labor Day Holiday observed</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>Tuesday</td>
<td>Classes resume</td>
</tr>
<tr>
<td>October</td>
<td>18</td>
<td>Friday</td>
<td>Deadline for completion of all requirements for December 2019 degree</td>
</tr>
<tr>
<td>November</td>
<td>4</td>
<td>Monday</td>
<td>Registration begins for 2019-2020 Spring Semester</td>
</tr>
<tr>
<td></td>
<td>11-18</td>
<td>Monday-Friday</td>
<td>Course Evaluations</td>
</tr>
<tr>
<td></td>
<td>20</td>
<td>Wednesday</td>
<td>Thanksgiving Holiday begins at 5:00pm</td>
</tr>
<tr>
<td></td>
<td>25</td>
<td>Monday</td>
<td>Classes resume</td>
</tr>
<tr>
<td>December</td>
<td>2-13</td>
<td>Monday-Friday</td>
<td>Fall Semester Examinations</td>
</tr>
<tr>
<td></td>
<td>14</td>
<td>Saturday</td>
<td>End of fall semester</td>
</tr>
<tr>
<td></td>
<td>17</td>
<td>Tuesday</td>
<td>Last Day to submit grades</td>
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<tr>
<td></td>
<td>23</td>
<td>Monday</td>
<td>$50 Late Registration Fee For 2019-2020 Spring Semester Effective Today</td>
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<tr>
<td>SPRING SEMESTER</td>
<td></td>
<td></td>
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<tr>
<td>January</td>
<td>6</td>
<td>Monday</td>
<td>Classes Begin</td>
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<tr>
<td></td>
<td>6</td>
<td>Monday</td>
<td>$100 Late Registration Fee For 2019-2020 Spring Semester Effective Today</td>
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<tr>
<td></td>
<td>10</td>
<td>Friday</td>
<td>Last day to register for spring semester</td>
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<tr>
<td></td>
<td>17</td>
<td>Friday</td>
<td>Last day to add a course</td>
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<tr>
<td></td>
<td>17</td>
<td>Friday</td>
<td><em><strong>Last day to submit an application for May 2020 degree</strong></em></td>
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<tr>
<td></td>
<td>20</td>
<td>Monday</td>
<td>Martin Luther King’s Birthday Holiday observed</td>
</tr>
<tr>
<td></td>
<td>21</td>
<td>Tuesday</td>
<td>Classes resume</td>
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<tr>
<td></td>
<td>23</td>
<td>Thursday</td>
<td>Last day to withdraw from a course or from school without receiving a withdrawal grade and to receive a tuition refund</td>
</tr>
<tr>
<td>February</td>
<td>5</td>
<td>Wednesday</td>
<td>Student Financial Wellness Seminar</td>
</tr>
<tr>
<td>March</td>
<td>9-13</td>
<td>Monday-Friday</td>
<td>Spring Break</td>
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<tr>
<td></td>
<td>16</td>
<td>Monday</td>
<td>Classes resume</td>
</tr>
<tr>
<td></td>
<td>27</td>
<td>Friday</td>
<td>Deadline for completion of all requirements for May 2020 degree</td>
</tr>
<tr>
<td>April</td>
<td>13</td>
<td>Monday</td>
<td>Registration begins for 2020-2021 Summer Term</td>
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<tr>
<td></td>
<td>17</td>
<td>Friday</td>
<td><em><strong>Last day to submit an application for August 2020 degree</strong></em></td>
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<tr>
<td></td>
<td>13-17</td>
<td>Monday-Friday</td>
<td>Course Evaluations</td>
</tr>
<tr>
<td>April/May</td>
<td>27-1</td>
<td>Monday-Friday</td>
<td>Final Examinations</td>
</tr>
<tr>
<td>May</td>
<td>1</td>
<td>Friday</td>
<td>Last day of semester</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>Tuesday</td>
<td>Last day to submit grades</td>
</tr>
<tr>
<td></td>
<td>12</td>
<td>Tuesday</td>
<td>$50 Late Registration Fee for 2020-2021 Summer Semester Effective Today</td>
</tr>
<tr>
<td></td>
<td>22</td>
<td>Friday</td>
<td>Commencement</td>
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</tbody>
</table>
The John D. Bower School of Population Health (SOPH) at the University of Mississippi Medical Center (UMMC) in Jackson was established in 2016 by the Board of Trustees of the Mississippi State Institutions of Higher Learning. The John D. Bower School of Population Health was designed to complement, strengthen, and extend the capacity for scholarship across UMMC and to assist in achieving the institutional missions by supporting rigorous approaches to investigation and transformational education in the science of population health, data science, health care economics, and preventive medicine.

The John D. Bower School of Population Health will serve an important role in accomplishing the mission of UMMC by:

- Educating future researchers and clinicians in the science of population health. Graduates of the John D. Bower School of Population Health will be expected to assume academic, administrative, and clinical roles in health care, population health, academia, and private industry. They will help shape the provision of health care, population health, and public health services in the state in the coming decades and thereby improve the health of Mississippians.
- Contributing to the UMMC clinical enterprise through the development and implementation of healthcare quality improvement interventions, developing creative approaches for identifying and intervening with high risk patient populations, and developing programs to reduce health disparities.

PROGRAMS

The John D. Bower School of Population Health offers programs leading to Executive Master of Science (Executive MS), Master of Science (MS), and Doctor of Philosophy (PhD) degrees.

- **Executive Master of Science Degree Program**
  - Executive Master of Science in Population Health Management

- **Master of Science Degree Programs**
  - Master of Science in Biostatistics and Data Science
  - Master of Science in Population Health Science

- **Doctor of Philosophy Degree Programs**
  - Doctor of Philosophy in Biostatistics and Data Science
  - Doctor of Philosophy in Population Health Science

Additional information about specific programs, is available on the SOPH website: [John D. Bower School of Population Health](http://www.johnbower.bowerschool.org)

MISSION STATEMENT

The mission of the John D. Bower School of Population Health is to educate and train leaders prepared to transform health care delivery and the health of Mississippians through the development of an innovative academic infrastructure uniquely designed to educate future population health scientists and clinical professionals to conduct pioneering population-based research and provide high quality, value-driven patient-centered care delivered in an increasingly complex health care delivery system.

VISION

The John D. Bower School of Population Health is protecting populations by addressing the multiple determinants of health.

FOUNDING PRINCIPLES

The John D. Bower School of Population Health is committed to:

- addressing health as a human right.
- transforming the health of populations through the education of researchers, practitioners, and clinicians prepared to conduct and disseminate pioneering, multi-sector, population research to increase the effectiveness of health care systems, improve community health, and reduce health and health care disparities.
- improving the health of Mississippians through connecting students with community-based organizations and state agencies to address “timely, real world” health-related challenges through required theses and dissertation research studies.
- respecting scientific and academic principles and the diversity of individuals, perspectives, and intellectual/scholarly disciplines.
- the dissemination of evidence-based knowledge and research findings to multiple stakeholder groups in an effort to improve the health of populations.

ADMISSION TO THE JOHN D. BOWER SCHOOL OF POPULATION HEALTH

GENERAL REQUIREMENTS – Selections of applicants is made on a competitive basis, without regard to race, creed, sex, color, religion, marital status, sexual orientation, age, national origin, disability, or veteran status. A student with a baccalaureate degree from an accredited institution may apply for study in areas in which competence has been demonstrated by scholastic performance.

Prospective students must submit an online application for admission to the Office of Student Records and Registrar. This application will include an official transcript of all undergraduate and graduate (if applicable) grades, and may include an official statement of scores (verbal, quantitative and analytical) received on the Graduate Record Examination (GRE), MCAT, or DAT, letters of recommendations from faculty members at accredited institutions or employment supervisors, and a personal statement. With the exception of those students applying for admission directly from a Master’s Degree program, the GRE examination must be taken within five years of application. Information regarding the GRE may be obtained from the Educational Testing Service, Princeton, NJ 08540. International applicants must have transcripts evaluated in a course-by-course report from World Education Services (WES) or Educational Credential Evaluators (ECE).

Prerequisites are required by certain programs, and these may be determined by contacting the specific program to which the applicant desires admission. Initial evaluation of applicants for admission to graduate programs is made on the basis of undergraduate (and graduate, if applicable) scholastic performance, letters of recommendation, and scores received on the GRE, MCAT, or DAT. Those applicants for whom the
The candidate must be able to acquire knowledge by direct observation of demonstrations, experiments, and experiences within the research and instructional setting.

Observation Skills. The candidate must be able to observe, calculate, analyze, reason, integrate and synthesize information to solve problems.

Intellectual/Conceptual Abilities. The candidate must be able to solve problems.

PhD applicants will be evaluated based on the following:
- Baccalaureate degree in a relevant scientific discipline
- GPA (3.0 or better)
- Three letters of recommendation
- A personal statement
- Admission Test Scores:
  - PhD in Biostatistics and Data Science: A GRE score ≥300 on the combined verbal and quantitative scores is preferred.
  - PhD in Population Health Science: A GRE score ≥300 on the combined verbal and quantitative scores is preferred; A MCAT score ≥195; or a DAT score of ≥19
  - Students who meet or exceed the minimum scores will be granted full admission to the SOPH. Students whose scores are below the minimum requirements may be considered for conditional admission based on the recommendation of the program director. To be removed from conditional status the student must, within three academic semesters of admission, attain a GPA of ≥3.0, or retake the entrance exam and obtain a score at or above the minimum requirements. Conditional students who fail to meet the criteria listed above will be dismissed from the program. Notwithstanding the above, individual programs may set higher minimum standards than those required by the SOPH.

MS applicants will be evaluated on the following:
- Baccalaureate degree in a relevant discipline
- GPA (3.0 or better preferred)
- Three letters of recommendation
- A personal statement
- Admission Test Scores:
  - MS in Biostatistics and Data Science: A GRE score ≥295 on the combined verbal and quantitative scores.

Executive MS applicants will be evaluated on the following:
- GPA (3.0 or better preferred)
- Three letters of recommendation
- A personal statement which includes information regarding relevant experiences or work history pertinent to the degree program
- Curriculum Vitae (Applicants must have >5 years work experience)

For both MS and PhD programs, individual programs may set higher minimum standards than those required by the John D. Bower School of Population Health. In view of that, students are requested to consult the director of their intended program of study and the specific program section of the Bulletin in order to ascertain program-specific requirements.

English Language Proficiency. Applicants whose native language is not English and/or who have completed their tertiary education primarily outside of the USA must submit official scores of the Test of English as a Foreign Language (TOEFL), International English Language Testing System (IELTS) or Pearson Test of English-Academic (PTE-A) as evidence of English language proficiency.
- TOEFL-Internet Based Test (IBT): 79 or higher
- TOEFL-Paper Based Test (PBT): 550 or higher
- IELTS: 6.5 overall band score or higher
- PTE-A: 53 or higher

However, this requirement may be waived for students who are currently enrolled at a college or university in the United States and/or who demonstrate a proficiency in written and spoken English following a personal interview. Admission of a student to a graduate program must be approved by the program director and by the dean of the SOPH. No individual may enroll in graduate level courses without proper approval and notification from the SOPH.

Conditional Acceptance. Acceptance to the SOPH is conditional; the school may rescind an offer of acceptance at any time before matriculation if an applicant fails to maintain expectations upon which the acceptance was based. Examples include, but are not limited to, a significant decline in academic performance, failure to complete prerequisites or other course work and degrees in progress, patterns of unprofessional behavior and incidents discovered in a criminal background check.

Criminal Background Checks (CBCs). Any preadmission agreement executed by the health care program with a student shall be void if there is a disqualifying incident or pattern of unprofessional behavior in the CBC prior to enrollment.

Fingerprint-Based CBC. All accepted applicants must contact the SOPH to schedule an appointment with UMMC Human Resources prior to enrollment so that a set of digital fingerprints and photograph can be obtained.

TECHNICAL STANDARDS FOR ADMISSION

Technical Standards are non-academic requirements essential for meeting the academic requirements of the programs in the SOPH. Within any area of specialization, students must demonstrate competence in those intellectual and physical tasks that together represent the fundamentals of research in their chosen discipline.

The PhD degree programs and the MS degree programs at the SOPH require a dissertation, thesis, projects, or a practice transformation practicum, based on independent research. Granting of these degrees implies the recipient has demonstrated a base of knowledge in their chosen field of study and the ability to independently apply that knowledge to form hypotheses, design and conduct experiments, interpret experimental results, and communicate these findings to the scientific community. Thus, a candidate for the PhD or MS degree must possess abilities and skills that allow for observation, intellectual and conceptual reasoning, motor coordination, and communication. The use of a trained intermediary is not acceptable.

The following technical skills are required of a successful MS or PhD student in the SOPH:
Observation Skills. The candidate must be able to acquire knowledge by direct observation of demonstrations, experiments, and experiences within the research and instructional setting.

Intellectual/Conceptual Abilities. The candidate must be able to measure, calculate, analyze, reason, integrate and synthesize information to solve problems.
Motor Skills. The candidate must possess motor skills necessary to perform procedures required for the experimentation and experiences within the chosen discipline.

Communication Skills. The candidate must be able to discuss and communicate his or her experimental hypotheses and results to the scientific community.

Behavioral and Social Attributes. The candidate must possess the emotional and mental health required for full utilization of his or her intellectual abilities, the exercise of good judgment, the prompt completion of responsibilities inherent in managing a scientific setting, the ability to function under the stress inherent in research, and the ability to understand and comply with ethical standards for the conduct of research.

APPLICATION PROCEDURE
The application may be obtained online from the SOPH website. All applications are handled through the Office of Student Records and Registrar. All transcripts and documents submitted to the Office of Student Records and Registrar in support of an application become the property of The UMMC and will not be returned to an applicant or forwarded to another school or individual. Contact information: Office of Student Records and Registrar, UMMC, 2500 North State Street, Jackson, MS 39216, 601-984-1080, 601-984-1079 (Fax).

DEADLINES FOR APPLICATIONS - The SOPH accepts applications throughout the calendar year. However, applications for specific academic semesters must be received by the Office of Student Records and Registrar by the deadlines below.

<table>
<thead>
<tr>
<th>Program</th>
<th>Deadline</th>
</tr>
</thead>
<tbody>
<tr>
<td>MS in Biostatistics and Data Science</td>
<td>Fall: June 1</td>
</tr>
<tr>
<td>PhD in Biostatistics and Data Science</td>
<td>Fall: April 15</td>
</tr>
<tr>
<td>Executive MS in Population Health Management</td>
<td>Summer: April 15</td>
</tr>
<tr>
<td>MS in Population Health Science</td>
<td>Summer: March 1</td>
</tr>
<tr>
<td>PhD in Population Health Science</td>
<td>Fall: March 31</td>
</tr>
</tbody>
</table>

PhD students wishing to be considered for a stipend for the upcoming Fall semester should apply for admission as early as possible, but no later than December 15. Stipends are assigned on a competitive basis. An applicant is considered for the enrollment period designated on the application. If the applicant is accepted and fails to enroll, or is not accepted, a new application must be submitted if consideration for a subsequent enrollment date is desired.

APPLICATION FEE - A nonrefundable fee of $25 must accompany the initial application.

REGISTRATION - Registration for classes is not permitted unless the applicant has received notification of acceptance to a specific graduate program from the SOPH. Registration for courses must be approved by the graduate program director and advisor. No credit is given for any course for which a student is not officially registered. All students and advisors must complete the required registration approval form before each semester.

NON-DEGREE SEEKING STUDENTS - Individuals who wish to take graduate courses but are not members of a UMMC degree program may apply as non-degree seeking students. Applicants must first complete an approval to register form. The form and instructions for the non-degree student are located on the SOPH website. Non-degree students may not earn more than 9 semester hours. Furthermore, successful completion of courses taken does not in itself qualify the individual for subsequent admission to a graduate program.

TUITION AND REQUIRED FEES
Tuition and fees for the academic year can be found on the institutional website. Students in PhD programs who maintain a minimum GPA of 3.0 will receive a waiver of non-resident fees. Tuition is subject to change pending information from the Mississippi State Institutions of Higher Learning (IHL).

STUDENT HANDBOOK
The purpose of the SOPH Student Handbook is to provide students with specific information concerning school policies, regulations, and services. SOPH students are responsible for reading and familiarizing themselves with the contents of the Student Handbook and all other such publications produced by the institution. The Student handbook can be found on the SOPH website. Additional institutional policies can be found in the current Bulletin and in the UMMC Document Center.

REQUIRED LAPTOPS
Entering students are required to have a laptop computer that meets the UMMC Minimal Laptop Specifications. Students should purchase a laptop meeting or exceeding the UMMC Minimal Specifications from regular retail channels. Students will be personally responsible for maintenance/repair of their laptop. All students are required to maintain up to date virus and spyware detection software to allow access to the UMMC public wireless network. Students should acquire their laptop prior to the first week of their first semester enrolled at UMMC. Students will need to bring their functional laptop to a computer orientation. Students must contact their program directors to obtain information about program specific technology requirements.

PREDOCTORAL FINANCIAL ASSISTANCE
STIPENDS AND LOANS - Financial support in the form of stipends may be available in some programs. Academic excellence, maturity, and research experience are the main qualifications considered in the appointment of trainees and assistants. Inquiries should be addressed to the director of the graduate program in which the applicant wishes to undertake study. Students receiving a stipend are assessed in-state fees. Stipends are not tax exempt and tuition is paid from the stipends. Information on the stipend policy can be found on the SOPH website. Students may also apply for additional funding through various loan mechanisms. Students should contact the Office of Student Accounting and the Office of Student Financial Aid to determine if they qualify for these loan programs.
SCHOLARSHIPS AND AWARDS

DEAN’S SCHOLARSHIP - The Dean’s Scholarship is a full-tuition recruitment scholarship which is awarded to students for outstanding academic achievement. All students on stipends or extramural support are eligible for the Dean’s Scholarship.

MYRLIE EVERS-WILLIAMS FELLOWSHIP - The Evers-Williams Fellowship will be available to outstanding scholars who have been admitted to the SOPH, Department of Population Health Science at UMMC. This fellowship is intended to recruit and support the most promising students entering graduate programs in population health at UMMC. Applicants must demonstrate a commitment to health disparities research in population health. Students selected for the program will be primarily mentored by a faculty member in the SOPH and secondarily by an affiliate of the Evers-Williams Institute.

REGULATIONS AND OTHER INFORMATION

SCHOLASTIC REQUIREMENTS – It is the responsibility of the student to ascertain the general and specific requirements for the degree program in which they are enrolled. Students can obtain all relevant information from the program director, their advisor, or the Office of the Dean, SOPH.

GRADING – In order to be in good academic standing, students must maintain a grade point average (GPA) of 3.0 or higher based on a 4 point grading scale for a PhD student and a 2.8 or higher for a MS student. Grades are reported as a percentage which are converted into a letter grade and reported on the transcript according to the following rubric: A, 90-100; B, 80-89; C, 70-79; F, 0-69. Under such a scale a grade of A is assessed 4 points, a B 3 points, a C 2 points, and an F 0 points.

In certain courses a mark of P is given to indicate that a student has received graduate credit but has been assigned no point grade in the course. For example, official credit for satisfactory scholastic performance in seminars, journal clubs, research, and preparation of the dissertation or thesis may be recorded as P. However, in courses approved for the P mark, course directors may assign the grade of F. An Incomplete (I) may be assigned with the approval of the program director when the student has not completed a course within the enrollment period. Graduate students receiving the mark of I must complete the course work within 12 months from the time the grade was assigned, unless the course director requires an earlier completion date.

A course instructor may change a reported grade only if the original grade was incorrectly assigned due to clerical or computational error, or to modify an incomplete (I) mark.

ADD OR DROP A COURSE – The request form to add or drop a class is found on the SOPH website under FORMS. Classes may be added or dropped until the day specified by the academic calendar. Registration for a course makes the student responsible for attending that class until the course is completed or until the program director and dean or designee of the SOPH authorizes withdrawal from that course. Approved withdrawal from a course, if completed on or before the day specified by the academic calendar, will not be recorded on the student’s record. A withdrawal authorized after that date will be recorded as W. A student can withdraw from a course and receive a W at any time up to the submission of the final grade. Once the final grade has been submitted, withdrawal is not permitted. Students may challenge grades within 30 days of issuance of final grades by the Office of Student Records and Registrar; otherwise, grades will stand as recorded.

ACADEMIC PROBATION – If at any time during an academic year the progress of a student is considered unsatisfactory, the student may be placed on academic probation or dismissed from the program. Students who are placed on academic probation because their GPA has fallen below the benchmarks as indicated in the good academic standing policy will have 3 semesters to raise their GPA to an acceptable level. Failure to do so will result in dismissal.

DISMISSAL – Students may be dismissed from the graduate program for cause. This may include unsatisfactory academic performance, failure to pass qualifying examinations, poor research performance, breaches of scientific integrity (i.e., plagiarism, falsification of data, etc.), or personnel issues (i.e., harassment).

TRANSFER OF GRADUATE CREDIT FROM ANOTHER INSTITUTION – When a transfer student enrolls at UMMC, a limited amount of graduate credits earned at another recognized institution may be accepted toward degree requirements at UMMC. All transfer course work is evaluated and accepted work is recorded, without changes in grades, as part of the student’s permanent academic record. Further information on the policy can be found in the UMMC Document Center.

WITHDRAWAL – Registration in an academic program makes the student responsible for completion of the course of study unless the student withdraws from the curriculum. Official withdrawal is initiated by the student and facilitated by the dean or designee submitting official notice of withdrawal to the Offices of the Registrar, Student Financial Aid, and Student Accounting. Failure to officially withdraw will result in the recording of a failing grade in the course(s) in which the student is registered. An approved withdrawal, if completed on or before the last day specified in the academic calendar, will not be recorded on the student’s record. Withdrawals authorized after this date will be recorded “W” unless the student has completed the course, in which case the final grade in the course will be recorded. A student who wishes to withdraw from a SOPH program must submit a withdrawal request form to the Office of the Dean. This form may be found on the SOPH website.

LEAVE OF ABSENCE – Leave of absence from school may be granted by the dean or his/her administrative designee to students who meet the conditions listed in the Student Handbook and per the SOPH Leave of Absence Policy found within the UMMC Document Center. DEGREES AND COMMENCEMENT – Degrees earned in a graduate program are awarded at the end of each semester. A student must complete all degree requirements and complete an application for diploma through the MyU Student Portal. The form should be completed by the dates designated in the academic calendar. All graduates are encouraged to participate in spring commencement exercises.

COURSE LOAD – A full-time course load in the SOPH is 9 credit hours per semester except for the summer semester when 1 credit hour is sufficient. A student who is admitted to candidacy and is working on a thesis or dissertation may be classified as full-time while registering for 1 credit hour, following request by the student’s advisor and program director. The student and his/her advisor must complete the required registration approval form which may be found on the SOPH website under Forms.

ENROLLMENT POLICY – Once students are accepted into a program, they must be continuously enrolled in classes until the degree is completed or be on leave of absence. Leave of absence forms can be obtained from the SOPH website. Failure to adhere to this requirement will result in administrative withdrawal from the SOPH.

DEGREE PROGRAMS

A range of circumstances and conditions determines the number of admissions to the various graduate programs. Therefore, students interested in a particular program of study are strongly urged to contact the director of that program prior to completing an application to determine whether openings exist for the current academic year and to ascertain specific program requirements.
EXECUTIVE MASTER OF SCIENCE
The SOPH offers an Executive Master of Science degree in Population Health Management.

ACADEMIC REQUIREMENTS (NUMBER OF CREDITS/MINIMUM GRADE POINT AVERAGE) - A minimum of 30 credit hours is required for the degree. The minimum GPA for a MS degree is 2.8 (on the 4 point scale).

TIME LIMIT - The degree program is designed to be completed within one academic year.

PRACTICE TRANSFORMATION PRACTICUM - Students must complete a practice transformation practicum based on independent research. Students will develop and implement comprehensive quality improvement projects intended to strengthen the quality of patient care and reduce health care costs. The project will be implemented in the setting in which the health care provider-student is practicing.

MASTERS OF SCIENCE
The SOPH offers Master of Science degrees in Biostatistics and Data Science and Population Health Science.

ACADEMIC REQUIREMENTS (NUMBER OF CREDITS/MINIMUM GRADE POINT AVERAGE) – A minimum of 30 credit hours is required for the MS degree. The minimum GPA for a MS degree is 2.8 (on the 4 point scale). These requirements notwithstanding, individual MS programs can establish more stringent criteria for graduation.

TIME LIMIT – The time limit for completing all requirements for a MS degree is six years from the date of first registration.

THESIS – Some programs may require a thesis as a requirement for graduation. The thesis should show evidence of original investigation. The thesis must be approved by the advisory committee and the SOPH dean. An oral examination and thesis defense is mandatory in programs requiring a thesis. The candidate’s advisory committee will conduct the examination.

DOCTOR OF PHILOSOPHY
The degree of Doctor of Philosophy is offered by the SOPH in Biostatistics and Data Science and in Population Health Science.

The PhD degree is a research degree and is not conferred solely as a result of formal course work, no matter how superior and extensive. The program leading to the PhD degree represents more than the sum of time in residence, and the plans of study listed below are only a minimum. To receive the doctoral degree, the candidate must demonstrate evidence of proficiency and distinctive attainment in a special field, and a recognized ability for independent investigation as presented in a dissertation based upon original research. The following requirements for the PhD degree are the minimal requirements and apply to all students seeking the doctoral degree. Because individual programs may have additional specific requirements, the student is urged to clearly identify them before beginning a course of study. A description of program-specific policies is available from the relevant program director.

ADMISSION REQUIREMENTS – The previously listed general requirements for admission to a graduate program apply to the doctoral programs.

ACADEMIC REQUIREMENTS (NUMBER OF CREDITS/MINIMUM GRADE POINT AVERAGE)

COURSE WORK – All doctoral degrees require a minimum of 60 credit hours beyond a baccalaureate degree (or 30 credit hours beyond a MS degree in the same UMMC SOPH degree program). Credits representing research and preparation of the dissertation are to be earned as directed by the student’s advisory committee. Credit hour requirements may differ for other programs so the student should consult the relevant program director for specific details.

MINIMUM GRADE POINT AVERAGE – The minimum GPA to obtain the PhD degree is a GPA of 3.0 (on a 4.0 scale). This requirement notwithstanding individual graduate programs may choose to set a higher standard for their program.

TIME LIMITS – Completion of a PhD degree generally requires five to six years, but must take no more than five years following admission to candidacy.

QUALIFYING EXAMINATION AND ADMISSION TO CANDIDACY – An examination to qualify students for admission to candidacy for the PhD degree is administered by each program within the SOPH. The qualifying examination is given to graduate students in good academic standing upon completion of required coursework. The exact form of the examination (oral, written, comprehensive, or research based) varies from program to program. Information on the specific format used within a program may be obtained from the relevant program director or from the program’s policy manual.

DISSERTATION ADVISORY COMMITTEE – PhD Advisory Committee members must be members of the graduate faculty or approved by the dean of the SOPH. The committee will consist of a minimum of three members. The members of the committee are nominated by the chair of the advisory committee with the approval of the program director and the dean of the SOPH. The nomination of advisory committee form should be submitted to the Office of the Dean.

DISSERTATION – The dissertation must show originality of thought and demonstrate the results of independent investigation. It should contribute to the advancement of knowledge, exhibit mastery of the subject literature, and be written with an acceptable degree of literary skill. The dissertation, written according to prescribed form, is prepared under the direction of the candidate’s advisor and must be approved by the candidate’s dissertation advisory committee and the dean of the SOPH. This approval must be obtained and all other requirements completed by the date given in the official academic calendar. Guidelines outlining the prescribed form for a student’s written dissertation can be found the SOPH website.

DISSERTATION DEFENSE – The dissertation defense is conducted by the candidate’s dissertation advisory committee and consists of a public presentation and defense of the dissertation. Two weeks prior to a student’s public defense, an administrative staff member from that particular program sends announcement information to the SOPH office. The following information should be included in the announcement: student name, program, dissertation or thesis, title of dissertation/thesis, date of defense, time of defense, and place of defense. In private deliberation, the advisory committee will determine the acceptability of the defense and dissertation. Further questioning of the candidate may be included in the committee’s deliberations. The dissertation must be submitted to the advisory committee at least 10 days before the examination. Three members of the advisory committee must be present at the final oral examination.

ADDITIONAL GRADUATION REQUIREMENTS

- Students receiving the PhD degree are required to have the results of their research submitted for publication prior to awarding of the degree. This manuscript must meet the publication requirement, i.e., the student must be listed as the sole first author on at least one submission to a national or international peer-reviewed journal.
- All students must pass ID709 (Responsible Conduct in Research).
## BIOSTATISTICS AND DATA SCIENCE PROGRAM

Seth Lirette, PhD, MS and PhD Program Director

### COURSE OF STUDY – MASTER OF SCIENCE (MS)

The Master of Science (MS) program in Biostatistics and Data Science will train students to extract, analyze, and translate vast amounts of data into actionable evidence and communicate results to individuals from other disciplines. Through supervised consulting sessions, an internship, and directed research, students will develop the technical and collaborative skills necessary to excel in clinical, academic, government, industrial, and population health work organizations. Students must have previous training in calculus (covering multiple variable integration and differentiation) and linear algebra. Additional training in statistical or computer programming languages is preferred. Students must install the following statistical programs onto their personal laptops prior to orientation: Stata (nominal fee), R (free), and SAS University Edition (free).

#### YEAR 1 – FALL

<table>
<thead>
<tr>
<th>Course Code</th>
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<tbody>
<tr>
<td>BDS 721</td>
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<td>BDS 741</td>
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<td>BDS 754</td>
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#### YEAR 1 – SPRING

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<td>BDS 763</td>
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#### YEAR 2 – SUMMER

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<tr>
<td>PHS 703</td>
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#### YEAR 2 – FALL

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<td>BDS 792</td>
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<tr>
<td>MSCI 710</td>
<td>Epidemiology I**</td>
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*Electives will be chosen from the courses offered by the Department of Data Science or other graduate degree departments upon approval of the program director.

### COURSE OF STUDY – DOCTOR OF PHILOSOPHY (PhD)

The Doctor of Philosophy (PhD) program in Biostatistics and Data Science will produce graduates equipped to conduct cutting-edge research, teach the next generation of biostatisticians and data scientists, and collaborate with basic research scientists, clinicians, epidemiologists, and population and public health organizations. The doctoral course of study includes supervised consulting, internships, and a dissertation expanding knowledge in one or more emphasis areas, namely biostatistics, data science, or bioinformatics & genomics. Students must have previous training in calculus (covering multiple variable integration and differentiation) and linear algebra. Additional training in statistical or computer programming languages is preferred. Applicants may submit code exhibiting their knowledge in a statistical or computer programming language and/or slides presenting a completed data analysis project. These materials are optional but may strengthen the overall application. Students must install the following statistical programs onto their personal laptops prior to orientation: Stata (nominal fee), R (free), and SAS University Edition (free).

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<td>BDS 751</td>
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<td>3</td>
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# Population Health Management

Leandro Mena, MPH, MD, Program Director

## Course of Study – Executive Master of Science (MS)

The 12-month program is designed for health care providers (e.g. physicians, nurses, pharmacists, dentists, clinical social workers, physical therapists, chiropractors, etc.) with at least 5 years practice-based experience, who are interested in enhancing their knowledge and skills to create sustainable models of value-driven accountable care. The program will educate students to aggregate patient data, analyze data into an actionable patient record, and equip them with the business intelligence tools to track and improve patient outcomes while reducing costs. The program will culminate in an innovative practice transformation practicum, in which students will develop and implement comprehensive quality improvement projects intended to strengthen the quality of patient care and reduce health care costs within the clinician/practitioner student’s current practice.

<table>
<thead>
<tr>
<th>Year 1 – Summer</th>
<th>Course</th>
<th>Credits</th>
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<tbody>
<tr>
<td>PHS 705</td>
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<tr>
<td>PHS 715</td>
<td>Health Disparities Seminar</td>
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<th>Year 1 – Fall</th>
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<tr>
<td>PHS 700</td>
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<td>PHS 706</td>
<td>Population Health and Consumerism</td>
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<tr>
<td>PHS 710</td>
<td>Clinical Coaching</td>
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<tr>
<td>PHS 707</td>
<td>Accountable Care Organizations</td>
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<th>Year 1 – Spring</th>
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<td>PHS 708</td>
<td>Managing Health Across the Care Continuum</td>
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<tr>
<td>PHS 720</td>
<td>Population Health Informatics</td>
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<tr>
<td>PHS 797</td>
<td>Practice Transformation Practicum</td>
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*Electives will be chosen from the courses offered by the Department of Data Science or other graduate degree departments upon approval of the program director.

**Students may substitute PHS 703. Epidemiology I for MSCI 710. Epidemiology I in the summer of their second year.
POPULATION HEALTH SCIENCE
Paul Burns, MS, PhD, Program Director

COURSE OF STUDY –MASTER OF SCIENCE (MS)
The MS in Population Health Science is a distance education program housed on the Jackson campus of UMMC. Courses will be offered on campus during the summer for one week and the remaining program curriculum will be completed using an electronic student learning platform via Canvas (online). The program is designed to educate students to examine health outcomes, patterns of health determinants, and develop policies and interventions. Specifically, graduates of the program will be able to analyze social structures and processes that influence health, develop approaches that seek to improve health outcomes, and develop effective practices that reduce healthcare costs. The program will culminate in an original thesis focused on the factors that influence health and disease.

Population Health Science Track
Paul Burns, MS, PhD, Track Director

YEAR 1 – SUMMER
- PHS 740 Foundations of Scientific Writing
- PHS 703 Epidemiology
- PHS 741 Introduction to STATA

YEAR 1 – FALL
- PHS 700 Essentials of Population Health
- PHS 702 Statistical Methods in Research
- PHS 714 US Healthcare Organizations and Delivery
- PHS 750 Population Health Research Methods I

YEAR 1 – SPRING
- PHS 713 Implementation Science & Dissemination
- PHS 730 Health Prom, Disease Prev, and Care Mgt
- PHS 731 Social Determinants of Health

YEAR 2 – SUMMER
- PHS 747 Qualitative Analysis
- PHS 744 Bioethics and Society
- PHS 715 Health Disparities Seminar

YEAR 2 – FALL
- PHS 716 Interventions for Org. Behavior Change
- PHS 732 Global Health: Disp, Deter, Pol, & Outcomes
- PHS 743 Prgm Eval for Pop-Level Interventions

YEAR 2 – SPRING
- PHS 709 Population Health Management
- PHS 711 Healthcare Quality and Safety
- PHS 799 Doctoral Proposal Development

*Elective courses may be chosen from the courses offered in the Population Health Science or other UMMC graduate degree programs upon approval of the program director.

Preventive Medicine Track
Peter Pendergrass, Track Director

The Preventive Medicine track provides Preventive Medicine residents with the knowledge and tools to enhance their expertise in clinical and health promotion to address health disparities using a social determinants of health framework. Students will have the opportunity to take courses in epidemiology and statistical research methods which can be used to evaluate public/population health interventions and to conduct clinical and translational research to advance innovations in quality improvement, health promotion, and disease prevention.

YEAR 1 – FALL
- MSCI 710 Epidemiology I
- ID 740 Statistical Methods in Research
- PHS 714 US Healthcare Organizations and Delivery
- PHS 700 Essentials of Population Health

YEAR 1 – SPRING
- PHS 730 Health Prom, Disease Prev, and Care Mgt
- ID 741 Statistical Methods in Research II
- MSCI 711 Epidemiology II
- MSCI 733 Social and Behavioral Science Theories

YEAR 2 – SUMMER
- PHS 739 Knowledge Trans & Science Comm II
- PHS 740 Foundations of Scientific Writing
- PHS 741 Introduction to STATA
- PHS 724 Environmental Health
- PHS 744 Bioethics and Society
Graduates of the program will be able to:

- Effectively communicate research findings to lay and professional audiences; and engage stakeholders in developing approaches to address service gaps and inequities in order to achieve
- Demonstrate advanced knowledge of population health science and its contribution to improving health and health care.
- Design and execute appropriate research studies to identify clinical and non-clinical determinants of health, distribution of health outcomes, and health disparities;
- Analyze primary and secondary population-level data to reach valid conclusions, including both quantitative and qualitative data;
- Critically interrogate research findings and synthesize evidence to articulate new knowledge;
- Effectively communicate research findings to lay and professional audiences;
- Engage stakeholders to translate research findings into policies and program that advance population health;
- Advance value-oriented healthcare reform through innovations in quality improvement, health promotion, clinical prevention, and population health management; and
- Evaluate population health interventions to inform continuous improvement efforts.

The following four courses are offered as part of the Master of Science program in Population Health Science at UMMC and are considered prerequisites for the PhD program. PhD students should have taken these courses or their equivalents before the start of their program. Admitted PhD students who have deficiency in one or more areas of the prerequisite courses will be required to take the deficient class(es) in the summer prior to their enrolling session. Exceptions might be made on a case-by-case basis for a student to take one or more of the prerequisite courses concurrently with their first year of PhD courses if the program director approves of such arrangement.

- PHS 740. Foundations of Scientific Writing
- PHS 741. Introduction to STATA
- PHS 703. Epidemiology I
- PHS 702. Statistical Methods in Research

**Population Health Economics Track**

The Population Health Economics track prepares doctoral students for conducting independent research on the economics of health and healthcare. The curriculum provides a firm grounding and applied skills in economic evaluation, modern microeconomic theory, and microeconometrics. Students will have the opportunity to take doctoral-level courses from the Department of Economics at the University of Mississippi, Oxford, Mississippi. A typical dissertation research will focus on the economic evaluation of health interventions or technologies, behavioral economics, or an applied econometric analyses project.
| YEAR 1 – SPRING | Implementation Science & Dissemination | 3 |
| PHS 713 | Health Behavior Theory | 3 |
| PHS 717 | Population Health Research Methods II | 3 |
| PHS 752 |

| YEAR 2 – SUMMER | Applied Demography | 3 |
| PHS 701 | Qualitative Analysis | 3 |
| PHS 747 |

| YEAR 2 – FALL | Interventions for Org. Behavior Change | 3 |
| PHS 716 | Multivariate Regression | 3 |
| PHS 742 | Program Eval for Pop-Level Interventions | 2 |
| PHS 743 |

| YEAR 2 – SPRING | Population Health Management | 3 |
| PHS 709 | Social Determinants of Health | 3 |
| PHS 731 | Longitudinal and Multilevel Models | 3 |
| PHS 749 |

| YEAR 3 – SUMMER | Bioethics and Society | 1 |
| PHS 744 |

| YEAR 3 – FALL | Systems Science and Population Health | 3 |
| PHS 753 | Health Economics | 3 |
| PHS 760 | *Elective | 3 |
| XXX ### |

| YEAR 3 – SPRING | Doctoral Proposal Development | 3 |
| PHS 799 | *Electives (two electives) | 6 |
| XXX ### |

| YEAR 4 – SUMMER* | Doctoral Dissertation Seminar | 1 |
| PHS 798 |

| YEAR 4 – FALL* | Comm Eng and Comm-Based Particip Rsrch | 3 |
| PHS 745 | Doctoral Dissertation Seminar | 4 |
| PHS 798 |

| YEAR 4 – SPRING* | Doctoral Dissertation Seminar | 1 |
| PHS 798 |

*Electives:
PFS 762. Economic Evaluation of Health Programs, AND at least two of the following courses:
PFS 763. Econometrics for Population Health
PFS 764. Applied Microeconometrics
PFS 765. Advanced Microeconomics
PFS 766. Behavioral Economics and Health Decision-Making

Science Communication and Dissemination Track
The Science Communication and Dissemination track trains doctoral students in the methods of knowledge translation. Knowledge Translation has been defined as an iterative process that includes the synthesis, dissemination, exchange, and application of knowledge to improve health and health service delivery. There is a wide gap between evidence and practice in many areas of health care. There is also an increasing challenge with communicating proper health information to the public in this era of internet and social media-driven consumer health information. Students in this track will be trained to conduct research that increases the dissemination and uptake of sound information to improve health and health care in various settings.

| YEAR 1 – FALL | Essentials of Population Health Science | 3 |
| PHS 700 | U.S. Healthcare Organizations and Delivery | 3 |
| PHS 714 | Population Health Research Methods I | 3 |
| PHS 750 |

| YEAR 1 – SPRING | Implementation Science and Dissemination | 3 |
| PHS 713 | Principles of Classic, Modern, and Emerging Health Behavior Theory | 3 |
| PHS 717 | Population Health Research Methods II | 3 |
| PHS 752 |

| YEAR 2 – SUMMER | Applied Demography | 3 |
| PHS 701 | Qualitative Analysis | 3 |
| PHS 747 |
### YEAR 2 – FALL
- PHS 716 Interventions for Org. Behavior Change 3
- PHS 742 Multivariate Regression 3
- PHS 743 Prog Eval for Pop-Level Interventions 3

### YEAR 2 – SPRING
- PHS 709 Population Health Management 3
- PHS 731 Social Determinants of Health 3
- PHS 749 Longitudinal and Multilevel Models 3

### YEAR 3 – SUMMER
- PHS 744 Bioethics and Society 1

### YEAR 3 – FALL
- PHS 753 Systems Science and Population Health 3
- PHS 712 Knowledge Translation and Science Comm 3
- XXX ### *Elective 3

### YEAR 3 – SPRING
- PHS 799 Doctoral Proposal Development 3
- XXX ### *Electives (two electives) 6

### YEAR 4 – SUMMER*
- PHS 798 Doctoral Dissertation Seminar 1

### YEAR 4 – FALL*
- PHS 745 Comm Eng and Comm-Based Particip Rsrch 3
- PHS 798 Doctoral Dissertation Seminar 1

### YEAR 4 – SPRING+
- PHS 798 Doctoral Dissertation Seminar 1

*Electives:
- PHS 739. Knowledge Trans and Science Comm II, AND at least two of the following courses:
- PHS 746. Systematic Review
- PHS 722. Health Information Visualization
- PHS 720. Population Health Informatics

#### Vulnerable Populations Track
The track in Vulnerable Populations prepares doctoral students for conducting independent research to improve the health of vulnerable populations. Vulnerable populations include racial and ethnic minorities; the economically disadvantaged; the uninsured; the elderly; people with certain diseases such as HIV/AIDS, debilitating chronic health conditions, and severe mental illness; and rural residents who often encounter barriers to accessing healthcare services. Emphasis will be on two areas whether UMMC is distinguished: addressing HIV/AIDS and rural health disparities.

### YEAR 1 – FALL
- PHS 700 Essentials of Population Health 3
- PHS 714 US. Healthcare Organizations and Delivery 3
- PHS 750 Population Health Research Methods I 3

### YEAR 1 – SPRING
- PHS 713 Implementation Science & Dissemination 3
- PHS 717 Behavior Theory 3
- PHS 752 Population Health Research Methods II 3

### YEAR 1 – SUMMER
- PHS 701 Applied Demography 3
- PHS 747 Qualitative Analysis 3

### YEAR 2 – FALL
- PHS 716 Interventions for Org. Behavior Change 3
- PHS 742 Multivariate Regression 3
- PHS 743 Prog Eval for Pop-Level Interventions 3

### YEAR 2 – SPRING
- PHS 709 Population Health Management 3
- PHS 731 Social Determinants of Health 3
- PHS 749 Longitudinal and Multilevel Models 3

### YEAR 3 – SUMMER
- PHS 744 Bioethics and Society 1

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**The University of Mississippi Medical Center**
**YEAR 3 – FALL**
- BDS 711. Statistical Methods in Research
  - Systems Science and Population Health
  - 3
- BDS 714. Statistical Methods for Clinical Trials
  - Improving the Health of Vulnerable Pop
  - 3
- XXX ###
  - *Elective
  - 3

**YEAR 3 – SPRING**
- BDS 712. Statistical Methods in Research II
  - Doctoral Proposal Development
  - 3
  - *Electives (two electives)
  - 6

**YEAR 4 – SUMMER**
- BDS 715. Intro to Sample Survey Analyses
  - Doctoral Dissertation Seminar
  - 1

**YEAR 4 – FALL**
- BDS 723. Longitudinal and Multilevel Models
  - Comm Eng and Comm-Based Particip Rsrch
  - 3
- BDS 725. Survival Analysis
  - Doctoral Dissertation Seminar
  - 1

**YEAR 4 – SPRING**
- BDS 724. Longitudinal and Multilevel Models
  - Doctoral Dissertation Seminar
  - 1

*Electives:
- BDS 716. HIV/AIDS in the United States: Disparities, Challenges, & Opportunities, AND at least two of the following courses:
  - BDS 748. Intro to Geographic Information Systems
  - BDS 721. Digital Healthcare
  - BDS 729. Methods in Health Equity Research

Additionally, from Year 3 onwards, students may take additional elective and independent study courses following approval of the program director. Elective courses may be taken from the courses offered with the John D. Bower School of Population Health or in other UMMC graduate departments upon approval of the program director.

**COURSES OF INSTRUCTION**

**BDS 711. Statistical Methods in Research.** Provides an introduction to selected important topics in statistical concepts and reasoning. This course represents an introduction to the field and provides a survey of data types and analysis techniques. Specific topics include applications of statistical techniques such as point and interval estimation, hypothesis testing (tests of significance), correlation and regression, relative risks and odds ratios, sample size/power calculations and study designs. While the course emphasizes interpretation and concepts, there are also formulae and computational elements such that upon completion, class participants have gained real-world applied skills. Traditional Lecture (3 hours)

**BDS 712. Statistical Methods in Research II.** A continuation of Statistical Methods in Research 1, this course introduces the student to more complicated methods than those discussed in the first course including generalized linear models, survival models and longitudinal data analysis. The emphasis will be on applied rather than theoretical statistics, and on understanding and interpreting the results of statistical analyses. Datasets will be analyzed using the statistical package STATA. This is a hands-on class with computer labs. Datasets will be analyzed under the supervision of instructors. Traditional Lecture (3 hours)

**BDS 713. Intro to Data Management and Programming.** Provides an introduction to programming and data management. The course will focus on planning and organizing programs to handle and process data, as well as the grammar of particular programming languages. Traditional Lecture (3 hours)

**BDS 714. Statistical Methods for Clinical Trials.** Provides a basic understanding of the statistical concepts important in the design, conduct and analysis of clinical trials. Traditional Lecture (3 hours)

**BDS 715. Intro to Sample Survey Analyses.** Provides an introduction to statistical concepts in the design and analyses of sample surveys. Covers topics such as instrument design, sampling procedures, variance estimation, reliability, validity, scaling and scoring, complex samples and weighting procedures. Traditional Lecture (3 hours)

**BDS 721. Analytics.** Provides an introduction to basic statistical and data analytic methods. This course covers topics such as data archetypes; exploratory data analysis; basic statistical paradigms including frequentist, likelihood and Bayesian approaches; contingency tables, sampling distributions, the Central Limit Theorem, point and interval estimation, sufficiency, tests of statistical significance including large sample, likelihood ratio and resampling approaches, basic random variable linear combinations, ANOVA, correlation, linear regression, logistic regression and Poisson regression. Course content will be delivered through lectures, hands-on lab instruction and team-based learning using statistical packages including R, SAS and Stata. Traditional Lecture (3 hours)

**BDS 722. Advanced Analytics.** Continues introductions to intermediate and advanced statistical analysis methods for biomedical research. This course covers advanced regression topics, generalized linear models (GLM), generalized additive models (GAM), splines and smoothing techniques, decision trees, basic survival models, and introduces machine learning techniques (clustering, classification, regularization/penalized regression, feature selection, Bayesian methods, and unbiased estimators). Course content will be delivered through lectures and hands-on lab instruction. Traditional Lecture (3 hours)

**BDS 723. Statistical Computation.** This course is designed to provide students with an introduction to statistical computing. Students will learn the core ideas of programming — functions, objects, data structures, flow control, input and output, debugging, logical design and abstraction — through writing code to assist in numerical and graphical statistical analyses. Students will learn descriptive statistics, graphical presentation, estimation (EM algorithm), and computational methods for optimization. This course will emphasize the learning of statistical methods and concepts through hands-on experience with real data. Since code is also an important form of communication among scientists, students will learn how to comment and organize code. Traditional Lecture (3 hours)

**BDS 724. Longitudinal and Multilevel Models.** Covers statistical models for drawing scientific inferences from clustered/correlated data such as longitudinal and multilevel data. Topics include longitudinal study design; exploring clustered data; linear and generalized linear regression models for correlated data, including marginal, random effects, and transition models; and handling missing data. Online, Internet, or Web-based Lecture (3 hours)

**BDS 725. Survival Analysis.** This course introduces basic concepts and methods for analyzing survival time data obtained from following individuals until occurrence of an event or their loss to follow-up. We will begin this course from describing the characteristics of survival (time
to data and building the link between distribution, survival, and hazard functions. After that, we will cover non-parametric, semi-parametric, and parametric models and two-sample test techniques. In addition, we will also demonstrate mathematical and graphical methods for evaluating goodness of fit and introduce the concept of dependent censoring/competing risk. During the class, students will also learn how to use SAS to analyze survival data. Traditional Lecture (3 hours)

BDS 726. Generalized Linear Models. Provides a foundation in the theory and application of generalized linear models and related statistical topics. A generalized linear model (GLM) is characterized by (1) a response variable with a distribution in an exponential dispersion family and (2) a mean response related to linear combinations of covariates through a link function. GLMs allow a unified theory for many of the models used in statistical practice, including normal theory regression and ANOVA models, many categorical data models including logit and probit models for binary data, loglinear models, and models for gamma responses and survival data. Traditional Lecture (3 hours)

BDS 727. Nonparametric Analyses. Provides an introduction to modern topics in nonparametric data analysis for estimation and inference. Topics include kernel estimation, rank based methods, nonparametric regression, confidence sets and random processes. Methodology and theory are presented together. Traditional Lecture (3 hours)

BDS 728. Multivariate Analysis. Provides an introduction of the analysis of multivariate data, balancing theory, implementation and translation of these methods. Topics covered include matrix computations, visualization techniques, the multivariate normal distribution, MANOVA, principal components analysis, factor analysis, and other clustering techniques. Traditional Lecture (3 hours)

BDS 739. Computational Statistics. This course will cover efficient methods for obtaining numerical solutions to statistical problems. Topics include numerical optimization in statistical inference [expectation-maximization (EM) algorithm, Fisher scoring, etc.]. Monte Carlo methods, random number generation, jackknife methods, bootstrap methods, kernel density estimation, and splines. Traditional Lecture (3 hours)

BDS 741. Statistical Inference I. Introduces probability and distribution theory, including axioms of probability; random variables; probability mass and density functions; common discrete and continuous distributions; transformations and sums of random variables; expectations, variances, and moments; hierarchical models and mixture distributions; and properties of random samples. Traditional Lecture (3 hours)

BDS 742. Statistical Inference II. This course is a continuation of Statistical Inference I and continues to introduce modern statistical theory and inference based on decision theory and likelihood (evidence) theory. Traditional Lecture (3 hours)

BDS 743. Theory of Linear Models. Provides an introduction to the development and use of general linear models including frameworks for parameter estimation and inference in a variety of settings. Theoretical foundations of the models will be reinforced with areas in which the models are applied to answer scientific questions. Topics covered include matrix algebra, distribution theory for quadratic forms of normal random vectors, properties of OLS estimators, estimable functions and related themes. Traditional Lecture (3 hours)

BDS 745. Advanced Statistical Genetics. An advanced course on modeling and methodology in statistical genetics for human diseases and traits. The course will cover topics including linkage analysis, population structure and stratification, admixture mapping, heritability and genetic risk prediction, familial aggregation, association analysis and others. On successful completion, participants will have the skills to develop and apply statistical models towards a variety of genetic questions. Traditional Lecture (3 hours)

BDS 750. Study Design. This course will equip doctoral-level biostatisticians and data scientists with the skills necessary to participate in the planning and analysis of biomedical, clinical, and population-based health studies. This course will cover a wide array of study designs, one and two-way classifications, nesting, blocking, factorial designs, multiple comparisons, confounding, power, sample size, and selected issues (randomization, blindness, adherence, dropout, phases) from clinical trials. Traditional Lecture (3 hours)

BDS 751. Statistical Inference in Genetics. This course will present fundamental theoretical concepts and statistical inference with emphasis on genetic epidemiology research for common human diseases. Five modules will be covered, including an introduction to statistical inference methods used on genetic data, familial aggregation methods, segregation analysis, linkage analysis, and testing associations between genetic variants and disease. Traditional Lecture (3 hours)

BDS 752. Advanced Statistical Genetics. An advanced course on modeling and methodology in statistical genetics for human diseases and traits. The course will cover topics including linkage analysis, population structure and stratification, admixture mapping, heritability and genetic risk prediction, familial aggregation, association analysis and others. On successful completion, participants will have the skills to develop and apply statistical models towards a variety of genetic questions. Traditional Lecture (3 hours)

BDS 753. Bioinformatics. Provides an introduction to selected important topics in bioinformatics. The course focuses on integrating bioinformatics resources with basic biology and clinical applications to enhance population health research. Includes methods for the analysis of high-throughput next-generation sequence data and an introduction to the use of bioinformatics databases in precision medicine and population health. Covers common programs and algorithms for sequence alignment, evolutionary tree construction, database searching, functional interpretation of expressed genes, and identifying genetic mutations for human disease. Traditional Lecture (3 hours)

BDS 754. Principles of Programming. This course will introduce fundamental programming concepts such as data structures and algorithms, object oriented programming, and the basics of building interactive applications in the python programming language. Traditional Lecture (3 hours)

BDS 761. Data Science. Provides a modern introduction to data science, including data wrangling and dynamic data visualization processes, while reinforcing reproducible research and applied statistical methods. Course content will be delivered through lectures and hands-on lab instruction. Traditional Lecture (3 hours)

BDS 762. Advanced Data Science. Provides a continuation into advanced Data Science topics with deeper programming and additional concepts. Topics include simulation, bootstrap, prediction, machine learning, and tool development. Course content will be delivered through lectures and hands-on lab instruction. Traditional Lecture (3 hours)

BDS 763. Database Systems. Review of database systems with special emphasis on data description and manipulation languages; data normalization; functional dependencies; database design; data integrity and security; distributed data processing; design and implementation of a comprehensive project. Traditional Lecture (3 hours)

BDS 764. Data Visualization. Provides an introduction to principles and techniques for creating effective interactive visualizations of quantitative information. Primary topics include principles for designing effective visualizations and implementing interactive visualizations using web-based frameworks. Traditional Lecture (3 hours)

BDS 765. Advanced Machine Learning. This course introduces students to the basic theories, concepts, and techniques of machine learning and gives them a glimpse of the state-of-the-art methods in this area. Topics covered include Bayesian estimation and decision theory, maximum likelihood estimation, nonparametric techniques, linear discriminant analysis, computational learning theory, support vector machines and kernel methods, boosting, clustering, dimensional reduction, and deep learning. Traditional Lecture (3 hours)

BDS 766. Advanced Computational Methods. Provides a blend of software engineering, stochastic processes and optimization for creating and deploying efficient analytic tools. Topics covered include software engineering paradigms, robust software design, data structure, object oriented design, parallel computations, and distributed computing with a focus on implementation. Traditional Lecture (3 hours)

BDS 791. Special Topics. This course is intended to meet special needs of individual students. Students who wish to learn more about a particular topic can approach a mentor to determine an advanced course of study for that topic. The structure of an individual course is decided upon by the course director with approval from the curriculum committee. Traditional Independent Study (1-9 hours)

BDS 792. Statistical Consulting. Provides hands-on training and experience in statistical consulting. Written and oral communication skills are emphasized, working with prospective collaborators and ethical aspects of consulting are discussed. Traditional Practicum/Internship (1 hour)
BDS 793. Seminar Series: Microtopics. This course consists of attending the weekly Department of Data Science faculty seminar series. The goal of this seminar course is to expose students to current research topics in the field, to also give them exposure to seminar presentations, and to offer further detail into faculty research areas to assist in proposing a dissertation topic and research mentor. Traditional Lecture (1 hour)

BDS 796. Directed Research. Provides students to the opportunity to conduct research under the guidance of a faculty member from the Department of Data Science. Traditional Laboratory (3 hours)

BDS 797. Biostatistics & Data Science Internship. A work experience conducted in the Department of Data Science, an affiliated department, center, or institute at the University of Mississippi Medical Center, or a public or private organization. The internship is focused on the development of real-world analytic, programming, and communication skills. Traditional Practicum/Internship (1-9 hours)


ID 709. Responsible Conduct in Research. An interactive lecture course designed to provide an understanding of ethics in scientific research and the basic skills important for both oral and written scientific communication. Traditional Lecture (1 hour)

ID 740. Statistical Methods in Research I. This course is an introduction to basic statistical methods for research and is designed to enable students to develop their data analysis and interpretation skills. Students will learn about experimental design, estimation, and hypothesis testing, and how to apply statistical techniques such as point and interval estimation, tests of statistical significance, correlation, linear and non-linear regression, ANOVA, and longitudinal data (repeated measures) analysis. The emphasis will be on applied rather than theoretical statistics, and on understanding and interpreting the results of statistical analyses. Data sets will be analyzed using the statistical package STATA. This is a "hands-on" class -- in the computer lab. Data sets will be analyzed under the supervision of instructors. Traditional Lecture (3 hours)

ID 741. Statistical Methods in Research II. A continuation of Statistical Methods in Research I, this course introduces the student to more complicated methods than those discussed in the first course. Data sets will be analyzed using the statistical package STATA throughout the course sequence. Traditional Lecture (3 hours)

MSCI 710. Epidemiology I. This course will introduce principles and methods of epidemiologic investigation. It will introduce different types of study designs, including randomized trials, case-control and cohort studies, risk estimation and causal inferences. This is a "hands-on" class, with laboratory problems providing experience in epidemiologic methods and inferences. Traditional Lecture (3 hours)

MSCI 711. Epidemiology II. This course will present and illustrate key methods used in epidemiologic research at an intermediate level. Topics will include causal inference in epidemiology, additional study designs, measures of disease frequency and association, methods to assess and handle confounding and bias, and analysis and statistical modeling in epidemiologic studies. Course prerequisites: MSCI 710, ID 740. Traditional Lecture (3 hours)

MSCI 733. Social and Behavioral Sciences Theories. The content and materials in this course provide a structured overview of social and behavioral science theories and their applications relevant to population and public health research and practice. The course is designed to introduce the concepts fundamental to the understanding of multi-level factors that influence human health behaviors. Traditional Lecture (3 hours)

PHS 700. Essentials of Population Health. Introduction to how the multiple determinants of health (e.g., health care, socioeconomic status, genetics, the physical environment and health behavior, and their interactions) have implications for the health outcomes of populations. Characteristics of populations defined by geography, diagnosis, and/or point of care will be discussed. Avenues in which health care systems, public health agencies, community-based organizations, retail health organizations work together to improve local, national, and global communities. Students will also learn how to view problems from a population health and population health management perspective. Descriptions of how clinical and non-clinical data is used to measure health-related outcomes, analyze patterns, communicate results, and develop evidence-based intervention practices to manage health of populations will be explored. Traditional Lecture (3 hours)

PHS 701. Applied Demography. A growing number of administrative, planning, and statistical agencies at all levels of government, public policy research organizations, and private industries are showing a great interest in employing persons whose primary training and expertise is in the use and analysis of population statistics. This course will provide a basic understanding of the way the population's social and demographic structure changes is becoming increasingly important for addressing a variety of social problems and issues -- and for business and government decision making. This course will provide you with a useful framework for evaluating how social change becomes transmitted over time. Traditional Lecture (3 hours)

PHS 702. Statistical Methods in Research. This course provides an introduction to selected important topics in statistical concepts and reasoning. This course represents an introduction to the field and provides a survey of data types and analysis techniques. Specific topics include applications of statistical techniques such as point and interval estimation, hypothesis testing (tests of significance), correlation and regression, relative risks and odds ratios, sample size/power calculations and study designs. While the course emphasizes interpretation and concepts, there are also formulae and computational elements such that upon completion, class participants have gained real world applied skills. Online, Internet, or Web-based Lecture (3 hours)

PHS 703. Epidemiology I. This course will introduce students to the principles and methods of epidemiology in human populations, including study design (randomized trials, case-control studies, cohort studies, and cross-sectional studies), risk estimation, and methods of causal inference. Online, Internet, or Web-based Lecture (3 hours)

PHS 705. Advanced Payment Models. Alternative Payment Models (APMs) are approaches that reward providers for the delivery of high-quality and cost-effective care. Advanced Payment Models are a subset of APMs that let clinical practices earn more rewards in exchange for taking on risk relative to patient outcomes. This course will cover the range of alternative payment models in healthcare and the policies that undergird these advances such as the Medicare Access and CHIP Reauthorization Act of 2015 (MACRA) and the Merit-Based Incentive Payment System (MIPS). Traditional Lecture (3 hours)

PHS 706. Population Health and Consumerism. Hospitals and health systems are re-inventing themselves and working with providers and their communities to position their organizations for success in an environment that demands high-value, lower-cost and efficient health care. But as hospitals and health systems transition to value-based care, they must do so with an eye on the consumer. Patients, and their families, will be more informed and savvy in making health care purchasing decisions. This course will familiarize students with the growing movements in health and care consumerism and population health management. Online, Internet, or Web-based Lecture (3 hours)

PHS 707. Accountable Care Organizations. Accountable Care Organizations (ACOs) are designed to provide high quality health care and control costs; two components of the Quadruple Aim. The focus of this course will be to examine different types of ACOs and their various payment characteristics, organizational structures, mixed capabilities, governance structures, and varied contracts, and to explore the interventions conducted within ACOs at both the organizational and patient-levels. Online, Internet, or Web-based Lecture (3 hours)

PHS 708. Managing Health Across the Care Continuum. Engaging patients and their families is critical to achieving the Quadruple Aim and ensuring that key strategies and practices are implemented reliably and monitored for improvement. This is an important step toward effective patient and family engagement that is critically needed to effectively manage health across the care continuum. This course will present current
models utilized to manage chronic health conditions in clinical settings, how electronic tools (EHRs and Telehealth) are used for patient monitoring and engagement, and approaches to addressing health behavior change across the life course. Online, Internet, or Web-based Lecture (3 hours)

**PHS 709. Population Health Management.** This course will introduce students to the applied field of population health management through the use of case studies and key elements of population health management such as development of accountable care processes and infrastructure, payer relationships, care coordination, health and financial management systems, and leadership. Descriptions of how clinical and non-clinical evidence is used to measure health-related outcomes, analyze patterns, communicate results and identify best practices and implement effective interventions to manage the health of clinical populations. The importance of the translation of data and information into intelligence used for clinical decision-making will be emphasized, as well as the stages of using this data in health policy decision-making. Online, Internet, or Web-based Lecture (3 hours)

**PHS 710. Clinical Coaching.** The purpose of this course is to increase the knowledge and skills of clinicians in coaching patients to make lasting lifestyle management changes. It is envisaged that undertaking this subject will contribute to the professional development, knowledge base and performance of those involved in clinical coaching. Given the evolution of the U.S. health care system, health care providers are incentivized to produce better patient outcomes and to reduce recurring patient visits. Employers are prioritizing health and wellness in the workplace, aiming to cut costs and increase productivity. Given these changes, it is important for clinicians to increase their skill set in the provision of clinical coaching, as well as enhancing their knowledge of evidence-based approaches for motivating behavior change, and understanding of how to incorporate clinical coaching into clinical practice. Online, Internet, or Web-based Lecture (3 hours)

**PHS 711. Healthcare Quality and Safety.** This course provides an overview of health care quality and safety. Students will learn quality improvement concepts and techniques and will practice the techniques in teams. Assigned readings, video talks and lectures, online discussions, individual writing assignments, small group activities, and team projects will be used. Traditional Lecture (3 hours)

**PHS 712. Knowledge Translation and Science Comm.** This introductory course is based on the premise that scientists, and increasingly, other practitioners and educators, are agents of change in creating research impact, promoting research utilization, and ensuring that research findings reach the appropriate audiences. Knowledge Translation as defined by the Canadian Institutes of Health Research, as “a dynamic and iterative process that includes the synthesis, dissemination, exchange and ethically sound application of knowledge to improve health, provide more effective health services and products, and strengthen the health care system”. This course is designed to increase the practical knowledge, competencies and skill set of translating scientific knowledge to multiple communities and population groups. Online, Internet, or Web-based Lecture (3 hours)

**PHS 713. Implementation Science & Dissemination.** This course is an introduction to implementation science and dissemination, with an emphasis on population health. The course will first highlight current challenges in population health and the role of implementation science in addressing them, including the development of practice-based research activities and the provision of technical support for program implementation. The course will define current implementation research frameworks and active implementation framework and describe the interface between improvement science and implementation science. Online, Internet, or Web-based Lecture (3 hours)

**PHS 714. US Healthcare Organizations and Delivery.** Focuses on the organization, financing, and delivery of healthcare in the U.S. Contrasts the private and public sectors and examines the effects of market competition and government regulation. Examines the ways that medical providers are paid, and explores the major issues currently facing physicians, hospitals, and the pharmaceutical industry. Also discusses several potential small and large scale reforms to the U.S. healthcare system and evaluates their likely effects on healthcare spending, quality of care, and access to care. Online, Internet, or Web-based Lecture (3 hours)

**PHS 715. Health Disparities Seminar.** This course will examine relevant historical issues, theories, and empirical data, emphasizing critical analysis and application of knowledge. Disparities will be discussed relative to race/ethnicity, gender, income, and sexual orientation. Students will gain a better understanding of research on health disparities and interventions to promote health equity through a combination of readings, reflection papers, and in-class exercises. Students will summarize the evidence regarding a specific health disparity (topic and population of their choice). Traditional Lecture (3 hours)

**PHS 716. Interventions for Org. Behavior Change.** This course is designed to provide students with a conceptual framework addressing the strategic importance of managing change and organization development (OD) in various agencies, health care organizations, human service organizations, community organizations and other settings. Uncertainty, complexity and rapidly changing organizational environments create the necessity for organizations to respond to and effectively deal with turbulence and instability. The capability of an organization’s human resources to adapt to such conditions, adopt and successfully use new practices, technologies and develop ways of performing organizational tasks is vital to proactive and sustainable human service organizations. Managing change and OD are essential to these processes. Students will also learn LEAN and six sigma methodologies as key tools for process improvement in healthcare settings that require the management of multidisciplinary teams. Traditional Lecture (3 hours)

**PHS 717. Health Behavior Theory.** This course will provide an overview of social and behavioral science theories and frameworks that are currently used to: 1) understand health related behaviors; and 2) guide development of interventions and policies designed to prevent, reduce or eliminate major public health problems. Population health is an interdisciplinary field built upon other disciplines such as sociology, psychology, economics, demography, and public health. As a result, this course will cover classic theories in psychology and sociology, the leading health behavior theories in public health, and emerging theories used in population health interventions. Traditional Independent Study (3 hours)

**PHS 720. Population Health Informatics.** This course will focus on the concepts, theories and practices of the evolving discipline of health informatics. Differentiation between approaches used in this field versus health information technology will be highlighted. Health informatics is defined as the method of acquiring, storing, retrieving, and using healthcare information to foster better collaboration among patients and health care providers. This evolving specialization links information technology, communication and health care to improve the quality and safety of patient care. Online, Internet, or Web-based Lecture (3 hours)

**PHS 721. Digital Healthcare.** This course introduces students to the utility of information and communication technologies (ICT) within modern healthcare practice. Students will learn about a range of digital technologies and applications in the areas of clinical practice, education and administration that are fast becoming commonplace. The course fosters awareness of digital health at national and international levels; it examines the characteristics of digital health innovation, strategic vision and deployment in various countries such as Australia, US, Canada, Europe and the developing world. While evaluating the technological advances relative to patient-centered care, students will also study the potential pitfalls of the use of technology in healthcare. The course draws attention to the associated social, ethical, legal issues and workflow issues that must be considered when integrating digital health into clinical practice. Traditional Lecture (3 hours)

**PHS 722. Health Information Visualization.** Information visualization is the use of interactive visual representations of data to amplify human cognition. This course provides an introduction to the theories, principles and techniques for creating effective interactive visualizations of quantitative health information. The course will take a hands-on approach and will teach how to carry out visual analytics in Tableau. Traditional Lecture (3 hours)
PHS 724. Environmental Health. This course offers a general introduction to environmental health from global to local, addressing fundamental topics and current issues. This course covers core topics that prepare students to comprehend environmental health issues leading to prevention and management of the major environmental health problems. Traditional Lecture (3 hours)

PHS 726. Intro to GIS. This course introduces the fundamental concepts and applications of geographic information systems. Special emphasis is given in the areas of healthcare and epidemiology. This course combines an overview of the general principles of GIS and analytical use of spatial information technology applicable for health professionals. This is the first course of a series of geospatial information technology at UMMS. Traditional Lecture (3-4 hours)

PHS 730. Health Prom, Disease Prev, and Care Mgt. The course is concerned with the socio-cultural, behavioral, psychological, and biological factors contributing to wellness and disease prevention. Students will be introduced to the theory and application of health promotion principles and will review and critically assess the current efforts to influence lifestyle change, at both the individual and population levels. Online, Internet, or Web-based Lecture (3 hours)

PHS 731. Social Determinants of Health. This course analyzes the social factors, such as inequalities in income and opportunities, and racial/ethnic disparities that influence the health of populations. The course examines the effect of economic, social, cultural, and environmental factors on population health. The course looks at how systematic variation in these factors lead to health disparities, and explores how economic, social and cultural conditions interact with other determinants of health such as human behavior and biology. The course also reviews the methods used in health disparities research and assesses relevant economic and social policies. Online, Internet, or Web-based Lecture (3 hours)

PHS 732. Global Health: Disp, Deter, Pol, & Out. This course will focus on four main topics: 1) the burden and distribution of disease and mortality; 2) the determinants of global health disparities; 3) the development of global health policies; and 4) the outcomes of global health interventions. Substantial attention will be given to the difference in terminology used to describe inequalities across countries, the underlying historical assumptions that undergird those definitions, and the resulting solutions that are implemented as a result. Factors that highlight how global health disparities and global health policy responses are shaped by social, economic, governmental, and political forces will be discussed. Online, Internet, or Web-based Lecture (3 hours)

PHS 733. Knowledge Trans & Science Comm II. This course is designed to advance your knowledge of health and science communication theory, research, and practice. The major course objective is to provide a solid foundation for communicating complex scientific information and study findings to multiple audiences. The course will focus on the various contexts of science communication including interpersonal, small group, mass media, and organizational templates for message generation. Traditional Lecture (3 hours)

PHS 740. Foundations of Scientific Writing. This course covers how to conduct a literature review, and interpret and evaluate scientific literature that focuses on population health. In addition, this course will provide students with fundamental skills of writing scientific manuscripts. Skills obtained in this course will prepare students for writing theses/dissertations, and peer-reviewed manuscripts. Online, Internet, or Web-based Lecture (1 hour)

PHS 741. Introduction to STATA. Students will obtain the necessary skills to work and develop their own empirical analyses with the statistical software STATA. This will be a good basis for the writing of an empirical seminar paper, a Bachelor or Master thesis. The course will cover basic commands, data management, graphs, data manipulation, descriptive statistics, and regression analysis (see preliminary outline below). If time allows, more advanced topics such as the analysis of survey data and basic programming in STATA may be covered as well. Online, Internet, or Web-based Lecture/Lab (1 hour)

PHS 742. Multivariate Regression. This course introduces the basic concepts and steps associated with multivariable statistical modeling. It integrates methods with performing the steps using data analysis tools such as Stata. Presents use of generalized linear models for quantitative analysis of data encountered in public health and medicine. Specific models include analysis of variance, analysis of covariance, multiple linear regression, logistic regression, and Cox regression. Applied linear regression involving hands-on data analysis will be emphasized. Students enrolling for this course should have taken at least one other graduate level statistics course and should be conversant with the basic fundamentals of statistical testing and estimation. Traditional Lecture (3 hours)

PHS 743. Prgm Eval for Pop-Level Interventions. This course is designed to cover a wide range of assessments including individual programs, institutional and governmental policies. Evaluators work with program staff and stakeholders to clarify a program’s operational theory and goals, develop information to help tailor an intervention to a specific audience, document a program’s specific activities, reach, and outcomes, and develop information about the impact of a program or policy on a specific community health concern. This practical course will cover the core knowledge and skills involved in program evaluation, provide hands-on experience in evaluation design, and provide exposure to some of the ethical and philosophical issues current in evaluation research. The course will be conducted entirely online. Course activities will be focused on giving students hands-on experience in the specific research skills and tools required for effective program evaluation. Traditional Lecture (3 hours)

PHS 744. Bioethics and Society. This is a case-method course, consisting of discussion of the fundamental basics of bioethical theory. In this class, students will learn the fundamentals of bioethical theory and then apply this knowledge in developing a language and toolbox for making decisions when faced with dilemmas and ethical conflicts in a healthcare setting and in regard to issues of health and healthcare. The underlying concepts are vital to selecting and applying the appropriate frame to view these dilemmas and ethical conflicts. Traditional Lecture (1 hour)

PHS 745. Comm Eng and Comm-Based Particip Rsrch. Community engagement strategies that affect health behavior are increasingly important for improving the health of populations. Introduces the principles and applied methods of community-engaged research, including defining the community and partnership models for identifying relevant research questions. The course will cover community assessment, coalition building, choosing community partners, ethical issues of community work and important methodological issues of community-based participatory research. It is intended to develop and expand the skills of population health professionals in designing and delivering culturally congruent health promotion programs in community settings. Traditional Lecture (3 hours)

PHS 746. Systematic Review. This course introduces the methods of systematic review and meta-analysis, including formulating questions, criteria for relevance and rigor in selecting primary studies, search strategies, coding protocols, tables and other formats for presenting data, qualitative and quantitative representation of effect sizes from individual primary studies, and analyses of groups of studies to estimate an average effect size and to explain variation. Each student works on his/her own project with the goal of producing a complete proposal/protocol and taking preliminary steps in all phases of the systematic review process. This course will include a STATA-based workshop in meta-analysis. The course will provide an overview of evidence-based medicine and evidence-based public health practice. Traditional Lecture (3 hours)

PHS 747. Qualitative Analysis. The purpose of this course is to provide the basic tools for analyzing ethnographic and other forms of qualitative data. The course will have three parts. Part I provides a refreshing on qualitative research traditions and techniques as students begin to conceptualize and design their own research project. Part II involves fieldwork: students work in small groups or independently to carry out a field-based research project. Part III covers qualitative analysis and presents the students with the opportunity to learn coding and axial coding techniques using a common software for qualitative analysis. Different analytical approaches will be explored and examined. Students will
explore the use of different types of analysis that are appropriate to the data project’s overarching theoretical approach and the topical focus of the study from which it was produced. Students will learn the basics of a software program for coding textual and visual data. The final paper will be the write up of their results. Traditional Lecture (1-3 hours)

**PHS 748. Spatial Analysis and GIS.** Introduces the field of spatial analysis and its application to population health research and planning. Concepts are examined through the use of ArcGIS Geographic Information System (GIS) mapping software as a tool for integrating, manipulating, and displaying health related spatial data. GIS topics covered include mapping, geocoding, and manipulations related to data structures and topology. Introduces the spatial science paradigm: Spatial Data, GIS, and Spatial Statistics. Selected case studies are used to demonstrate concepts along the paradigm. Focus is on using GIS to generate and refine hypotheses about population health related spatial data in preparation for follow up analyses. Prerequisite: PHS 702 Statistical Methods in Research or equivalent. Traditional Lecture (3 hours)

**PHS 749. Longitudinal and Multilevel Models.** This course covers statistical models for drawing scientific inferences from clustered/correlated data such as longitudinal and multilevel data. Topics include longitudinal study design; exploring clustered data; linear and generalized linear regression models for correlated data, including marginal, random effects, and transition models; and handling missing data. Traditional Lecture (3 hours)

**PHS 750. Population Health Research Methods I.** This course will introduce the major components in research methods including: levels of measurement, qualitative and quantitative study designs, selection of study populations, hypothesis formulation, sampling, measurement instruments, formulation of research questions, and study interpretation issues such as determination of causality and the effectiveness of clinical and community interventions. Online, Internet, or Web-based Lecture (3 hours)

**PHS 752. Population Health Research Methods II.** This course is designed to provide graduate students with a solid and applied understanding of advanced research topics and methods used commonly in population health science research. It is designed to build on the research skills obtained in other fundamental research methods and statistics courses. Advanced topics in epidemiology, research design and statistical analysis will be discussed and students will be asked to lead discussions, apply their skills in class and for homework assignments. Participants will gain skills in the design of conceptually cogent and methodologically rigorous proposals and in manuscript preparation. Online, Internet, or Web-based Lecture (3 hours)

**PHS 753. Systems Science and Population Health.** This course provides an introduction to systems science and its applications to population health science and practice. Health and health care improvement challenges tend to be complex and involve multiple actors and institutions. Unlike traditional cause and effect or linear thinking models, systems thinking and complexity science is characterized by nonlinearity, hence traditional statistical methods are often inadequate for analyzing or predicting outcomes that depend on many interacting and adaptive parts. Systems thinking is a core skill that helps health professionals build programs and policies that anticipate and prepare for unintended consequences. Students will learn new ways of thinking about problem solving, including a range of powerful conceptual techniques suitable for planning interventions in complex and uncertain environments and use of systems models to devise strategies to account for real world complexities in research translation. Traditional Lecture (3 hours)

**PHS 755. Improving the Health of Vulnerable Pop.** The course provides intensive coverage of contemporary topics in vulnerable populations in health care and health research. It explores definitions of vulnerability and provides a conceptual model for considering issues of vulnerability in a health care, health research, or public health context. It guides students through practical considerations for working with a variety of vulnerable populations. Traditional Lecture (3 hours)

**PHS 756. HIV/AIDS in the United States.** This course offers an immersion experience in the HIV/AIDS epidemic in the United States. Seminar topics to be covered include: historical context, epidemiology and trends, wide and persisting disparities, old and emerging challenges, and advances and opportunities in prevention and treatment. Students will have an immersion experience in nationally acclaimed cutting-edge research and service programs in Jackson, Mississippi, with emphasis on improving equity for sexual minorities with or at-risk for HIV infection. Traditional Lecture (3 hours)

**PHS 757. Health Equity Research Methods.** This course covers theory and practical methods for developing and conducting research with the goal of improving health equity. Introduces methods and skills required to conduct rigorous health equity research and translate evidence-based strategies into practice and policy. It goes beyond methods for identifying health disparities to methods for addressing such disparities through research. Traditional Lecture (3 hours)

**PHS 760. Health Economics.** This course covers the theory of microeconomic analysis and its application to health and health services. It emphasizes the use of theory to understand problems of organization, delivery, and financing of health services; discrepancies in health levels among members of society; and the choices available to society regarding these issues. Doctoral students will be required to write a paper that identifies and discusses the major policy and research issues in one of the areas of health economics that is introduced in the course. Traditional Lecture (3 hours)

**PHS 761. Healthcare Finance.** This course covers key financial concepts and principles in the health care industry. Managerial and financial accounting, as well as financial analysis and strategic planning, are covered. Financial management under prospective payment and capitation systems, as well as product costing and pricing, will be emphasized. Risk-based contracting and other anticipated changes to financial management due to health care reform will be introduced. Traditional Lecture (3 hours)

**PHS 762. Methods for Econ Eval of Health Programs.** This course deals with comparative effectiveness research that takes cost into consideration. It covers the concepts and methods for the economic analysis of healthcare decision alternatives. Topics will include cost-benefit, cost-effectiveness and cost-utility analysis, and other methods of decision analysis. It emphasizes the application of these methods to the evaluation of alternative health programs. Traditional Lecture (3 hours)

**PHS 790. Special topics in PHS.** The focus of this Special Topics course may vary by semester. It is designed to respond to contemporary issues in population health as well as to cover specific areas of faculty and/or students’ interest. Traditional Lecture (1-3 hours)

**PHS 791. Independent Study.** This course is intended to meet special needs of individual students. Students who wish to learn more about a particular topic can approach a mentor to determine an advanced course of study for a particular topic. The structure of an individual course is decided upon by the individual course instructor with approval from the program committee. Traditional Independent Study (1-9 hours)

**PHS 798. Thesis and Dissertation Research.** The purpose of this culminating course is for students to produce a written, independent scientific work. During the course, students will demonstrate their ability to independently plan, carry out and present (orally and written) their research on a topic that addresses a current population health-related issue identified by a local agency. This involves formulating a research problem and objectives, selecting appropriate methods, collecting and analyzing data, and presenting and discussing results in relation to scientific articles and other relevant literature. This course provides the opportunity to apply knowledge and proficiencies acquired during the other courses in the master of population health program. The course includes a final seminar where the thesis is presented and discussed. The outcome of the master thesis should be a publishable manuscript and a knowledge translation article intended for a general audience Online, Internet, or Web-based Thesis (1-3 hours)
**PHS 797. Practice Transformation Practicum.** This course will guide students through the conduct of a practice transformation practicum is a planned and evaluated work experience that complements the classroom education, and allows them the opportunity to apply the lessons learned in their course work. The practicum experience is designed to enhance student's experience in the field of population health, and is key to a comprehensive understanding of population health in clinical settings. Success is defined by the exposure to valuable work experience, improvements in subject matter knowledge and mastery of specific competencies. Traditional Practicum/Internship (1-6 hours)

**PHS 798. Doctoral Dissertation Seminar.** This is a seminar course for doctoral students in Population Health Science who are currently working on their dissertation. The seminar provides students the opportunity to present and discuss their work in a supportive environment. Faculty may also present ongoing research. Traditional Dissertation (1-9 hours)

**PHS 799. Doctoral Proposal Development.** This course deals with both the theoretical and practical aspects of designing dissertation research and successfully defending the design in a proposal hearing. The purpose of the course is to assist students through the proposal and dissertation writing processes. This course covers the structure and content of a student dissertation research proposal, scientific writing conventions, strategies for conducting a literature search, critical evaluation and synthesis of literature, development of specific aims and research methods, procedures for writing and editing research proposals, and presentation of population health information. Students will be introduced to the process of acquiring and managing extramural funding for sponsored projects with emphasis on NIH research grants. Students will be encouraged to flesh out their doctoral dissertation proposal and to complete a pre-doctoral grant application during this course. Traditional Dissertation (3 hours)

**FACULTY**

Beauchamps, Laura, MD; Assistant Professor – Population Health Science
Beech, Bettina, DrPH, MPH; Professor - Population Health Science
Backus, Kandid, PharmD; Graduate Faculty – Population Health Science
Bidwell, Josie, DNP, MSN; Associate Professor – Preventive Medicine
Bruce, Marino, PhD; Scientist-Educator – Population Health Science
Buckley, Lecretia, PhD; Associate Professor – Population Health Science
Burns, Paul, PhD, MS; Assistant Professor- Population Health Science
Cain, Loretta, PhD, MPH; Assistant Professor – Data Science
Castillo, Alexandra, PhD; Graduate Faculty – Population Health Science
Chima, Charles, MSc, MBBS, DrPH; Assistant Professor – Population Health Science
Conpreta, Caroline, PhD; Assistant Professor - Preventive Medicine
Correa, Adolfo, PhD, MPH, MBA; Professor – Population Health Science
Didlake, Ralph, MD, MA; Professor – Population Health Science
Dobbs, Thomas, MD, MPH; Associate Professor – Population Health Science
Dzielak, David, PhD; Professor – Population Health Science
Espinoza, Ingrid, PhD; Associate Professor - Preventive Medicine
Faruque, Fazlay, PhD; Professor - Preventive Medicine
Fowler, David, PhD; Professor – Data Science
Fox, Ervin, MD; Professor – Population Health Science
Gamble, Abigail, PhD; Assistant Professor - Preventive Medicine
Gaughf, Natalie, PhD; Professor - Family Medicine; Professor - Population Health Science
Griswold, Michael, PhD; Professor - Data Science
Goldstein, Fred, MS; Graduate Faculty – Population Health Science
Griffith, Derek, PhD; Scientist-Educator – Population Health Science
Heitman, Elizabeth, PhD; Scientist-Educator – Population Health Science
Hester, Robert L., PhD; Professor- Physiology and Biophysics; Professor- Data Science
Hillegass, William, PhD, MD, MPH; Associate Professor – Data Science
Lirette, Seth T., PhD, MS; Assistant Professor – Data Science
Mann, Joshua, MD, MPH; Professor - Preventive Medicine
Marshall, Galen, PhD, MD; Professor – Population Health Science
Mei, Hao, MD, PhD, MS; Associate Professor - Data Science
Mena, Leandro, MD, MPH; Professor - Population Health Science
Murphy, Sydney, PhD, MS; Assistant Professor - Population Health Science
Myers, Janet, PhD; Scientist-Educator – Population Health Science
Norris, Keith, PhD; Scientist-Educator – Population Health Science
O'Brien, Robert, PhD, MS; Assistant Professor – Data Science; Assistant Professor – Population Health Science
Parham, Jason, MD, MPH; Assistant Professor – Population Health Science
Pendergrass, Desiree, MD, MPH; Associate Professor - Preventive Medicine
Pendergrass, Peter, MD, MPH; Associate Professor - Preventive Medicine
Penman, Alan, PhD, MD, MPH; Professor - Preventive Medicine
Reneke, Jennifer, PhD; Associate Professor – Population Health Science
Ricks, Janelle, PhD; Scientist-Educator – Population Health Science
Rogers, Deirdre, PhD, MS; Graduate Faculty- Population Health Science
Ruckdeshel, John, MD; Professor – Population Health Science
Simino, Jeannette, PhD, MS; Assistant Professor - Data Science
Talluri, Rajesh, PhD; Assistant Professor – Data Science
Thorpe, Roland, PhD, MS; Scientist-Educator- Population Health Science
Ward, Lori, PhD; Research Assistant Professor – Population Health Science
Welsch, Michael, PhD; Professor - Population Health Science
West, Nancy, PhD; Assistant Professor - Preventive Medicine
Williams, Michelle, PhD; Assistant Professor – Population Health Science
Wiggins, Corey, PhD; Scientist-Educator – Population Health Science
Yimer, Wondwosen, PhD, MS; Assistant Professor - Data Science
Zhang, Yunxi, PhD, MS; Instructor – Data Science
Zhou, Yunyun, PhD, MS; Assistant Professor - Data Science
school of pharmacy

The University of Mississippi Medical Center
The Board of Trustees created the School of Pharmacy on July 1, 1908. Although the main campus of the school remains in Oxford, the school established a presence on the University of Mississippi Medical Center (UMMC) campus in 1971 to access a larger patient population and to directly interact with other health professional schools. This presence grew and the School of Pharmacy Department of Pharmacy Practice was established on the UMMC campus in 1978. The Division of Pharmacy Professional Development, formerly the Bureau of Pharmaceutical Services, transitioned from the Oxford campus to the UMMC campus in 2004. The Department of Pharmacy Practice currently has approximately 30 full-time faculty and 30 part-time faculty on the UMMC campus, and approximately 340 preceptors in 190 practice sites. In July 2017, the Center for Clinical and Translational Science in the Research Institute of Pharmaceutical Sciences opened and in February 2018 became recognized as a Center on the UMMC campus.

MISSION
The mission of The University of Mississippi School of Pharmacy is to improve health, well-being and quality of life of individuals and communities by educating students, pharmacy practitioners and pharmaceutical scientists, conducting research, and engaging in service.

We seek to accomplish this by providing:

- Innovative models of practice, with an emphasis on underserved populations and those with health disparities.
- Quality education for current professional and graduate students.
- Quality post-graduate training opportunities.
- Quality continuing professional development opportunities.
- An environment which promotes the generation and dissemination of new biomedical knowledge and technologies through collaborative and interdisciplinary research.
- Opportunities for discovery and dissemination of knowledge of natural products and novel pharmaceuticals.
- Leadership in the development and implementation of advanced pharmacy practice models.
- Service to internal and external stakeholders and the general population.
- Opportunities to conduct practice-based and translational research to address health disparities.

CORE VALUES
Core Values of the School Of Pharmacy (Listed In Alphabetical Order)

- **Collaboration** – By fostering a spirit of teamwork and partnership that is founded on respect for the contributions of others, we seek to create interdisciplinary, synergistic relationships characterized by inclusiveness and flexibility.
- **Creativity** – We seek to encourage and support resourcefulness, originality, imagination, ingenuity, and vision in our students, faculty, and staff.
- **Excellence** – We strive to meet and exceed, through continuous improvement, the highest expectations for achievement as we maintain the highest quality and standards in all of our endeavors.
- **Knowledge** – We value the discovery, acquisition, application, and dissemination of knowledge, and will work to foster these activities in pursuit of our vision and fulfillment of our missions.
- **Leadership** – We encourage and foster the development of leaders who have the ability to influence the thinking, understanding, and attitudes of others and who have the ability and courage to identify and effect solutions. Leadership requires the ability to inspire, enable, instill confidence, build a shared vision, and connect with others through mutual trust, responsiveness, and sincerity.
- **Learning** – We encourage and support student-centered, ability-based learning; the mentoring of new faculty, graduate and undergraduate students; lifelong learning; and intellectual curiosity.
• **Professionalism** – We foster, encourage, and expect the active demonstration of structural, attitudinal, and behavioral attributes of a profession and its members. We believe that there are certain professional attributes that are fundamental to our functioning as learners, educators, researchers, scholars, and practitioners of pharmacy. These attributes include a service orientation, one in which the needs of others are put above personal needs; caring; respect for others; accountability to our stakeholders and responsibility for one’s action; and integrity, honesty, and ethically sound decision making.

• **Social Responsibility** – We value respect for the diversity of people with whom we work and those we serve; the importance we place on our local, state, national and global communities; and our concern for the welfare of humanity and the environment, as evidenced in the way we serve others.

**VISION**

We are a highly-respected community of learners, educators, scientists, and practitioners whose innovative achievements position us as leaders in improving health and wellness.

**Indicators:**

- Increased funding for research.
- Placements of choice for our graduates, residents and fellows.
- Increase in number of high-impact publications and presentations.
- Increase in number of license agreements and commercialization of technologies.
- Recognition at a national level of faculty, students, student organizations and our programs through awards, scholarships and elected leadership positions.
- Development of collaborations internally and externally.
- Maintaining exceptional NAPLEX performance.
- Improved quality of incoming undergraduate and graduate students and post docs.
- Advancing innovative pharmacy practice models.
- Demonstrating improved health outcomes.

**ORGANIZATIONAL STRUCTURE**

A. **Academic Departments**

The School of Pharmacy is organized into four academic units – Department of Pharmacy Practice, Department of Pharmaceutics and Drug Delivery, Department of Pharmacy Administration and the Department of BioMolecular Sciences. The departments are located on the Oxford campus with the exception of the Department of Pharmacy Practice, which is located on both the Oxford and Jackson campuses.

B. **Division of Pharmacy Professional Development**

The Division of Pharmacy Professional Development is the unit primarily responsible for the professional development activities for pharmacy practitioners. This Division is located on the UMMC campus.

C. **Research Institute of Pharmaceutical Sciences**

Research activities are conducted within each academic department as well as in the Research Institute of Pharmaceutical Sciences (RIPS). The areas of research within RIPS are listed below. The Research Institute of Pharmaceutical Sciences (RIPS) was charted by the Mississippi Legislature in 1964 and exists within the organizational structure of the School of Pharmacy at The University of Mississippi. The Research Institute is organized around the efforts of a core of full-time research faculty. In addition, the academic faculty of the School of Pharmacy may have joint appointments in the Institute. Activities of the Institute are conducted through the Center for Pharmaceutical Marketing and Management, the National Center for Natural Products Research, the Pii Center for Pharmaceutical Technology, and the Center for Clinical and Translational Science (CCTS).

1. **Center for Pharmaceutical Marketing and Management**

The Center for Pharmaceutical Marketing and Management (CPMM) promotes efficiency and effectiveness in the marketing and management of pharmaceutical products and services in all segments of the industry. Through a unique strategic alliance between the School of Pharmacy and the School of Business Administration, the CPMM applies The University of Mississippi’s distinctive competencies to focused research and innovative educational programs involving health care. The CPMM is committed to supporting education at all levels -- undergraduate, graduate, and practicing professionals.

The CPMM also provides an environment where business and education can come together to exchange real-world research ideas, results, and information. Past, present, and future research includes both applied and theoretical projects in an environment that encourages mutual interaction between industry professionals and the staff and students in the Center.

An open exchange of ideas, collaboration on development of solutions to problems, and dissemination of the findings will be the result. The programs of the CPMM include Pharmaceutical Marketing and Management Research and Pharmacy Entrepreneurship.

2. **The National Center for Natural Products Research**

The mission of the National Center for Natural Products Research (NCNPR) is to improve human health and agricultural productivity through the discovery, development, and commercialization of natural products or derivatives as pharmaceuticals and agrochemicals. The NCNPR conducts basic and applied multidisciplinary research and educational activities in two major programmatic areas: the discovery of potential new drugs for certain infectious diseases, cancer, and immune and inflammatory diseases and the development of phytomedicines as therapeutic agents. Additionally, the NCNPR conducts research related to the development of medicinal plants as alternative crops for U.S. farmers.

3. **Pii Center for Pharmaceutical Technology (Pii Center)**

The Pii Center for Pharmaceutical Technology (Pii Center) conducts interdisciplinary drug/polymer research that provides end stage pharmaceutical products directed at therapeutic conditions, vaccines, antidotes and wound care. This unique Center leverages the existing expertise and resources at The University of Mississippi, including the NCNPR. Utilizing cutting edge thermal processing, the Pii Center collaborates with private industry, government and academia to develop new, improved and expanded drug delivery systems. Many drugs and biological products require special delivery systems. The Pii Center provides problem-solving approaches for the development of cost effective, patient friendly and efficacious delivery systems for existing active pharmaceutical ingredients as well as for new chemical entities. Utilizing solid solutions and dispersions and nanotechnology, the Pii Center develops novel formulations to improve bioavailability and therapeutic efficacy.
The Doctor of Pharmacy (Pharm.D.) degree is a practice degree awarded after successful completion of the four-year professional curriculum. The baccalaureate in pharmaceutical sciences degree, the fourth year of which is also the first of a four-year professional curriculum leading to the Doctor of Pharmacy degree. Previous attainment of a Bachelor of Science (B.S.) in Pharmacy from this or another Accreditation Council for Pharmacy Education (ACPE) accredited School of Pharmacy or a B.S. in Pharmaceutical Sciences from this institution is prerequisite for admission into the Doctor of Pharmacy program.

The Bachelor of Science in Pharmaceutical Sciences is not a practice degree, nor does it entitle one to sit for the pharmacy licensure examination. This four-year degree provides the academic preparation for admission into either the Doctor of Pharmacy program, a graduate degree program in the biomedical or pharmaceutical sciences, a professional school, e.g., medicine or law, or a pharmaceutical science or pharmacy-related career path, e.g., pharmaceutical marketing and management, or environmental toxicology. This degree program includes both pre-professional (3 years) and professional (1 year) components.

The Doctor of Pharmacy (Pharm.D.) degree is a practice degree awarded after successful completion of the four-year professional curriculum. The Doctor of Pharmacy degree allows one to sit for the pharmacy licensure examination. The first two years of the professional curriculum, Professional Year 1 (PY1) and Year 2 (PY2), are completed on the Oxford campus. The PY3 and PY4 years are completed in preceptor sites throughout Mississippi, including UMMC, and other states.

The University of Mississippi School of Pharmacy is committed to encouraging diversity in its student body and to graduating professionals dedicated to the delivery of compassionate pharmaceutical care to all segments of the diverse population in their communities. The school's goals are developed to ensure that this commitment is manifested in all aspects of student life so that students are provided access to educational opportunities and social programs that are free from bias. The school expects that all students, faculty, and staff will be treated fairly without regard to race, age, color, gender, religion, national origin, sexual orientation, marital status, handicapped status, or veteran status.

A hallmark of the pharmacy profession is the trusting relationship between the pharmacist and his or her patients. That relationship is sustained by a commitment to the highest levels of professionalism. All students enrolled in the School of Pharmacy are expected to adopt and reflect the characteristics of a professional, which include integrity, empathy, fairness, responsibility, and a commitment to ethical behavior. In addition, students will demonstrate respect for peers, faculty, and staff of the school and exhibit a high level of maturity that reflects their status as a member of the greater pharmacy community. To further emphasize the commitment to professionalism, the school conducts a White Coat Ceremony for students beginning professional course work. At that event, students sign the Pledge of Professionalism. Near the completion of the PY3 year, a Patch Ceremony is held to emphasize direct patient care.

ACCREDITATION
The School of Pharmacy holds membership in the American Association of Colleges of Pharmacy, an organization of the colleges and schools of pharmacy of the United States, whose objective is to promote pharmaceutical education and research. The Doctor of Pharmacy program was fully reaccredited in 2012 by the Accreditation Council for Pharmacy Education, 135 S. LaSalle Street, Suite 4100, Chicago, Illinois 60603; (312) 664-3575, (800) 533-3606, or fax (312) 664-4652.

Over the last five years (2013-2018), graduates had an above average pass rate on the North American Pharmacist Licensure Examination.

MISSISSIPPI PHARMACY LAW
The Mississippi Pharmacy Practice Act, enacted by the Mississippi Legislature in 1983, requires that all practitioners obtain a license prior to engaging in the practice of pharmacy.

To obtain a license the applicant shall:
1. Have submitted a written application on the form prescribed by the board;
2. Be of good moral character;
3. Have graduated and received a degree from a program of a school or college of pharmacy accredited by the American Council for Pharmacy Education;
4. Have successfully passed an examination given by the board;
5. Have submitted documented evidence of the required practical experience;
6. Have paid the initial license fee.

Every prospective registrant must be a B.S. in Pharmacy or Doctor of Pharmacy graduate of a recognized school or college of pharmacy before the registrant may be permitted to take the NAPLEX examination for registration as a registered pharmacist. The Mississippi State Board of Pharmacy, consisting of seven members who are practicing pharmacists, is charged with the general administration of the laws regulating the practice of pharmacy. Transactions with the Board of Pharmacy are directed through the office of the secretary and executive officer, 6360 I-55 North, Suite 400, Jackson, Mississippi 34211.

INSTRUCTIONAL FACILITIES
Oxford Campus: The School of Pharmacy is located in Faser Hall and in the Thad Cochran Research Center. These facilities contain classrooms, laboratories, offices, and equipment used by the Departments of BioMolecular Sciences, Pharmaceutics and Drug Delivery, Pharmacy Practice, and Pharmacy Administration, as well as the Research Institute of Pharmaceutical Sciences, including the National Center for Natural Products Research, Center for Pharmaceutical Marketing and Management, the Pii Center for Pharmaceutical Technology, and the Center for Clinical and Translational Science. Students complete the four-year B.S. in Pharmaceutical Sciences program and the first year of the Doctor of Pharmacy Program on the Oxford campus. The majority of classes in the curriculum are held in technologically advanced auditoria complete with network...
connections and the ability for video conference. Rooms dedicated for small group interaction are network ready and contain a variety of
technologies used to enhance learning. A Skills Laboratory has space for conducting activities, a model pharmacy, and patient care/counseling
rooms for objective structured clinical examinations (OSCEs) and other activities.

Jackson Campus: The SOP building on the UMMC campus provides a state-of-the-art educational facility in the heart of an academic corridor.
The facility houses the SOP Department of Pharmacy Practice, Division of Pharmacy Professional Development, the Center for Clinical and
Translational Science administrative offices, all faculty, resident, and staff offices, and education and research space. The building includes 17
small group classrooms for Problem Based Learning (PBL), an auditorium that seats approximately 175, clinical and basic research laboratory
space, student common areas and student organization office space.

PROFESSIONAL ORGANIZATIONS

Students enrolled in the professional pharmacy program have the opportunity to become affiliated with various national professional pharmacy
organizations, including chapters of the American Pharmacists Association Academy of Student Pharmacists (APhA-ASP), National Community
Pharmacists Association (NCPA), Academy of Managed Care Pharmacy (AMCP), Student Societies of Health-System Pharmacists of American
Society of Health-Systems Pharmacists (ASHP-SSHP), Christian Pharmacists Fellowship International (CPFI), Student National Pharmaceutical
Association (SNPhA), Student College of Clinical Pharmacy (SCCP), Pediatric Pharmacy Association (PPAG), and American College of Veterinary
Pharmacists (ACVP). The school also has chapters of the three professional fraternities: Kappa Psi, Phi Delta Chi, and Kappa Epsilon; a chapter of
the Rho Chi Society, the pharmacy honorary society; Phi Lambda Sigma, the pharmacy leadership society; and The University of Mississippi
School of Pharmacy Advocacy Council which was created in 2015. These organizations provide opportunities for professional development,
involved in service projects, and attainment of leadership skills.

CODE OF PROFESSIONAL AND ETHICAL CONDUCT

As a professional, the first concern of a pharmacist is the health and safety of those to be served. It is essential to the profession and the public
that the integrity of all of its members be beyond reproach. The Code of Professional and Ethical Conduct has been established to inculcate
appropriate ethical and moral values in students pursuing undergraduate and professional degrees in pharmacy. Details of the Code are
available in the School of Pharmacy Student Handbook found online at http://pharmacy.olemiss.edu/studentaffairs.

FINANCIAL AID

Information on general financial aid programs is provided in the financial aid section of the University of Mississippi catalog. Inquiries about
general financial aid should be directed to the Director of Financial Aid, The University of Mississippi, P.O. Box 1848, University, Mississippi
38677-1848. In addition, scholarships and loans are available specifically to students in the School of Pharmacy. Although School of
Pharmacy scholarships are used for recruitment of students, the distribution of these funds is primarily based on academic performance in
the professional program. Formal application for these scholarships is not necessary. Questions concerning scholarships and loans available
only to pharmacy students should be directed to the School of Pharmacy Associate Dean for Academic Affairs. Scholarship policies are described
in detail in the School of Pharmacy Student Handbook found online at http://pharmacy.olemiss.edu/studentaffairs/.

SCHOLARSHIPS

A. Endowed Scholarships

ALTA RAY GAULT MEMORIAL SCHOLARSHIP, established in 1968 to honor Dr. Gault who was a faculty member in the Department of
Pharmacology. The award is to assist professional degree students.

AMIE EWING MEMORIAL SCHOLARSHIP, awarded to a member of the PY2 class who exhibits those characteristics exemplified by Amie
Ewing during her enrollment in the School of Pharmacy, namely her determination and participation in University extracurricular
activities. The recipient is determined by the Student/Faculty Relations Committee. A separate application process is required and the
amount is partially funded by proceeds from the sale of the specialty pharmacy automobile license tag.

AMY B. JAEBER PHARMACY SCHOLARSHIP, established as an academic scholarship in 2006 to honor Dr. Jaeger’s contributions as a
member of the School of Pharmacy faculty. The recipient is a PY4 student who demonstrates interest in direct patient care.

AMY McElROY RUTHERFORD MEMORIAL SCHOLARSHIP, established as an academic scholarship in 1994 by Joe B. Rutherford.
Recipients shall be full-time students who have been admitted to the professional pharmacy program and have financial need. The
scholarship is limited to one student from each pharmacy class. First preference is given to students from Desoto County, Mississippi, and
Shelby County, Tennessee.

ANTHONY VAZZANA ENDOWMENT, established as an academic scholarship in 2017. Recipients will be full-time students in the School
of Pharmacy.

BARBARA AND DEWEY GARNER SCHOOL OF PHARMACY SCHOLARSHIP ENDOWMENT, established in 2009 as an academic
scholarship to assist full-time students in the professional pharmacy program with first preference going to members of Kappa Psi
Pharmaceutical Fraternity.

BARBARA AND RICHARD WELLS SCHOLARSHIP, established in 2001, is awarded to members of the PY3 and PY4 class based on active
participation in student professional activities.

BRUCE R. PARKS MEMORIAL PHARMACY SCHOLARSHIP, established as an academic scholarship in 2003 to honor Dr. Parks’ many
contributions to the school and its students during his years of service as a devoted member of the faculty. Recipients will be students in
the final two years of the professional program, who in addition to their academic achievement, demonstrate leadership and a commitment
to community service.

C. MILTON O’KEEFE SCHOLARSHIP IN PHARMACY, an academic scholarship established in 1985 by friends and relatives of the late
Jackson, Mississippi, pharmacist. Recipients must be full-time students in the professional pharmacy program, have financial need, and
plan to enter the field of pharmacy practice. Preference will be given to students from Hinds, Rankin, and Madison counties in Mississippi.

CARDINAL HEALTH PHARMACY SCHOLARSHIP, established as an academic scholarship in 2011, is awarded to a PY3 student
demonstrating continued interest in independent community pharmacy practice.

CHILTON MEMORIAL SCHOLARSHIPS, through the bequest of the late Mr. T.D. Chilton, who for many years operated a pharmacy in
Vicksburg, Mississippi, the School of Pharmacy is able to offer several scholarships annually to students in the School. The criteria for
selection are scholarship, leadership, and need.

CLYDE STANTON MAXCY MEMORIAL SCHOLARSHIP, established by his family in his memory. Mr. Maxcy was a 1981 graduate of the
School of Pharmacy. The scholarship is awarded to professional pharmacy students.
DAWN ELLISON ALLEN MEMORIAL SCHOLARSHIP, an academic scholarship awarded to a member of the PY3 and PY4 class based on scholarship, leadership, and active participation in student-related activities. Preference will be given to transfer students from Holmes Community College.

DAWN AND CHARLES SMITH, SR. MEMORIAL SCHOLARSHIP IN PHARMACY, established as an academic scholarship in 2011 to assist full-time professional pharmacy students (PY1-PY4) who have a minimum GPA of 3.5. First preference is given to Mississippi or Louisiana residents.

DIXIE STEELE DAVIS SCHOLARSHIP, established in 2006 in honor of Mrs. Davis who served the Office of the Dean for over 30 years prior to her retirement. The academic scholarship is to assist professional degree students with financial need.

ECKERD CORPORATION PHARMACY SCHOLARSHIP, an academic scholarship established in 2003 to benefit pharmacy students who exhibit academic excellence, desire to work in community pharmacy, and have financial need.

ELMER LIONEL HAMMOND PHARMACY SCHOLARSHIP, established as an academic scholarship in 2017 to assist full-time Pharmacy students.

FRANCES G. MCDONALD SCHOLARSHIP, established in 1980 for full-time students who are pursuing a pharmacy degree.

GERALDINE ATCHLEY SCHOLARSHIP, an academic scholarship established in 2006 to assist female students enrolled full-time in the professional degree program.

GRACE S. AND N.V. "CY" DOTY SCHOLARSHIP IN PHARMACY, established in 1979 by Mr. Arthur W. Doty in honor of his parents to benefit students in the School of Pharmacy. Recipients must be native Mississippians with demonstrated financial need and achievement in the areas of leadership, academics, and professional competence in the field of pharmacy.

HARRIET NAOMI EASLEY COX MEMORIAL SCHOLARSHIP IN PHARMACY, established by Mr. A. Conley Cox of West Point, Mississippi, in memory of his wife. Recipients must be Mississippi residents, preferably residing in Clay County.

HARTMAN-JOHNSON MEMORIAL SCHOLARSHIP, established in honor of Dr. Charles W. Hartman, the late dean of the School of Pharmacy, and Dr. W.W. Johnson, the late pharmacy professor. It is awarded annually to a pharmacy student enrolled in the professional program.

HENRY CECIL CALDWELL SCHOLARSHIP, an academic scholarship established in 2007 to assist Mississippi residents in the School of Pharmacy with financial need.

HENRY MINOR FASER SCHOLARSHIP, established in 1986 as an academic scholarship. Recipients shall be full-time students of at least junior standing, who have been admitted to the professional program.

JACK R. DUNN MEMORIAL SCHOLARSHIP, established by his family in memory of the Lexington, Mississippi pharmacist. This academic scholarship is awarded to full-time professional pharmacy students. First priority will be given to students from Holmes County, Mississippi.

JAMES O. HOGUE SCHOLARSHIP, an academic scholarship established by friends and colleagues of the late Mr. Hogue to honor his memory, while providing scholarship assistance to a senior pharmacy student dedicated to retail pharmacy and who indicates a strong ability in pharmacy management.

JIM AND SARAH AINSWORTH LEADERSHIP SCHOLARSHIP, an academic scholarship established in 2011 to provide assistance to full-time PY3 or PY4 students in the School of Pharmacy who have demonstrated leadership throughout their career as a University of Mississippi student.

JOE AND WINNIE McCASKILL PHARMACY SCHOLARSHIP, an academic scholarship awarded to full-time undergraduate students in the School of Pharmacy with demonstrated financial need.

JOHN DEWEY OWINGS PHARMACY SCHOLARSHIP, an academic scholarship established in 2016 to assist full-time students in the professional pharmacy program that have financial need. First preference will be given to students from Noxubee and Chickasaw counties in Mississippi.

JOHNSON-ABDO PHARMACY FAMILIES SCHOLARSHIP ENDOWMENT, an academic scholarship awarded to full-time students who have been admitted to the professional pharmacy program.

JOHNSON-CONDON PHARMACY FAMILY SCHOLARSHIP, an academic scholarship established in 2005 to assist full-time students in the professional degree program.

JOSEPH AND JEANETTE BYRD PHARMACY SCHOLARSHIP ENDOWMENT, an academic scholarship established for full-time pharmacy students in the professional program (PY1-PY4) who have a minimum grade point average of 2.5.

LINTON FAMILY PHARMACY SCHOLARSHIP ENDOWMENT, an academic scholarship awarded to full-time students admitted to the professional pharmacy program who have a minimum 3.0 GPA and financial need. First preference is given to students from Humphreys, Lee or Panola counties.

MADELINE SCIACCA SCHOLARSHIP ENDOWMENT, established in 2011 to assist full-time students who have been admitted to the professional pharmacy program.

MAHMOUD ELSOHLY FAMILY SCHOLARSHIP, an academic scholarship established in 2004 to assist students in the professional degree program with preference given to students raised in Lafayette County.

MARGARET HAAGA MURPHREE PHARMACY SCHOLARSHIP, an academic scholarship established in 2012 to assist professional pharmacy students from the state of Mississippi with demonstrated need.

MARSHALL E. HOLLIS PHARMACY SCHOLARSHIP ENDOWMENT, an academic scholarship established in 2016 to assist freshmen entering the School of Pharmacy with financial need.

MARVIN C. WILSON SCHOLARSHIP ENDOWMENT, established for full-time professional pharmacy students and used to fund need-based emergency scholarships to assist students who are confronted with unforeseen personal adversity during the academic year and whose annual maximum federal student loan amount has previously been awarded.

MCCASKILL PHARMACY FAMILY SCHOLARSHIP, an academic scholarship established in 2005 to assist students in the professional degree program with preference for students raised in Lafayette County.

MCKINLEY R. CLARK SCHOLARSHIP ENDOWMENT, an academic scholarship established in 2011 to provide scholarship assistance to full-time students who have been admitted to the professional pharmacy program and have financial need. First preference will be given to residents of Jackson, Harrison, and Hancock counties in Mississippi.
B. Non-Endowed Scholarships

The School of Pharmacy receives continuing financial support to provide non-endowed scholarships from the following:

- CVS Pharmacy Foundation Scholarship – The CVS Foundation Scholarship will be prioritization to applicants who are bilingual and who are volunteering their time with underserved populations.
- James Robert Haines Memorial Scholarship - TriState Educational Foundation
- NACDS Foundation
- Pharmacists Mutual Insurance Company
- Vicksburg Hospital Medical Foundation
- Walgreens Pharmacy
- Wal-Mart Pharmacy

AWARDS

School of Pharmacy student award presentations occur at Commencement and at the School of Pharmacy Awards Ceremony. The recipients of those awards are chosen by the academic departments or by members of the Faculty, Honors, Awards, and Commencement Committee. Near the end of the spring semester, Phi Lambda Sigma, the Pharmacy Leadership Society, sponsors the Pharmacy School Awards Ceremony. In addition to departmental awards, all student organizations and classes present their various student awards and teacher-of-the-year awards at this ceremony. PY3 and PY4 students are excused in order to attend this assembly. PY4 students not in attendance are to be at their rotation site. Failure to attend either location will result in a $100.00 fine payable to the Student Body.

Special recognition is given to a graduating PY4 student, PY3 student, PY2 student, and a PY1 student who are recipients of the Debbie Mellinger, Charisma Pope, Amie Ewing, and Shawn Bankston Awards respectively. The awards are named after young women who died while enrolled in the School of Pharmacy.

The DEBBIE MELLINGER AWARD was established in 1993 by the members of Phi Lambda Sigma. Ms. Mellinger was a charter member of the local chapter and served as its initial president. The students of the PY4 class determine the recipient and the selection process is coordinated by the class president. The award is presented to an individual who has exhibited courage and a positive attitude in carrying out normal student activities even though confronted by significant personal hardship.

The CHARISMA POPE AWARD was established in 2004 by the Magnolia State Pharmaceutical Society. The award recipient is selected by the Magnolia State Pharmaceutical Society and is presented to a rising PY4 student who must be a member of this Society and the Student National Pharmaceutical Association (SNPhA). The criteria for selection are academic performance, financial need, professional goals, and the degree to
The **AMIE EWING AWARD** was established by the 2005 Pharm.D. graduating class. Each spring one or more PY2 students are to be selected to receive this scholarship award. The selected student(s) must demonstrate those characteristics that were exemplified in Ewing, who also was a member of the Ole Miss Volleyball team in 1999-2002. The recipient(s) must exhibit determination, good citizenship, professionalism and maturity within School of Pharmacy activities and the greater community. The recipients are determined following nominations/applications by the Faculty Student Relation Committee.

The **SHAWN BANKSTON AWARD** was established by the 2000 PY1 class to honor their deceased class member. The selection of the recipient is coordinated by the PY1 class president. The criteria for selection are the frequent demonstration during the PY1 year of a significant willingness to assist classmates, and the demonstration of an ever present positive attitude at the expense of personal sacrifice of time.

The school awards presented at the Awards Ceremony include the following departmental academic awards. A single award is presented by each department.

The **BIOLOGICAL SCIENCES AWARD** is given for outstanding scholastic achievement in medicinal chemistry courses, pharmacognosy courses and pharmacology courses.

The **MEDICINAL CHEMISTRY AWARD (PY2)** is given for outstanding scholastic achievement in medicinal chemistry courses.

The **PHARMACEUTICS AND DRUG DELIVERY AWARD (PY2)** is given for outstanding scholastic achievement in pharmacetics courses.

The **BIOLOGICAL PHARMACOGNOSY AWARD (PY2)** is given for outstanding scholastic achievement in pharmacognosy courses.

The **BIOLOGICAL PHARMACOLOGY AWARD (PY2)** is given for outstanding scholastic achievement in pharmacology courses.

The **PHARMACY ADMINISTRATION AWARD (PY2)** is given for outstanding scholastic achievement in pharmacy administration courses.

The **PHARMACY PRACTICE AWARD (PY3)** is given for outstanding scholastic achievement in pharmacy practice courses.

Other student awards whose recipients are selected by the Honors, Awards and Commencement Committee include:

The **AINSWORTH AWARD FOR EXEMPLARY LEADERSHIP** is presented to a rising PY3 and a rising PY4 student who have demonstrated outstanding leadership qualities while enrolled in the School of Pharmacy.

The **BRUCE PARKS MEMORIAL MSHP STUDENT AWARD** is presented in memory of Dr. Bruce Parks, former professor in the department of pharmacy practice, to a student who exemplifies outstanding integrity, leadership, and a strong desire to enhance the mission of health-system pharmacy in Mississippi.

The **CARDINAL HEALTH NATIONAL LEADERSHIP CONFERENCE AWARD** is presented to a rising PY4 student who has demonstrated a commitment to institutional pharmacy practice and leadership in the local chapter of ASHP. The student is invited to attend the Cardinal Health National Leadership Conference held during the summer following PY3 year.

The **ELI LILLY AND COMPANY AWARD FOR LEADERSHIP** is awarded to a graduating Bachelor of Science in Pharmaceutical Sciences (PY1) student who has demonstrated outstanding leadership within the School of Pharmacy and its organizations.

The **FACTS AND COMPARISONS AWARD FOR EXCELLENCE IN CLINICAL COMMUNICATIONS** is presented to a PY4 student in recognition of effective pharmacist-patient communication skills as a vital aspect of pharmacists’ service to their patients and community.

The **MERCK SCHOLASTIC ACHIEVEMENT IN PHARMACY** is presented to the three PY1 students who have achieved the highest grade point average during the first semester of the professional curriculum and pre-professional courses at The University of Mississippi.

The **MYLAN INSTITUTE OF PHARMACY EXCELLENCE IN PHARMACY AWARD** is presented to a graduating Doctor of Pharmacy student who has demonstrated high academic achievement and a strong commitment to the profession of pharmacy.

The **PATIENT CARE AWARD** is presented to a student who has demonstrated superior performance in patient care skills during the experiential component of the Doctor of Pharmacy program.

The **RHIO SCHOLARSHIP AWARD** is presented to the student for achieving the highest grade-point average during the four years of the professional program of the School of Pharmacy leading to the Doctor of Pharmacy degree.

The **SCHOOL OF PHARMACY HALL OF FAME AWARD**, chosen by the graduating Doctor of Pharmacy class, recognizes significant contribution to the school, both scholastically and professionally. Two Hall of Fame members are selected.

The **SCHOOL OF PHARMACY SERVICE AWARD** is awarded to a PY2 and PY4 student who have demonstrated outstanding service within the School of Pharmacy and its organizations.

The **TEVA PHARMACEUTICALS NON-PRESCRIPTION DRUG THERAPY AWARD** is presented to the PY4 student who demonstrated high academic achievement in the study of non-prescription drug therapy.

The **UNITED STATES PUBLIC HEALTH SERVICE EXCELLENCE IN PUBLIC HEALTH PHARMACY PRACTICE AWARD** is presented to a PY4 student in recognition of contribution to public health pharmacy practice.

**SCHOOL OF PHARMACY DEGREE PROGRAMS**

(Detailed information regarding the undergraduate/professional program is available in the School of Pharmacy Student Handbook located online at [http://pharmacy.olemiss.edu/studentaffairs/](http://pharmacy.olemiss.edu/studentaffairs/).

I. **Bachelor of Science in Pharmaceutical Sciences Program**

Undergraduate students entering the professional program of the School of Pharmacy will be admitted into the B.S. in Pharmaceutical Sciences program. This is a four-year degree consisting of three years of pre-professional education followed by one year of professional courses, culminating in the awarding of the baccalaureate degree. This degree does not provide eligibility to sit for the licensure examination for pharmacy practice. This program is offered in its entirety on the Oxford campus.

Admission into this degree program can occur in the fall of the freshman year, i.e., “Early Entry,” but more typically after completion of the three-year pre-pharmacy curriculum at The University of Mississippi or other accredited institution, i.e., “Regular Entry.”

II. **Doctor of Pharmacy Program**

**Note**: The University of Mississippi School of Pharmacy is implementing a new curriculum for the Doctor of Pharmacy Program. For updated information on the requirements for the first and second professional years of the program for the 2019-2020 academic year, please contact the School of Pharmacy.

The Doctor of Pharmacy degree is the entry-level professional degree, requiring a minimum of four years of professional course work. The first year consists of the final year of the B.S. in Pharmaceutical Sciences degree program and is completed on the Oxford campus. The
second year is completed on the Oxford campus and the final two years are administered on the UMMC campus and at a variety of practice sites located throughout Mississippi and the mid-South region.

Graduates of a B.S. in Pharmacy program, accredited by the Accreditation Council for Pharmacy Education (ACPE), and who are licensed to practice pharmacy in Mississippi, and graduates of The University of Mississippi B.S. in Pharmaceutical Sciences program are eligible for admission into the Doctor of Pharmacy program. Requests to transfer to this program from students in good academic standing at other ACPE accredited schools of pharmacy will be considered on an individual basis, as well as on a space-available basis. Such transfers must occur prior to the beginning of the PY3 year, given the unique nature of course design of this program as compared to other schools of pharmacy. Transfer, if approved, may result in the student being required to take, at a minimum, an additional semester of course work, given the uniqueness of course sequencing in the various schools of pharmacy.

A. Application Process
To be considered for admission into the entry-level Doctor of Pharmacy program, B.S. in Pharmaceutical Sciences students must, during the spring semester of the P1 year, reapply to the University of Mississippi by completing an UNDERGRADUATE admission application choosing “B.S. in Pharmaceutical Sciences” as the major. Final admission will not occur until after graduation from the B.S. in Pharmaceutical Sciences program with a grade of at least C in all required P1 courses and the applicant has attained a cumulative GPA of at least 2.65 on P1 required courses. The applicant’s major classification will be updated at that time.

B. Admission Criteria
The minimum requirements for provisional admission to the entry-level Doctor of Pharmacy program are as follows:
1. Successful completion of the B.S. in Pharmaceutical Sciences curriculum.
2. A GPA (calculated on all grades earned) of at least 2.65 on all required courses in the P1 year of the regular-entry curriculum.
3. Grades of at least C in each of the required courses in the P1 curriculum.

C. Criminal Background Inquiry
Students are required to undergo fingerprinting and criminal history check at two separate times upon pursuit of the Doctor of Pharmacy degree. The first check will be conducted as part of the process of registration with the Mississippi State Board of Pharmacy as a student extern/intern. Such registration is required for acceptance into the B.S. in Pharmaceutical Sciences program. Specific procedures for this process are outlined in the Backgrounds Check Policy which may be found on the Board’s website. The student and the Board receive the results of the background checks along with explanation letters. Students should keep a copy of all background check letters. If as a result of the investigation there are any issues determined by the Board to prevent the student from being licensed as an extern/intern, that student will not receive final admission into the B.S. in Pharmaceutical Sciences program. The School will accept a copy of the student extern/intern registration card as documentation that background checks have been conducted and board clearance has been obtained.

Background check information is only considered valid for two years. An additional fingerprinting and background check will be conducted upon entry to the University of Mississippi Medical Center campus immediately prior to the PY3 year. Background checks will be scheduled through the University of Mississippi Medical Center Department of Human Resources. The Human Resources Department and the student will receive the results of the background check and explanation letter. The Human Resources Department will only provide students with an ID badge once clearance has been obtained. Therefore, the ID badge serves as documentation that the student has been cleared to be a member of the UMMC community. Students must wear ID badge to access all UMMC teaching and patient care areas. Therefore, failure to have said badge would prohibit School of Pharmacy students from completing their PY3/PY4 curriculum. As a result, failure to obtain the badge due to issues discovered during the background investigation will result in dismissal from the professional degree program.

Furthermore, students may be requested at any time to undergo another background check or random drug testing by UMMC or a rotation practice site other than on the UMMC campus, perhaps at the expense of the student. This situation results because not all health care facilities have the same exact policies regarding the background of staff, health care professionals, or students permitted to be on site. In most instances the site would be satisfied with the results obtained by the check administered prior to obtaining the UMMC ID badge. Therefore, students are urged to retain copies of letters indicating the results of prior investigations in order to provide such documentation to preceptors or rotation site directors. If the student is not allowed to complete a rotation due to an issue from the background check, other arrangements will be attempted to allow the student to complete requirements at a different site. However, if no sites will accept the student based on the results of the background check, the student will be dismissed from the program since he or she will not be able to complete the degree requirements.

D. Curricular Philosophy
The curricular philosophy for the entry-level Doctor of Pharmacy program is an amalgamation of four general principles. Completion of the curriculum will (1) prepare practitioners who can effectively participate in the pharmaceutical care practice model as defined below, (2) ensure the development of a defined set of general and professional education abilities listed below, as well as appropriate content knowledge, (3) ensure that students become active, rather than passive, learners, and (4) ensure the development of higher order thinking skills. These principles and curricular characteristics are evident in all four years of the professional program (PY1-PY4).

1. Pharmaceutical Care
The curriculum leading ultimately to the Doctor of Pharmacy degree is designed to provide the abilities necessary for the graduate to be capable of providing acceptable levels of pharmaceutical care. Pharmaceutical care is the responsible provision of drug therapy for the purpose of achieving definite outcomes that improve a patient’s quality of life. These outcomes are (1) cure of a disease, (2) elimination or reduction of a patient’s symptomatology, (3) arresting or slowing of a disease process, or (4) preventing a disease or symptomatology.

Pharmaceutical care involves the process through which a pharmacist cooperates with a patient and other professionals in designing, implementing, and monitoring a therapeutic plan that will produce specific therapeutic outcomes for the patient. This in turn involves three major functions: (1) identifying potential and actual drug-related problems, (2) resolving actual drug-related problems, and (3) preventing potential drug-related problems.

Pharmaceutical care is a necessary element of health care, and should be integrated with other elements. Pharmaceutical care is, however, provided for the direct benefit of the patient, and the pharmacist is responsible directly to the patient for the quality of that care. The fundamental relationship in pharmaceutical care is a mutually beneficial exchange in which the patient grants authority to the pharmacist and the pharmacist gives competence and commitment (accepts responsibility) to the patient. The
mission of a pharmacy practitioner is the distribution of optimal pharmaceutical care in addition to accurate distribution of drugs.

2. Abilities Fostered by the Curriculum at The University of Mississippi School of Pharmacy
The curriculum culminating in the awarding of the Doctor of Pharmacy degree at The University of Mississippi School of Pharmacy is ability-based. Successful completion of the program will ensure the development of both general and professional educational abilities (listed below). Progression through the four-year curriculum provides for the formulation and continuous strengthening of these abilities. These have been modified from the School’s outcomes delineated in 1998, in order to reflect new emphases present in the 2004 CAPE Outcomes Statement for Pharmacy Education and the 2007 AACE Guidelines.

UM General Abilities
The following three general educational abilities are emphasized by the Southern Association of Colleges and Schools (SACS); and demonstration of programmatic contribution to these general abilities is desired by The University of Mississippi for all appropriate undergraduate majors.

1. Critical Thinking, Analysis and Decision-Making
The student can find, understand, analyze, evaluate, and synthesize information and make informed, rational, and responsible decisions.

2. Communication Skills
The student can communicate with various audiences by written, verbal, and electronic media for a variety of purposes.

3. Mathematical Competence
The student is proficient in the expression of quantitative relationships and can perform the needed mathematical operations to infer their consequences.

Professional Abilities of the School of Pharmacy

1. Assess patient drug therapy
   a. Collect and organize patient data, medical records, interviews, and psychomotor evaluations
   b. Evaluate and interpret patient data
   c. Apply knowledge of medical terminology and abbreviations
   d. Apply knowledge of specified drugs and drug classes
   e. Apply knowledge of specific physiologic systems
   f. Apply knowledge of specific disease pathology and comorbid conditions

2. Provide contemporary evidence-based patient-specific drug therapy
   a. Apply understanding of indications for pharmacologic and non-pharmacologic therapy
   b. Apply clinical reasoning skills in drug product selection, chemical entity, and dosage formulation based on principles of pharmaceutics, medicinal and natural product chemistry
   c. Develop appropriate dosing regimens, which reflect application of knowledge of pharmaceutical calculations, systems of measurement, initial dose, dose titration, and dosage adjustments
   d. Prepare accurate patient-specific pharmacologic agents, dosage forms and delivery systems
   e. Develop rational plans for monitoring therapeutic outcomes
   f. Develop rational plans for monitoring and managing adverse events
   g. Develop plans for anticipating, avoiding, and resolving drug interactions, drug-drug interaction, drug-food interaction, drug-disease interaction, drug-lab interaction, and drug-procedure interaction
   h. Develop plans for patient education on drug therapy and therapeutic lifestyle changes
   i. Document recommendations and services accurately and comprehensively

3. Provide contemporary evidence-based population-focused care
   a. Analyze epidemiologic and pharmacoeconomic data, medication use criteria, medication use review, and risk reduction strategies
   b. Apply knowledge of protocol utilization for the initiation and modification of drug therapy
   c. Develop population-based protocols for medication therapy management

4. Manage patient-centered practice with contemporary methods
   a. Appropriately manage resources to maximize economic, clinical and humanistic outcomes for patients, and effectively manage financial, personnel, time, and technology resources
   b. Appropriately manage safe, accurate and time-sensitive medication distribution
   c. Apply ethics and professional principles to assure efficient utilization of resource management and effective treatment choices
   d. Assure that medication use systems minimize medication errors and optimize patient outcomes
   e. Develop proposals for establishing, marketing, and being compensated for medication therapy management and patient care services rendered
   f. Practice in accordance with state and federal regulations and statutes

5. Collaborate with patients, caregivers, and health professionals to engender a team approach to patient care
   a. Employ communication styles and techniques appropriate to the audience
   b. Work effectively within a multidisciplinary/interdisciplinary environment
   c. Include patient and caregiver as integral parts of a treatment plan

6. Retrieve, analyze, and interpret the professional, lay, and scientific literature to provide drug information to patients, their families, other involved health care providers and the public to optimize patient care
   a. Apply understanding to statistical methods
   b. Apply understanding of research design principles
   c. Evaluate research outcomes for validity
   d. Demonstrate expertise in informatics

7. Demonstrate understanding of health problems specific to diverse populations
   a. Display empathy in patient interactions
   b. Display sensitivity to differences in ethnicity, gender, values, or belief systems (cultural competency)
8. Provide comprehensible, effective education to patients, health care professionals, and the public
   a. Serve as reliable and credible source of drug information
   b. Effectively educate patients using all appropriate communication modalities (verbal, written, other)
   c. Apply knowledge of roles of advocacy and support organizations (e.g., AA, Epilepsy Foundation) to practice
   d. Present effective educational programs and presentations to public and health care profession audiences

9. Analyze internal and external factors that influence pharmacy and other health care systems
   a. Demonstrate knowledge of the impact of health care systems on pharmacy practice
   b. Demonstrate understanding of the influences of legislation on pharmacy practice
   c. Demonstrate understanding of the roles of professional organizations

10. Promote the availability of effective health improvement, wellness, disease prevention, and health policy,
    applying population-specific data, quality improvement strategies, informatics, and research processes
    a. Engage in health-related community outreach activities
    b. Identify public health problems
    c. Suggest solutions for public health problems
    d. Review current health policies and recommend modifications
    e. Participate in the development of drug use and health policy
    f. Help design pharmacy benefits

11. Develop self-learning skills to foster lifelong learning
    a. Take responsibility for gathering new knowledge
    b. Demonstrate an ability to evaluate and utilize information resources
    c. Exhibit self-assessment behaviors

3. Active Learning
   Instructional methodology emphasizes active (independent) rather than passive (dependent) learning. A characterization of
   active learning is as follows:
   Most students enter pharmacy schools as dependent learners; that is, they enter with the perception that it is the teachers’
   responsibility to teach students, while de-emphasizing, if not ignoring, the responsibility of students to learn on their own.
   Students come to health professional schools adept at memorizing facts, and the teaching methods at most professional schools
   readily focus on this characteristic. In practice, the practitioner must rely on his or her ability to interpret data in order to reach
   conclusions and solve problems. There is no “teacher” in practice (except other practitioners and the patient). Consequently, in
   practice, the responsibility to learn must rest with the learner/practitioner. And so it must be while in the School of Pharmacy.
   The responsibility to learn must rest with the learner/student, not with the teacher.

   It follows, then, that a major responsibility of pharmacy educators is to shift the burden of learning from the teacher to the
   student. The transition from a dependent learner to an independent learner must occur as the student progresses through the
   pharmacy curriculum. Students must understand that to become educated is to know what questions to ask and where the
   answers may be found.

   Teaching must be achieved through educational processes that involve students as active learners. One measure of achieving
   this goal is to require participation in cooperative learning projects. Teachers must view themselves as coaches and facilitators
   rather than merely as providers and interpreters of information. As students move from the PY1 to the PY4 years, increasing
   emphasis is placed on active learning strategies.

4. Development of Higher-Order Thinking Skills
   Closely aligned with the incorporation of active learning strategies is the formatting of class evaluation instruments to include
   more emphasis on higher-order thinking skills. Different questions require different levels of thinking. Lower-level questions
   are appropriate for assessing students’ preparation and comprehension or for reviewing and summarizing content. Higher-level
   questions encourage students to think critically and to solve problems. Various researchers have developed cognitive schemes
   for classifying questions. Bloom’s system of ordering thinking skills from lower to higher has become a classic and includes the
   following skills:
   a. Knowledge skills, or “recall” (remembering previously learned material such as definitions, principles, formulas): “Define
      shared governance.” “What is Piaget’s stages of development?”
   b. Comprehension skills (understanding the meaning of remembered material, usually demonstrated by restating or citing
      examples): “Explain the process of mitosis.” “Give some examples of alliteration.”
   c. Application skills (using information in a new context to solve a problem, answer a question, perform a task): “How does
      the concept of price elasticity explain the cost of oat bran?” “Given the smallness of the sample, how would you analyze
      these data?”
   d. Analysis skills (breaking a concept into its parts and explaining their interrelationships; distinguishing relevant from
      extraneous material): “What factors affect the price of gasoline?” “Point out the major arguments Shelby Steele uses to
      develop his thesis about affirmative action.”
   e. Synthesis skills (putting parts together to form a new whole; solving a problem requiring creativity or originality): “How
      would you design an experiment to show the effect of receiving the Distinguished Teaching Award on a faculty member’s
      subsequent career progress?” “How would you reorganize Bloom’s taxonomy in light of new research in cognitive science?”
   f. Evaluation skills (using a set of criteria to arrive at a reasoned judgment of the value of something): “To what extent does
      the proposed package of tax increases resolve the budget deficit?” “If cocaine were legalized, what would be the
      implications for public health services?”

   The School of Pharmacy faculty are committed to increasing the percentage of questions on their examinations that involve
   higher-level thinking skills. The commitment is based on the assumption that it is the development of these skills that will
   enable the graduate to provide appropriate levels of patient care.
### E. Curriculum Entry-level Doctor of Pharmacy Program (UMMC Campus)

#### PY3 YEAR

**FIRST SEMESTER**

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<th>HOURS</th>
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<tr>
<td>Pharmaceutical Care I: Knowledge and Comprehension (PRCT 555)</td>
<td>2</td>
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<tr>
<td>Pharmaceutical Care I: Problem Solving (PRCT 556)</td>
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</tr>
<tr>
<td>Pharmaceutical Care I: Group (PRCT 557)</td>
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</tr>
<tr>
<td>Pharmaceutical Care II: Knowledge and Comprehension (PRCT 558)</td>
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</tr>
<tr>
<td>Pharmaceutical Care II: Problem Solving (PRCT 559)</td>
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<td>Pharmaceutical Care II: Group (PRCT 560)</td>
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<td>Community Pharmacy Practice III (Z grade) (PRCT 543)</td>
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<tr>
<td>Pharmacy Skills Laboratory V (PRCT 577)</td>
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**SECOND SEMESTER**

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<th>Course</th>
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<tr>
<td>Pharmaceutical Care III: Problem Solving (PRCT 562)</td>
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<td>Pharmaceutical Care III: Group (PRCT 563)</td>
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</tr>
<tr>
<td>Pharmaceutical Care IV: Knowledge and Comprehension (PRCT 564)</td>
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<td>Pharmaceutical Care IV: Problem Solving (PRCT 565)</td>
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<td>Pharmaceutical Care IV: Group (PRCT 569)</td>
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<td>Institutional Pharmacy Practice III (Z grade) (PRCT 544)</td>
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<tr>
<td>Preventive Medicine and Public Health (PRCT 552)</td>
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</tr>
<tr>
<td>Specialty Pharmacy Practice Elective (Z grade) (PRCT 545)</td>
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<td><strong>Total</strong></td>
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</tr>
</tbody>
</table>

#### PY4 YEAR

Each student will participate in five required month-long rotations (adult medicine PRCT 586, ambulatory care PRCT 587, institutional practice PRCT 554, community practice PRCT 553, and a selective ambulatory care or adult medicine practice experience – AMBC 591 or MEDC 591) and five month-long elective rotations for a total of 40 weeks of experiential education during the period beginning in May following completion of the PY3 year and ending with May commencement of the succeeding year. The electives must be in five different areas of training. Students also must register for Seminar Skills Development II (PRCT 567) during one semester of the PY4 year.

### F. Additional Program Requirements

1. **Financial Obligations**
   All financial obligations to the University, UMMC, and the School of Pharmacy Student Body, including obligations to on-campus chapters of professional student organizations in which the student has accepted membership, must be satisfied in order to progress to the next academic year or to receive a diploma. PY3 and PY4 students have included in their tuition for each semester, a fee which is paid by UM to UMMC, which entitles pharmacy students to full student services and participation in student life activities at UMMC during the PY3 and PY4 years. This fee is charged independent of the location of APPE rotations.

2. **Orientations:** There will be orientations held before the beginning of the PY1 and PY3 years. These orientations are held the week before classes start and are mandatory for all students to attend.

3. **Computer Requirement**
   Students are required to purchase a laptop prior to enrollment in the fall of PY1 year. The minimum hardware and software specifications are prescribed on an annual basis by the Information Resources and Computing Committee.

4. **Experiential Program Requirements**
   There are a number of requirements necessitated by participation in the experiential component of the professional curriculum. In most instances, these are required by the practice sites at which students complete their IPPE and APPE rotations. In addition to randomized drug screening as described previously, these include insurance and health related factors such as required immunizations and annual physical examinations. Students are responsible for uploading proof of the following requirements into the E-Value system that is maintained by the Professional Experience Program Office.

   1. **Liability/Malpractice Insurance**
      Each professional student (at the student's expense) will be required to offer proof (for example, photocopy of the certificate of insurance with dates of coverage included) of personal/professional liability coverage (a minimum of $1 million per individual claim, $3 million per incident) extending through the completion of the four year professional program.

   2. **Hospitalization/Medical Insurance**
      Hospitalization/Medical insurance is continuously required (at the student's expense) of all students enrolled in the professional degree program, i.e. PY1-PY4 years. Proof of coverage must be provided prior to conclusion of the fall semester of the PY1 year. Continuity of coverage is required throughout the four-year professional program. It is the student's responsibility to update changes in coverage which occur during the PY1-PY4 years in E-Value.

   3. **Intern/Extern Registration with the Mississippi State Board of Pharmacy (MSBP)**
      All PY1 students must present proof of intern/extern registration with the MSBP prior to receiving final admission into the professional program. Such registration must be maintained throughout the four-year program. A photocopy of the entry-level student's MSBP extern card is acceptable documentation. Post-B.S. students should submit a photocopy of their most current MSBP registration card. Fingerprinting and criminal background investigation separate from the provided/required by the University of Mississippi Medical Center (UMMC) upon entry to the PY3 year may be required by the Board to maintain this registration during the completion of the Pharm.D. program.
4. Annual Physical Examination
   Students enrolled in the professional degree program must provide proof that they have undergone a routine
   physical examination (at the student’s expense) prior to completion of the fall semester of the PY1 year and prior to
   the beginning of the PY3 year.

5. Immunizations
   a. Hepatitis B Immunization - Students (at the students’ expense) will be required to demonstrate proof of
      completion of the three-shot series of hepatitis B vaccinations prior to admission to the School of Pharmacy. If
      a student has not been immunized previously against hepatitis B, he or she should complete the series of three
      injections, which are to be administered over a six-month period during the PY1 year. More than 90 percent of
      students so immunized will demonstrate a positive antibody titer within one month after completion of the
      injection schedule. Students may want to ascertain their immune status prior to beginning this series of
      injections.
   b. Negative Tuberculin Skin Test (PPD) - Proof of a negative 2-step tuberculin skin test is required before students
      are permitted to complete any experiential rotations in PY1 year. After PY1 year, proof of a negative tuberculin
      skin test (PPD) is required annually before students are permitted to complete any experiential rotations.
      Students having a positive PPD test cannot participate in experiential activities until they demonstrate lack of
      an active case of tuberculosis (by chest radiograph or immunoassay) or present evidence that they are
      undergoing active treatment.
   c. Varicella Titer - Students, at their own expense, must demonstrate either proof of two Varicella (chicken pox)
      vaccinations separated by one month or proof of immunity through blood titer prior to the end of the fall PY1
      semester.
   d. Influenza Vaccination - Students (at their own expense) will also be required, prior to completion of the fall
      semester of the PY3-PY4 year, to demonstrate proof of immunization against influenza. Such proof of all
      immunizations is to be submitted to the Professional Experience Program Office. Proof of receipt of influenza
      vaccination must be submitted annually before students are permitted to complete any experiential rotations.
      Students who are located on the Jackson campus must submit documentation to the UMMC Student Employee
      Health Center.
   e. Tetanus/Diphtheria/Pertussis (TDAP) Vaccine - Students must provide proof of up-to-date TDAP. The last
      dose must have been given within 10 years. If only tetanus/diphtheria vaccine (Td) was administered, a single
      booster dose of Tdap is required. Tdap can be administered regardless of the interval since the last dose of Td.
      International students must provide documentation of 3 previous doses of Tetanus/diphtheria. One of which
      must include the Tdap vaccine.
   f. MMR (measles, mumps, and Rubella): Documentation of 2 doses of live vaccine for persons born in 1957 or
      later. The doses must have been administered at least 28 days apart and at or after 12 months of age.
      Laboratory evidence of immunity to measles, mumps, and rubella OR laboratory confirmation of disease OR
      birth before 1957 is acceptable.

6. Basic Life Support for the Health Care Provider Training
   Basic Life Support for the Health Care Provider (BLSHCP) training is required of all students. A BLSHCP course trains
   students how to: perform adult, child, and infant cardiopulmonary resuscitation (CPR); manage foreign body airway
   obstruction in the adult, child, and infant; and defibrillate utilizing an Automated External Defibrillator. Documentation
   may be in the form of a photocopy of the course completion card. Per the American Heart Association guidelines, BLS
   providers must receive training every two years and re-certification is a requirement.

7. Compliance/HIPAA Training
   All students on the UMMC campus must complete UMMC Compliance Training at the beginning of the PY3 year and on
   the timeline provided by UMMC. The University of Mississippi School of Pharmacy adheres to all rules and regulations as
   set forth by the Health Insurance Portability and Accountability Act (HIPAA). Students are introduced to HIPAA during
   the PY1 year and are required to complete an online training program during the PY1 year and as required by UMMC
   throughout the PY3 and PY4 years. Students must submit proof of UMMC Compliance Training completion as requested
   to the Office of Clinical Affairs. Students may also be required to complete additional HIPAA training at their rotation
   sites.

G. Drug Screening
   All students (PY1-PY4) enrolled in the undergraduate and professional degree programs at the University of Mississippi School
   of Pharmacy (UMSOP) will be subject to randomized drug (urine) screening during their time of enrollment in the program. Refer to
   Section 4, IV for the drug screening policy.

H. Programmatic Assessment
   Student participation in programmatic assessment activities is required prior to commencement for verification of diploma
   application to occur. These activities may be University, School and accreditation agency mandated. It is expected that students will
   take these activities seriously and to perform to the best of their ability. Otherwise, the results of these assessments would be invalid
   and unreliable and may lead to inappropriate programmatic changes. These activities can also identify knowledge domains that a
   particular student may need to emphasize for self-improvement prior to national board exams or otherwise.

COURSES (UMMC Campus)

Department of Pharmacy Practice - PRCT
541, 542. PROBLEMS IN CLINICAL PHARMACY. Individual investigation of problems of current clinical interest in pharmacy. (1-3, 1-3).
543. COMMUNITY PHARMACY PRACTICE III. An introduction (10 weeks, 4 contact hours/week) to patient care and related activities in a
       community pharmacy practice setting with additional emphasis in ambulatory care practice experiences. Prerequisite: PRCT 477, 478. (1). (Z
       grade).
544. INSTITUTIONAL AND SPECIALTY PRACTICE PHARMACY PRACTICE III. An introduction (10 weeks, 4-hour contact hours/week) to
       patient care and related activities in an institutional pharmacy practice setting with a didtional emphasis in inpatient specialty pharmacy practice
       experiences. Prerequisite: PRCT 477, 478. (1). (Z grade).
545. SPECIALTY PHARMACY PRACTICE ELECTIVE. An introduction (one week, 40 contact hours) to patient care and related activities in a specialty pharmacy practice experience. Prerequisite: PRCT 477, PRCT 478. (1). (Z grade).

552. PREVENTIVE MEDICINE AND PUBLIC HEALTH. This course will teach the students about concepts of preventive medicine, public health, and epidemiology. Pharmacy students will participate in the IPE with professional schools on the UMMC campus. Prerequisite: PY3 Classification. (2).

*553. ADVANCED PRACTICE EXPERIENCE (community). Calendar month professional experience program offered at approved community pharmacies. Prerequisite: Pharmacy PY4. (4). (Z grade).

*554. ADVANCED PRACTICE EXPERIENCE (institutional). Calendar month professional experience program offered at approved hospital pharmacies. Prerequisite: Pharmacy PY4. (4). (Z grade).

555. PHARMACEUTICAL CARE I: KNOWLEDGE AND COMPREHENSION. A course designed to integrate clinical and scientific disciplines using patient cases as the basis for group discussions. Emphasis is placed on the development of the core knowledge base required of a pharmacist. Prerequisite: PY3 Classification. Corequisites: PRCT 556, 557. (2).

556. PHARMACEUTICAL CARE I: PROBLEM-SOLVING. A course designed to integrate clinical and scientific disciplines using patient cases as the basis for group discussions. Emphasis is placed on the development of problem-solving skills. Prerequisite: PY3 Classification. Corequisites: PRCT 555, 557. (2).

557. PHARMACEUTICAL CARE I: GROUP. A course designed to integrate clinical and scientific disciplines using patient cases as the basis for group discussions. Emphasis is placed on the development of independent learning and communication skills. Prerequisite: PY3 Classification. Corequisites: PRCT 555, 556. (3).

558. PHARMACEUTICAL CARE II: KNOWLEDGE AND COMPREHENSION. A course designed to integrate clinical and scientific disciplines using patient cases as the basis for group discussions. Emphasis is placed on the development of the core knowledge base required of a pharmacist. Prerequisite: PY3 Classification. Corequisites: PRCT 559, 560. (2).

559. PHARMACEUTICAL CARE II: PROBLEM-SOLVING. A course designed to integrate clinical and scientific disciplines using patient cases as the basis for group discussions. Emphasis is placed on the development of problem-solving skills. Prerequisite: PY3 Classification. Corequisites: PRCT 558, 559. (2).

560. PHARMACEUTICAL CARE II: GROUP. A course designed to integrate clinical and scientific disciplines using patient cases as the basis for group discussions. Emphasis is placed on the development of independent learning and communication skills. Prerequisite: PY3 Classification. Corequisites: PRCT 558, 559. (3).

561. PHARMACEUTICAL CARE III: KNOWLEDGE AND COMPREHENSION. A course designed to integrate clinical and scientific disciplines using patient cases as the basis for group discussions. Emphasis is placed on the development of the core knowledge base required of a pharmacist. Prerequisite: PY3 Classification. Corequisites: PRCT 562, 563. (2).

562. PHARMACEUTICAL CARE III: PROBLEM-SOLVING. A course designed to integrate clinical and scientific disciplines using patient cases as the basis for group discussions. Emphasis is placed on the development of problem-solving skills. Prerequisite: PY3 Classification. Corequisites: PRCT 561, 563. (2).

563. PHARMACEUTICAL CARE III: GROUP. A course designed to integrate clinical and scientific disciplines using patient cases as the basis for group discussions. Emphasis is placed on the development of independent learning and communication skills. Prerequisite: PY3 Classification. Corequisites: PRCT 561, 562. (3).

564. PHARMACEUTICAL CARE IV: KNOWLEDGE AND COMPREHENSION. A course designed to integrate clinical and scientific disciplines using patient cases as the basis for group discussions. Emphasis is placed on the development of the core knowledge base required of a pharmacist. Prerequisite: PY3 Classification. Corequisites: PRCT 561, 562. (3).

565. PHARMACEUTICAL CARE IV: PROBLEM-SOLVING. A course designed to integrate clinical and scientific disciplines using patient cases as the basis for group discussions. Emphasis is placed on the development of problem-solving skills. Prerequisite: PY3 Classification. Corequisites: PRCT 564, 569. (2).

566. SEMINAR SKILLS DEVELOPMENT FOR HEALTH PROFESSIONALS. Course on developing the basic skills needed for effective presentation of pharmacy-oriented material. Prerequisite: PY4 Classification. (1). (Z grade).

567. SEMINAR SKILLS DEVELOPMENT FOR HEALTH PROFESSIONALS II. Continuation of PRCT 566. Course on developing the basic skills needed for the effective presentation of pharmacy-oriented material. Prerequisite: PRCT 566. (1). (Z grade).

568. SEMINAR SKILLS DEVELOPMENT FOR HEALTH PROFESSIONALS III. A course designed to integrate clinical and scientific disciplines using patient cases as the basis for group discussions. Emphasis is placed on the development of independent learning and communication skills. Prerequisite: PY3 Classification. Corequisites: PRCT 564, 565. (3).

577. PRACTICE SKILLS LABORATORY V. This course is the fifth in a five course series. The purpose of this course is to offer students an expansion on abilities practiced in previous Practice Skills Laboratories at a level commensurate with the PY3 year in the University of Mississippi School of Pharmacy. Completion of Practice Skills Laboratory V will assist in the achievement of each of the 11 core domain competencies required by the ACPE Accreditation Standards and Guidelines Appendix D prior to commencement of fourth year Advanced Pharmacy Practice Experiences. This course aims to fulfill domain competencies in a hands-on, practical manner, with an emphasis on skills needed in situations students are likely to encounter in their APPEs. Each activity addresses two or more core domains, with a focus on augmenting clinical knowledge with practical skills needed in various pharmacy settings. Prerequisite: PY3 Classification. (2).

*586. ADULT MEDICINE ADVANCED PRACTICE EXPERIENCE. A required experiential course designed to provide in-depth experience and clinical competence in dealing with acutely ill patients in a hospital environment with emphasis on rational therapeutics. Prerequisite: Pharmacy PY4. (4).

*587. AMBULATORY CARE ADVANCED PRACTICE EXPERIENCE. A required calendar month rotation in which students gain clinical experience and competence with ambulatory patients by participating as a drug consultant and primary care provider for patients in an outpatient environment. Prerequisite: Pharmacy PY4. (4).

*589. 591, 592, 593. ELECTIVE ADVANCED PRACTICE EXPERIENCE. Calendar month blocks of practical experience in specialty practice areas under the coordination of a faculty preceptor. Course may be taken three times for elective credit in specialty area of choice. Prerequisite: Pharmacy PY4. (4).

*AMBC 591. AMBULATORY CARE ADVANCED PRACTICE EXPERIENCE. An elective experiential course consisting of a full-time calendar month exposure emphasizing the rational use of therapeutic agents and disease management in ambulatory care patients. Prerequisite or corequisite: PRCT 507, Pharmacy PY4. (4).

*SBOP 591. STATE BOARD OF PHARMACY PRACTICE EXPERIENCE. An elective experiential course consisting of a full-time calendar month exposure to pharmacy practice in a nontraditional setting of association management. Prerequisite: Pharmacy PY4. (4).

*BARI 591. BARIATRICS PRACTICE EXPERIENCE ELECTIVE. An elective experiential course consisting of a full-time calendar month exposure to pharmacy practice in a patient care setting of bariatrics. Prerequisite: Pharmacy PY4. (4).
*BIOT 591. BIOTECH PHARMACY SERVICES ADVANCED PHARMACY PRACTICE EXPERIENCE. An elective experiential course consisting of a full-time calendar month exposure to pharmacy practice in a nontraditional setting in biotechnology. Prerequisite: Pharmacy PY4. (4).

*CARD 591. CARDIOLOGY ADVANCED PHARMACY PRACTICE EXPERIENCE. An elective experiential course consisting of a full-time calendar month exposure emphasizing the rational use of therapeutic agents and disease management in cardiology patients. Prerequisite: Pharmacy PY4. (4).

*COM 591. COMMUNITY PHARMACY ADVANCED PHARMACY PRACTICE EXPERIENCE. An elective experiential course consisting of a full-time calendar month exposure emphasizing the rational use of therapeutic agents and disease management in patients in a community-practice setting. Prerequisite or corequisite: PRCT 553, Pharmacy PY4. (4).

*CRIT 591. CRITICAL CARE ADVANCED PRACTICE EXPERIENCE. An elective experiential course consisting of a full-time calendar month exposure emphasizing the rational use of therapeutic agents and disease management in critical care patients. Prerequisite: Pharmacy PY4. (4).

*DINF 591. DRUG INFORMATION ADVANCED PHARMACY PRACTICE EXPERIENCE. An elective experiential course consisting of a full-time calendar month exposure emphasizing the utilization of drug information resources, both electronic and nonelectronic, in providing optimal patient care. Prerequisite: Pharmacy PY4. (4).

*EMER 591. EMERGENCY MEDICINE ADVANCED PHARMACY PRACTICE EXPERIENCE. An elective experiential course consisting of a full-time calendar month exposure emphasizing the rational use of therapeutic agents in the emergency care setting. Prerequisite: Pharmacy PY4. (4).

*GERA 591. GERIATRICS ADVANCED PHARMACY PRACTICE EXPERIENCE. An elective experiential course consisting of a full-time calendar month exposure emphasizing the rational use of therapeutic agents and disease management in geriatric patients. Prerequisite: Pharmacy PY4. (4).

*HOME 591. HOME INFUSION ADVANCED PHARMACY PRACTICE EXPERIENCE. An elective experiential course consisting of a full-time calendar month exposure to pharmacy practice in a non-direct patient care setting of home infusion. Prerequisite: Pharmacy PY4. (4).

*INAD 591. INSTITUTIONAL ADMINISTRATION ADVANCED PHARMACY PRACTICE EXPERIENCE. An elective experiential course consisting of a full-time calendar month exposure to institutional administrative pharmacy practice. Prerequisite: Pharmacy PY4. (4).

*INDY 591. PHARMACEUTICAL INDUSTRY ADVANCED PHARMACY PRACTICE EXPERIENCE. An elective experiential course consisting of a full-time calendar month exposure emphasizing the role and functions of the pharmaceutical industry in providing health care professionals medication information. Prerequisite: Pharmacy PY4. (4).

*INF 591. INFECTIOUS DISEASES ADVANCED PHARMACY PRACTICE EXPERIENCE. An elective experiential course consisting of a full-time calendar month exposure emphasizing the rational use of therapeutic agents and disease management in infectious disease patients. Prerequisite: Pharmacy PY4. (4).

*INOP 591. INSTITUTIONAL OUT-PATIENT PRACTICE EXPERIENCE. An elective experiential course consisting of a full-time calendar month exposure to pharmacy practice in a patient care setting of institutional outpatient management. Prerequisite: Pharmacy PY4. (4).

*MANC 591. MANAGED CARE ADVANCED PHARMACY PRACTICE EXPERIENCE. An elective experiential course consisting of a full-time calendar month exposure emphasizing the role of managed healthcare delivery systems, the roles and responsibilities of pharmacy benefits management companies, and basic business and economic concepts. Prerequisite: Pharmacy PY4. (4).

*MGMT 591. PHARMACY MANAGEMENT ADVANCED PHARMACY PRACTICE EXPERIENCE. An elective experiential course consisting of a full-time calendar month exposure to pharmacy practice in a nontraditional setting of association management. Prerequisite: Pharmacy PY4. (4).

*MEDC 591. MEDICINE ADVANCED PRACTICE EXPERIENCE. An elective experiential course consisting of a full-time calendar month exposure emphasizing the rational use of therapeutic agents and disease management in medicine patients. Prerequisite or corequisite: PRACT 586, Pharmacy PY4. (4).

*NEON 591. NEONATOLOGY ADVANCED PHARMACY PRACTICE EXPERIENCE. An elective experiential course consisting of a full-time calendar month exposure to pharmacy practice in a patient care setting of neonatology. Prerequisite: Pharmacy PY4. (4).

*NEUR 591. NEUROLOGY ADVANCED PRACTICE EXPERIENCE. An elective experiential course consisting of a full-time calendar month exposure emphasizing the rational use of therapeutic agents and disease management in neurology patients. Prerequisite: Pharmacy PY4. (4).

*NUCL 591. NUCLEAR MEDICINE ADVANCED PHARMACY PRACTICE EXPERIENCE. An elective experiential course consisting of a full-time calendar month exposure to pharmacy practice in a nontraditional setting of nuclear medicine. Prerequisite: Pharmacy PY4. (4).

*NEUT 591. NUTRITION ADVANCED PRACTICE EXPERIENCE. An elective experiential course consisting of a full-time calendar month exposure emphasizing the rational use of nutritional support in patient care. Prerequisite: Pharmacy PY4. (4).

*ONCL 591. ONCOLOGY ADVANCED PRACTICE EXPERIENCE. An elective experiential course consisting of a full-time calendar month exposure emphasizing the rational use of therapeutic agents and disease management in oncology patients. Prerequisite: Pharmacy PY4. (4).

*PAIN 591. PAIN MANAGEMENT ADVANCED PHARMACY PRACTICE EXPERIENCE. An elective experiential course consisting of a full-time calendar month exposure to pharmacy practice in a patient care setting of pain management. Prerequisite: Pharmacy PY4. (4).

*PEDG 591. PEDIATRY ADVANCED PRACTICE EXPERIENCE. A calendar month (40 hours/week) elective experiential rotation in an academic setting that provides senior professional students with opportunities to explore issues in teaching and learning, and to participate directly in facilitating the learning of junior students in the pharmacy professional program. Registrants will be introduced to various teaching methods, including problem based learning and other practice based skills. Registrants will have opportunities to develop and improve teaching skills, with emphasis in evaluation and assessment. Prerequisite: Pharmacy PY4. (4).

*PEDS 591. PEDIATRIC ADVANCED PRACTICE EXPERIENCE. An elective experiential course consisting of a full-time calendar month exposure emphasizing the rational use of therapeutic agents and disease management in pediatric patients. Prerequisite: Pharmacy PY4. (4).

*PKIN 591. PHARMACOKINETICS ADVANCED PRACTICE EXPERIENCE. An elective experiential course consisting of a full-time calendar month exposure emphasizing the application of pharmacokinetic principles in providing optimal patient care. Prerequisite: Pharmacy PY4. (4).

*POIS 591. POISON CONTROL ADVANCED PRACTICE EXPERIENCE. An elective experiential course consisting of a full-time calendar month exposure emphasizing the role and functions of a Poison Control Center. Prerequisite: Pharmacy PY4. (4).

*PMAT 591. PHARMACY MEDICATION THERAPY MANAGEMENT PATIENT CARE ADVANCED PHARMACY PRACTICE EXPERIENCE. An advanced practice elective experiential course designed to provide the student with practical experience in the profession of pharmacy. The course consists of interactions with both patients and healthcare workers across multiple disciplines. Prerequisite: PY4. (4).

*PSYC 591. PSYCHIATRY ADVANCED PRACTICE EXPERIENCE. An elective experiential course consisting of a full-time calendar month exposure emphasizing the rational use of therapeutic agents and disease management in psychiatric patients. Prerequisite: Pharmacy PY4. (4).

*PUBH 591. PUBLIC HEALTH ADVANCED PHARMACY PRACTICE EXPERIENCE. An elective experiential course consisting of a full-time calendar month exposure to pharmacy practice in a nontraditional setting of public health. Prerequisite: Pharmacy PY4. (4).

*RSH 591. RESEARCH ADVANCED PHARMACY PRACTICE EXPERIENCE. An elective experiential course consisting of a full-time calendar month exposure to pharmacy practice in a nontraditional setting of pharmacy-related research. Prerequisite: Pharmacy PY4. (4).
PHARMACY PRACTICE DEPARTMENT FACULTY

Adams, Lindsay, Pharm.D., Clinical Instructor
Adcock, Kim, Pharm.D., Professor
Allen, Mark, B.S.Ph, Clinical Instructor
Anderson, James, B.S.Ph, Clinical Instructor
Andrews, Robert, Pharm.D., Clinical Instructor
Arnold, Jon, Pharm.D., Clinical Assistant Professor
Artman, Katherine, Pharm.D., Clinical Instructor
Atwood, Cheris, B.S.Ph, Clinical Instructor
Austin, Gary, Pharm.D., Clinical Instructor
Ayres, Phil, Pharm.D., BCNSP, Clinical Associate Professor
Bachert, Krista, Pharm.D., Clinical Assistant Professor
Bakus, Kandis, Pharm.D., Clinical Instructor
Bailey, Clara, Pharm.D., Clinical Assistant Professor
Ballou, Jordan, Pharm.D., Clinical Assistant Professor
Barber, Katie, Pharm.D., Assistant Professor
Barker, Leslie Bennett, Pharm.D., Clinical Instructor
Barot, Vishal, Pharm.D., Clinical Instructor
Barrett, Shannon, Pharm.D., Clinical Instructor
Beaty, Leigh Ann, B.S.Ph, Clinical Instructor
Bentley, Sandy, Pharm.D., Clinical Assistant Professor
Berch, Gary, B.S.Ph, Clinical Professor
Berry, Hart Pharm.D., Clinical Instructor
Bienvenu, John, Pharm.D., Clinical Instructor
Bingham, Donna, Pharm.D., Clinical Assistant Professor
Birmingham, Judy, B.S.Ph, Clinical Instructor
Bishop, Melanie, Pharm.D., Clinical Instructor
Blair, Sallie, Pharm.D., Clinical Instructor
Bloodworth, Lauren, Pharm.D., BCPS, Clinical Associate Professor
Boggan, Charles, B.S.Ph, Clinical Instructor
Boggess, Donan, Pharm.D., Clinical Instructor
Borden, Alexandria, Pharm.D., Clinical Instructor
Bouldin, Alicia, Ph.D, B.S.Ph, Clinical Instructor
Box, Jessica, Pharm.D., Clinical Instructor
Bradley, Kimberly, Pharm.D., Clinical Instructor
Brent, Zachary, Pharm.D., Clinical Instructor
Breuer, Joy, B.S.Ph, Clinical Instructor
Brown, Billy, Pharm.D., Clinical Assistant Professor
Brown, Bridgette, Pharm.D., Clinical Instructor
Brown, Meagan, Pharm.D., BCACP, Clinical Associate Professor
Brown, Terrence, Pharm.D., Clinical Instructor
Broyles, Joyce, Pharm.D., Clinical Assistant Professor
Bryan, Robin B.S.Ph, Clinical Instructor
Budd, Rebecca, Pharm.D., Clinical Instructor
Burford III, Robert B.S.Ph, Clinical Instructor
Burns, Betty, Pharm.D., Clinical Instructor
Burton, Ginger, Pharm.D., Clinical Instructor
Burton, Steven, Pharm.D., Clinical Instructor
Buss, Donna, Pharm.D., Clinical Instructor
Butler, Curt, Pharm.D., Clinical Instructor
Calvert, Randy, B.S.Ph, Clinical Instructor
Cannon, Rebecca, B.S.Ph, Clinical Instructor
Capino, Amanda, Pharm.D., Clinical Assistant Professor
Carroll, Paige, Pharm.D., Clinical Instructor
Carter, Rachelle, Pharm.D., Clinical Assistant Professor
Cash, Richard, B.S.Ph, Clinical Instructor
Chambers, Jamie, Pharm.D., Clinical Instructor
Chisolm, Bridgett, Pharm.D., Clinical Assistant Professor
Clark, Andrew, Pharm.D., Clinical Instructor
Clark, Dillon, Pharm.D., Clinical Assistant Professor

Clark, Gichelle, Pharm.D., Clinical Assistant Professor
Clark, Katherine, Pharm.D., Clinical Instructor
Clark, Linda, Pharm.D., BCPS, Clinical Instructor
Clark, Samantha, Pharm.D., Clinical Instructor
Cleary, John, Pharm.D., Professor
Coats, Jordan, Pharm.D., Clinical Instructor
Cook, Monica, B.S.Ph, Clinical Instructor
Cougle, Bj, Pharm.D., Clinical Instructor
Covington, Jamie, Pharm.D., Clinical Instructor
Cox, Beau, Pharm.D., Clinical Instructor
Cox, Neely, Pharm.D., Clinical Assistant Professor
Cox, William Todd, Pharm.D., Clinical Instructor
Crane, Rebecca, Pharm.D., BCACP, Clinical Instructor
Cretella, David, Pharm.D., Clinical Instructor
Crosby, Brandon, Pharm.D., Clinical Instructor
Crum, Teresa, Pharm.D., Clinical Instructor
Cumby, Trey, Pharm.D., Clinical Assistant Professor
Cummings, Carolyn, Pharm.D., Clinical Instructor
Cutshall, Tate, Pharm.D., Clinical Instructor
D’Mello, Nate, Pharm.D., Clinical Instructor
Dabbs, April, Pharm.D., Clinical Instructor
Dabbs, David, Pharm.D., Clinical Assistant Professor
Dana, Jessica, Pharm.D., Clinical Instructor
Dancer, Steven, B.S.Ph, Clinical Instructor
Davis, Courtney, Pharm.D., BCACP, Clinical Associate Professor
Dear, Todd Pharm.D., BCPS, Clinical Assistant Professor
Deaton, Kimberly, Pharm.D., Clinical Assistant Professor
Denton, J.R, B.S.Ph, Clinical Instructor
DeOrnellas, Daniel, Pharm.D., Clinical Instructor
Dixon, Tripp, Pharm.D., Clinical Assistant Professor
Dozier, Dawn, Pharm.D., Clinical Instructor
Dukes, Alan, Pharm.D., Clinical Assistant Professor
Dukes, Christina, Pharm.D., Clinical Instructor
Dukes, Ray, B.S.Ph, Clinical Instructor
Dumas, Cindy, Pharm.D., Clinical Instructor
Dunaway, Shaina, Pharm.D., Clinical Instructor
Dyles, David, B.S.Ph, Clinical Instructor
Earl, Sally, Pharm.D., Clinical Assistant Professor
Eddelmon, Ben, Pharm.D., BCPS, Clinical Assistant Professor
Elliot, Reeca, B.S.Ph, Clinical Instructor
Ernst, William B.S.Ph, Clinical Instructor
Esche, Lori, Pharm.D., Clinical Assistant Professor
Esposito, Maureen, Pharm.D., Clinical Instructor
Everett, Jessica, Pharm.D., Clinical Instructor
Fairchild, Jentry, Pharm.D., Clinical Instructor
Faulkner, Bart, Pharm.D., Clinical Instructor
Finch, Chris, Pharm.D., Clinical Instructor
Fleming, Joshua, Pharm.D., BCACP, Clinical Assistant Professor
Fleming, Laurie W, Pharm.D., BCACP, Clinical Associate Professor
Foster, Jillian, Pharm.D., MBA, Clinical Assistant Professor
Franklin, Rodney, Pharm.D., Clinical Instructor
Freeman, Brandi, Pharm.D., Clinical Instructor
Freeman, Gary, B.S.Ph, Clinical Instructor
Freeman, Lauren, Pharm.D., Clinical Instructor
Gable, James B.S.Ph, Clinical Instructor
George, Julie, Pharm.D., BCPS, Clinical Assistant Professor
Gibson, Jody, Pharm.D., Clinical Assistant Professor
GilBow, Michael R. Ph., Clinical Instructor
<table>
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<th>Name</th>
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<tr>
<td>Gilchrist, Brad, Pharm.D.</td>
<td>Clinical Instructor</td>
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<td>Goodwin, Melodie, Pharm.D.</td>
<td>Clinical Assistant Professor</td>
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<td>Grantham, Jenni, Pharm.D.</td>
<td>Clinical Assistant Professor</td>
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<td>Griffin, Lee Ann, Pharm.D.</td>
<td>Clinical Assistant Professor</td>
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<td>Guarr, Bart, Pharm.D.</td>
<td>Clinical Assistant Professor</td>
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<td>Guthrie, Dee, Pharm.D.</td>
<td>Clinical Instructor</td>
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<td>Guy, Keith, B.S.Ph.</td>
<td>Clinical Instructor</td>
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<td>Haines, Seenla L., Pharm.D.</td>
<td>BCACP, Professor</td>
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<td>Haines, Stuart T., Pharm.D.</td>
<td>BCPs, BCACP, Professor</td>
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<td>Hamilton, Angela, Pharm.D.</td>
<td>Clinical Instructor</td>
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<td>Hanissian, Silva, Pharm.D.,</td>
<td>Ph.D., Clinical Assistant</td>
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<td>Hankins, Cheryl, Pharm.D.</td>
<td>Clinical Instructor</td>
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<td>Harrell, T. Kristen, Pharm.D.</td>
<td>M.A., Associate Professor</td>
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<td>Harris, Whitney, Pharm.D.</td>
<td>Clinical Instructor</td>
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<td>Harrison, Justin, Pharm.D.</td>
<td>Clinical Instructor</td>
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<td>Hatch, Megan, Pharm.D.</td>
<td>BCPS, Clinical Instructor</td>
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<td>Hayes, Lisa, Pharm.D.</td>
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<td>Hayes, Karen, Pharm.D.</td>
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<td>Heidel, Donna, B.S.Ph.</td>
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<td>Henry, Ronald, B.S.Ph.</td>
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<td>Hicks, Lonnie, B.S.Ph.</td>
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<td>Hilliman, Lisa, Pharm.D.</td>
<td>Clinical Instructor</td>
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<td>Hinson, Paula, B.S.Ph.</td>
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<td>Hudson, David, B.S.Ph.</td>
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