

MEDICAL PHYSIOLOGY 2008-2009

The two major goals of this course are 1) to help you learn the fundamental mechanisms of human physiology needed for the practice of modern medicine, and 2) to stimulate your lifelong interest in learning physiology and pathophysiology. The syllabus for the course will be the *Textbook of Medical Physiology*, Guyton & Hall, 11th Edition.

The classes are intended to emphasize the most important physiological concepts and to assess your understanding of the assigned reading. Because the textbook provides extensive coverage of almost all areas of physiology, some of the textbook material cannot be discussed in the classes. Nevertheless, it is advantageous to be familiar with all aspects of the textbook, except for those sections specifically excluded by the various instructors. In addition to the textbook material, there may be discussion of pathophysiology and clinical medicine, especially in the problem-based learning classes and in the clinical correlation classes, in order to illustrate physiological principles and to show the importance of physiology to clinical practice. Each instructor will provide a list of knowledge objectives and self assessment questions.

Your individual study of the assigned reading of the textbook prior to class will be emphasized in this course. An important objective of the classes is to assess your level of understanding and to help you with those areas in which you are having difficulty. Instructors will use a series of questions to help guide the class discussions. You will utilize electronic devices (PRS RF Clicker, available for purchase in the UMC book store) to register your response to each of the questions and to obtain immediate feedback about your comprehension of the material. This approach will also help us to focus discussion on the areas that are more challenging to you and will also promote “active” learning, as opposed to the “passive” learning that takes place with most formal lectures. We believe that knowledge gained through active learning is much deeper and will stick with you much longer than information gained by passive processes, and that this approach will help you develop lifelong learning habits that will be necessary to sustain you throughout your medical careers.

The instructors will take time to explain the physiological principles underlying the questions, especially in instances where students are unable to answer the question correctly. All of the clicker questions for each lecture will count as one point. For example, if there are 5 questions and you answer 4 of them correctly, you will receive 0.8 point. Some of the more difficult questions may not be counted and the instructors will indicate which questions will not be counted. Approximately 10% of the total grade for the year will be derived from the average score of the clicker questions that are counted. Therefore, please purchase your clicker before the Medical Physiology course begins and be certain that your “clicker” is functioning properly before class begins.

Since the clicker questions will be graded, we will apply the same “rules” as for regular tests. Books and notes will be closed and there will be no discussion of answers by students until prompted by the instructor.

What should you do if your clicker malfunctions (e.g. battery dies)? You may use a 3” x 5” note card to provide your answers on no more than 3 occasions during the course. Please write your name and answers (e.g., a, b, c, d,...etc) to questions (i.e. 1, 2,...etc) on the card and return your answers to the instructor.

The Medical Physiology schedule gives the times and dates for the various classes; the instructors may provide additional information or slightly modify the schedule but any modifications of reading assignments will be provided to you in advance of the classes. We will not be able to change the dates of the tests, because these are scheduled by the Curriculum Committee. It is, of course, advantageous for you to arrive on time for the quizzes and exams. We will not be able to administer any quizzes or exams to students who arrive after other students have completed the quiz or exam.

Exams, Quizzes and Grades. The grades for the course will be derived from several sources:

1. The daily questions will account for approximately 10% of the total grade
2. The 9 section quizzes for the various sections. (Approximately 4 questions/chapter)
3. The Cumulative Exam which will be administered on March 11 will include approximately 2 questions per chapter from the entire course except for Chapters 45-61.
4. The National Board Exam for Physiology which will be administered on March 13
5. The laboratory. (Dr. Hester will review the objectives and procedures for the labs).

The format of the questions for all of the tests will be the same as those used for the National Board Exams and the United States Medical Licensure Exam (USMLE). Each question in daily questions, the section tests, and the final exam will count the same as other questions, although certain material may be given greater emphasis. The scores from the National Board Exam will be scaled so that a Board Subject Test Score of 70 will be equivalent to a local score of 83%.

Mechanical or electronic devices capable of receiving, storing or transmitting information, such as PDAs, Palm Pilots, hand-held computers, laptop computers, etc. are not permitted in School of Medicine classrooms during tests. However, the Office of Academic Affairs has agreed to provide calculators for your use during the quizzes and exams and we provide them for you when the quizzes/exams are distributed.

Listed below are the approximate number of questions on the various tests and the approximate percentage contribution of these tests to the overall course grade:

Tests:	Approximate Number of Questions:	Percentage of Total Grade (approximate):
Daily questions	-	10
Tests and Quizzes		
- 9 Section Quizzes	340	47
- Cumulative Exam	165	23
- National Board Exam	140	20
- (including-excluding neurophysiology)		
		100

The tests will be graded by computer (except for the daily questions). Therefore, it is important to fill out the computer form carefully. All grades will be computed from your answers on the Scantron sheet. If you have questions about the individual tests, please contact the instructor after the test has been completed. The instructors will not be able to answer questions during the test.

What should you do if you miss a quiz? We will not be able to administer make up quizzes. If you are a medical student and are unable to attend one of the section quizzes or daily quizzes because of sickness or another acceptable excuse, please contact The Office of Student Affairs (Dr. Clark) who will determine if the excuse is acceptable. If you are a graduate student, please contact the Graduate Office. For those who miss the quizzes without an acceptable excuse the grade for the quiz will be registered as zero. If too many quizzes have been missed, as determined by the Course Director in consultation with the Office of Academic Affairs or Graduate Office, the grade for the course will be registered as incomplete. The cumulative exam and the National Board exams must be completed to successfully complete the Medical Physiology course.

Laboratory Exercises. Attendance and a satisfactory laboratory grade for all laboratories are necessary for successful completion of the medical physiology course. Questions from the laboratory exercises may also be included in the section tests. For those who miss the laboratory without an acceptable excuse, or even with an excuse if too much laboratory has been missed, special exercises will be required such as writing library reports.

Attendance. We anticipate that you will find the classes to be interesting and highly beneficial to your education. We also believe that the spirit of the class is greatly enhanced by your presence at the teaching exercises. Attendance is expected at all classes but will be required and monitored at all laboratory exercises, problem based learning sessions (PBLs), and Clinical Correlations given by speakers from outside the Physiology department. Participation in these sessions will be graded as Satisfactory or Unsatisfactory, and all of these special sessions must be completed in a satisfactory manner to receive a passing grade in the course. For those who miss these special sessions without an acceptable excuse, or even with an excuse if too many sessions have been missed, special exercises will be required such as writing library reports. Attendance at the designated special sessions will be taken.

You will have the opportunity to evaluate each of the instructors and the entire course. These evaluations are very important in helping us improve the course and in letting us know if we are doing a good job in certain areas. If you have suggestions that you think would help us improve the course, please let me know. We hope that you enjoy the course and wish you success.

John E. Hall, Ph.D.
Professor and Chair