University of Mississippi School of Dentistry
University of Mississippi School of Graduate Studies and Health Sciences

Course Syllabus

Dent 625, Dental Physiology/Physio 725, Fundamentals of Physiology

Credit Hours: Dent 625 – 8  Contact Hours: 100
Physio 725 – 7

1) GENERAL INFORMATION

Course Director: Thomas H. Adair, Ph.D.
Professor, Physiology and Biophysics
G159
tadair@umc.edu

Course Coordinator: Jennifer Duckworth
Education Administrator, Physiology and Biophysics
G251
601-984-1810
jduckworth1@umc.edu

Class Meeting Information: Monday/Wednesday/Friday
10:00-11:50 am
Upper Amphitheater, R354

2) 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.

3) LEARNING RESOURCES


Required Course Materials: Laptop computer

4) PARTICIPATING FACULTY

Thomas Adair, Ph.D., Professor of Physiology and Biophysics
Barbara Alexander, Ph.D., Professor of Physiology and Biophysics
Alejandro Chade, M.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
 David Stec, Ph.D., Professor of Physiology and Biophysics

5) 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 of the human body at the sub-cellular, cellular, tissue, organ and whole body level.

The course objectives can be found in Canvas under the Learning Objectives module.

6) EVALUATION

The grades will be based on National Board style examinations and daily quizzes. There will be five 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/quizzes will be approximately as follows:

<table>
<thead>
<tr>
<th>Blocks 1 - 8</th>
<th>Instructor(s)</th>
<th>Lecture Hours</th>
<th>No. Questions</th>
<th>Hourly Quizzes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Nerve, Muscle, Heart</td>
<td>Adair</td>
<td>10</td>
<td>40</td>
<td>5.0</td>
</tr>
<tr>
<td>2. GI, Temperature Regulation</td>
<td>Adair</td>
<td>10</td>
<td>40</td>
<td>5.0</td>
</tr>
<tr>
<td>3. CNS, Special Senses</td>
<td>Adair</td>
<td>10</td>
<td>40</td>
<td>5.0</td>
</tr>
<tr>
<td>4. Circulation I</td>
<td>Alexander</td>
<td>10</td>
<td>40</td>
<td>5.0</td>
</tr>
<tr>
<td>5. Circulation II</td>
<td>Speed</td>
<td>6</td>
<td>24</td>
<td>3.0</td>
</tr>
<tr>
<td>6. Respiration</td>
<td>Drummond</td>
<td>10</td>
<td>40</td>
<td>5.0</td>
</tr>
<tr>
<td>7. Kidney, Body fluids</td>
<td>Stec</td>
<td>10</td>
<td>40</td>
<td>5.0</td>
</tr>
<tr>
<td>8. Endocrine, Reproduction</td>
<td>George</td>
<td>12</td>
<td>48</td>
<td>6.0</td>
</tr>
<tr>
<td>Final Exam</td>
<td>All instructors</td>
<td>100</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Points</strong></td>
<td></td>
<td><strong>412</strong></td>
<td><strong>39</strong></td>
<td></td>
</tr>
</tbody>
</table>

Exams for some blocks will be combined. For example, blocks 2 and 3 will be covered on the second exam as shown below.
EXAMS | Exam dates | Blocks covered on exams | Number of Questions on exams
---|---|---|---
1 | Sept. 12 | 1 | 40
2 | Oct. 7 | 2 and 3 | 80
3 | Oct. 28 | 4 and 5 | 64
4 | Nov. 23 | 6 and 7 | 80
5 | Dec. 12 | 8 | 48
FINAL | Dec. 16 | ALL | 100
**Total Points** | | | **412**

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. You will be given instructions on how to access Nearpod before the first day of class. Nearpod will be used on 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%

7) SPECIFIC CLASS POLICIES AND PROCEDURES

**Attendance**

**Dental School Attendance Policy:**
We will adhere to the following dental school attendance policy:

“Students are expected to attend all classes. Arriving late for or leaving early from class beyond the bounds set by the course coordinator will be counted as an absence. If a student is absent from a class, 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 complete a missed class assignment in the time designated by the course coordinator will result in a failing grade (50) for that assignment. 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.”

All dental students are expected to study all clinical correlations. Test questions on clinical correlations will be administered as needed.
Additionally, no make-up tests or daily quizzes will be offered regardless of whether an absence is excused or not.

**Graduate Student Attendance Policy:**
The graduate school under the direction of Dr. Broome (hjbroome@umc.edu) will determine whether an absence is considered excused or unexcused and will notify the course coordinator of their decision. Graduate students should direct all queries concerning attendance to Dr. Broome, and should copy the correspondence to the course coordinator, Jennifer Duckworth (jduckworth1@umc.edu).

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

**Classroom and Testing Policies**

All students are required to study and sign the Examination Honor Code before they will be eligible to take an exam or daily quiz. Students will have assigned seating for all examinations and the seat assignments will be different for each exam.

The following procedures will be used on exam day:

- When prompted, the student will retrieve their scratch paper at the front of the room; the scratch paper will include the assigned seat number for the student.
- 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 seat.
- All belongings (including cell phones and other electronic devices) will be stored at either 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 will be allowed to submit challenges for exam questions in writing to instructors for up to one-week after the exam. No question challenges will be considered thereafter. Students may also contact the course coordinator to review questions they missed on each test for up to one week after the test.

**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 five 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/Fundamentals of Physiology Award

A bookstore cash award and plaque will be awarded to the student with the highest-grade point average in the class. The award requires that all tests are taken during normal testing times since we do not offer makeup tests in physiology. 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.

8) MEDICAL CENTER OR SOD-WIDE POLICIES/STATEMENTS
All references are to the current SOD Student Handbook

   d. Academic Accommodations, p. 57.
   e. Dress/Appearance Code, pp. 32-33.

9) COURSE SCHEDULE (INSTRUCTIONAL SESSIONS)

The course schedule can be found in Canvas under the Schedule module. You will be notified if any changes are made to the schedule throughout the semester.