**Course Name:** Dental Physiology 2023

Fundamentals of Physiology 2023

**Course Number:** Physio 625 – 7 Credit Hours

Physio 725 – 7 Credit Hours

**Course Director**: Thomas H. Adair, PhD

Professor of Physiology and Biophysics

Office: G251

Phone: 601.984.1810

Email: [tadair@umc.edu](mailto:tadair@umc.edu)

**Course Coordinator:** Jennifer Duckworth

Education Administrator, Physiology and Biophysics

Office: G251

Phone: 601.984.1810

Email: [jduckworth1@umc.edu](mailto:jduckworth1@umc.edu)

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**Course Description**

Physiology 625/725 provides 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.

**Course Goals and Objectives**

The student will describe the normal structure and function of the human body and each of its major organ systems across the life span; this includes describing the normal structure and function at the subcellular, cellular, tissue, organ and whole-body level.

The course objectives can be found in [Canvas under the Learning Objectives module.](https://umc.instructure.com/courses/1979732/files/89866373?module_item_id=24388932)

**Course Schedule**

The course schedule can be found in [Canvas under the Schedule module](https://umc.instructure.com/courses/1979732/files/89866375?module_item_id=24388934). You will be notified if any changes are made to the schedule throughout the semester.

**Participating Faculty**

Thomas Adair, Ph.D., Professor of Physiology and Biophysics

Barbara Alexander, Ph.D., Professor of Physiology and Biophysics

Heather Drummond, Ph.D., Professor of Physiology and Biophysics

Eric George, Ph.D., Associate Professor of Physiology and Biophysics

Joshua Speed, Ph.D., Assistant Professor of Physiology and Biophysics

David Stec, Ph.D., Professor of Physiology and Biophysics

**Assessment Method**

The grades will be based on National Board style examinations and daily quizzes. There will be seven block exams (total ~312 points) during the course and a comprehensive final exam (100 points) at the end of the course. There will be four questions for each hour of lecture on the block exams, and there will be one or more quiz questions during each hour of lecture that will have a total point value of 0.5 points per hour of lecture. The number of questions on the various exams and quizzes will be approximately as follows:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Blocks 1 - 8** | **Instructor(s)** | **Lecture**  **Hours** | **No.**  **Questions** | **Hourly**  **Quizzes** |
| 1. Nerve, Muscle, Heart | Adair | 10 | 40 | 5.0 |
| 1. GI, Temperature Regulation | Adair | 10 | 40 | 5.0 |
| 1. CNS, Special Senses | Adair | 10 | 40 | 5.0 |
| 1. Circulation I | Alexander | 10 | 40 | 5.0 |
| 1. Circulation II | Speed | 6 | 24 | 3.0 |
| 1. Respiration | Drummond | 10 | 40 | 5.0 |
| 1. Kidney, Body fluids | Stec | 10 | 40 | 5.0 |
| 8. Endocrine, Reproduction | George | 12 | 48 | 6.0 |
| Final Exam | All instructors |  | 100 |  |
| **Total Points** |  |  | **412** | **39** |

We will use online testing software (ExamSoft) to administer block exams as well as the final exam. Daily quizzes will be administered using a web-based program called Nearpod. Nearpod will be used on the first day of class to administer quizzes; you will be given instructions on how to access Nearpod before the first day of class. Each student can turn in answers to quizzes on paper no more than three times during the entire course.

Grading Scale: A = 90% - 100%

B = 80% - <90%

C = 70% - <80%

F = <70%

**Educational Resources**

***Required Text:***

Hall JE and Hall ME. *Guyton and Hall Textbook of Medical Physiology*. 14th ed. Philadelphia, PA: Elsevier, 2021.

***Required Course Materials:***

Laptop computer

***Additional Resources:***

Hall JE and Hall ME. *Pocket Companion to Guyton and Hall Textbook of Medical Physiology 14th Edition*. Philadelphia, PA: Elsevier.

Hall JE and Hall ME. *Guyton and Hall Physiology Review. 4th ed.* Philadelphia, PA: Elsevier.

**Course Policies**

***Testing Policies.*** All students are required to study and agree with an Examination Honor Code before they will be eligible to take an exam or daily quiz; the Honor Code will be included in an ExamSoft practice test that will be administered several days before the first block exam. Any student who violates any aspect of this honor code will be subject to penalty that can include earning a zero for an exam or quiz or failure of the entire course.

The following procedures will be used on exam days:

* We will use both the upper and lower amphitheaters (R153 and R354) on Exam days. Students will have assigned seating for all seven block exams as well as the final exam.
* When prompted, students must retrieve personalized scratch paper at the front of the room; the scratch paper will include the assigned seat number for each student. The scratch paper must be turned in to the proctors when the exam has been completed. You will also be asked to show your student ID to a proctor for bar code reading.
* Seat numbers will be identified by labels affixed to the back of each seat. A seating chart will be projected on the screen to help students find their assigned seats.
* All belongings (including cell phones, smart watches, calculators and other electronic devices) must be stored at the front or back of the room, not in the aisles or in the seat rows.
* Proctors will randomly check assigned seating during each exam.

***Challenging Test Questions.*** Students may submit any challenges for test questions in writing to the course coordinator for up to **one-week** after the exam. No question challenges will be considered thereafter. Students may make appointments with the course coordinator to review questions they missed on each test for up to one week after the test.

***Dental School Attendance Policy.*** We will adhere to the following dental school attendance policy: “*During a course, course coordinators may require mandatory in-person attendance for certain lectures or topics. For preclinical courses, clinical courses, and required attendance lectures or topics, attendance is required. Arriving late or leaving early in these situations is counted as an absence. If a dental student is absent from a required class session, the student must contact the course coordinator by UMMC email prior to the next class session to make up the missed class. Any additional remedial assignments for the missed class will be at the discretion of the course coordinator. Failure to report an absence to the course coordinator prior to the next class session, or failure to successfully complete any remedial assignment in the time designated by the course coordinator, will result in a penalty of three points off the course final grade for each occurrence. Failure to complete a missed class assignment in the time designated by the course coordinator will result in a failing grade (50) for that assignment.”*

All dental students are expected to study all clinical correlations.

Additionally, no make-up tests or make-up daily quizzes will be offered regardless of whether an absence is excused or not.

***Graduate Student Attendance Policy*.** The MS-BMS Program under the direction of Dr. Meyer ([emeyer@umc.edu](mailto:emeyer@umc.edu)) will determine whether an absence is excused or unexcused and

will notify the course coordinator of their decision. Graduate students should direct all queries concerning attendance to Dr. Meyer, and should copy the correspondence to the course coordinator, Jennifer Duckworth ([jduckworth1@umc.edu](mailto:jduckworth1@umc.edu)).

All graduate students are expected to study all clinical correlations.

Additionally, no make-up tests or daily quizzes will be offered regardless of whether an absence is excused or not.

***Course and Instructor Evaluations.*** You will have an opportunity to evaluate each physiology instructor and clinical correlation speaker before and immediately after each of the seven block exams as well as the entire course after the final exam. We hope you will perform this task with objectivity because the evaluations play a key role in our quest to achieve excellence in the course. The course coordinator will pick up the evaluations in the classroom on evaluation day.

***Dental Physiology Award / Fundamentals of Physiology Award.*** A bookstore cash award and plaque will be awarded to the student with the highest-grade point average in each class. Any type of absence from a test (excused or unexcused) disqualifies the student from an award. Separate awards will be given for the dental and graduate student classes.

1. **Academic Support**

The Office of Academic Support at UMMC is located in the Verner Holmes Learning Resource Center, Suite U155-A. The website is [www.umc.edu/academic\_support](http://www.umc.edu/academic_support).

One of the resources available at this site is the Academic Success Kiosk, ASK. ASK is a free Canvas course that includes helpful information regarding time management in academics, study strategies, and stress management, among other topics. Visit the website above for instructions about how to register for the ASK course.

Students with disabilities: The UMMC Policy on Academic Accommodations provides information for students with a documented disability as specified under Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990 (ADA). This policy can be found at <https://documents.umc.edu>.

1. **UMMC SCHOOL OF GRADUATE STUDIES OR SOD-WIDE POLICIES/STATEMENTS**

**School of Graduate Studies**

<https://umc.libguides.com/msbms>

**All references are to the current *SOD Student Handbook*** <https://www.umc.edu/sod/Students/files/sod_student_handbook.pdf>

* 1. **Academic Status, p. 8.**
  2. **Policy on Good Academic Standing, pp. 9-10.**
  3. **Attendance Policies, pp. 17-18.**
  4. **Academic Accommodations, p. 57.**
  5. **Dress/Appearance Code, pp. 32-33.**
  6. **Policy on Ethical Conduct and Professional Behavior, pp. 19-26.**

**3) Additional wellness opportunities and communication of wellness services**

1. [Resources - University of Mississippi Medical Center (umc.edu)](https://www.umc.edu/OWB/Resources/Home.html)
2. Additional Office of Well-Being Programs:

* [Everyday Wellness - University of Mississippi Medical Center (umc.edu)](file:///C:\Users\jduckworth1\AppData\Local\Microsoft\Windows\INetCache\Content.Outlook\YECN8LOR\Everyday%20Wellness%20-%20University%20of%20Mississippi%20Medical%20Center%20(umc.edu))
* [55-Word Stories - University of Mississippi Medical Center (umc.edu)](https://www.umc.edu/OWB/Programs/55-word-stories.html)

c. [Student Counseling and Wellness Center - University of Mississippi Medical Center (umc.edu)](https://www.umc.edu/Office%20of%20Academic%20Affairs/For-Students/Student%20Affairs/Student-Counseling-and-Wellness-Center/Student-Counseling-and-Wellness-Center.html)