

## Elements of Physiology (MPP 3202)

### Course Director:

Alan R. Parrish, Ph.D., Associate Professor, Medical Pharmacology and Physiology  
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Office hours: By appointment

### Instructors:

Ronald Korthuis, Professor and Chair, Medical Pharmacology and Physiology  
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Ted Kalogeris, Ph.D., Assistant Research Professor, Medical Pharmacology and Physiology  
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### Laboratory Director:

Mark Milanick, Ph.D., Professor of Medical Pharmacology and Physiology  
Office: M121A, School of Medicine  
E-mail: milanickm@missouri.edu

### Teaching Assistant Office Hours:

Please Check Blackboard for a schedule.

### Classroom:

Lectures are scheduled for M105, Medical Sciences Building; the laboratories will be held in M122.

### Required Text:

Silverthorn Human Physiology: An Integrated Approach, Sixth Edition

### Archived Examinations:

Old examinations may be found at the J. Otto Lottes Health Sciences Library's electronic reserves site: [www.eres.missouri.edu](http://www.eres.missouri.edu). Click on the first link (electronic reserves and reserve pages) and search by instructor, department or course. Please note that as of fall 2013 the course will have new instructors and a new text, therefore, the old exams prior to the fall semester 2013 may not be reflective of the course.

### Objectives:

#### Upon completion of the course, students will:

1. Demonstrate an understanding of homeostasis and the mechanisms involved in maintaining the intracellular and extracellular environments of the body.
2. Delineate the principles underlying cellular transport systems, secretion, and metabolism.

3. Understand the basic principles underlying normal organ function and their systemic integration.
4. Experience analytic and quantitative skills, including an understanding of physiological recording and the interpretation of those records.
5. Comprehend the scientific method (i.e. generating and testing a hypothesis).

### ***Academic Integrity***

Academic integrity is fundamental to the activities and principles of a university. All members of the academic community must be confident that each person's work has been responsibly and honorably acquired, developed, and presented. Any effort to gain an advantage not given to all students is dishonest whether or not the effort is successful. The academic community regards breaches of the academic integrity rules as extremely serious matters. Sanctions for such a breach may include academic sanctions from the instructor, including failing the course for any violation, to disciplinary sanctions ranging from probation to expulsion. When in doubt about plagiarism, paraphrasing, quoting, collaboration, or any other form of cheating, consult the course instructor.

University of Missouri policies and procedures related to Students Rights & Responsibilities may be found at [ossr.missouri.edu/index.html](http://ossr.missouri.edu/index.html)

### **Students with Disabilities:**

If you anticipate barriers related to the format or requirements of this course, if you have emergency medical information to share with me, or if you need to make arrangements in case the building must be evacuated, please let me know as soon as possible.

If disability related accommodations are necessary (for example, a note taker, extended time on exams, captioning), please register with the Disability Center (<http://disabilitycenter.missouri.edu>), S5 Memorial Union, 573- 882-4696, and then notify me of your eligibility for reasonable accommodations. For other MU resources for persons with disabilities, click on "Disability Resources" on the MU homepage.

### ***Grading***

1. Four exams @ 80 points each (320 points)
2. Ten homework assignments @ 8 pts each (80 points)
2. The laboratory will contribute 100 total points.

The final grades are based on 500 points, 90%, 80%, 70%, and 60% scale;

A  $\geq$  450 points

B = 400-449 points

C = 350-399 points

D = 300-349 points

F  $\leq$  299 points

We will use a +/- grading system, but will determine those cutoffs at the end of the course.

There will be four one-hour exams. Exams will be based on material covered in lectures. Exams must be taken on the assigned date. Makeup examinations are composed of essay questions. If examinations are taken after the assigned date, a 10 point/day penalty will be incurred. For example, if the exam is scheduled for a Wednesday but is not taken until

Friday, 20 points will be deducted from the final score. If the examination is scheduled for a Friday, arrangements must be made to take on the weekend, delay until the following Monday will result in a 30 point penalty. If illness or other extenuating circumstances prevent you from taking an exam, notify the course director immediately to avoid the penalty and documentation must be provided.

To drop the course, students must go through the registrar's office. Everyone who does so will be given a "Withdrew Passing" grade. All students on the class roster after this date must be given a grade for the course. An Incomplete (I) grade automatically becomes an F after a year; do not attempt to drop the course simply by stopping attendance at lectures, labs and exams. The academic calendar is available at <http://registrar.missouri.edu/sp14dates-deadlines.php>

### **Intellectual Pluralism**

The proper expression of both academic rights and responsibilities is required for a reasoned and respectful debate that explores a diversity of views and perspectives about complex, and often controversial topics. This is the essence of **intellectual pluralism**. The University community is committed to intellectual pluralism in its many dimensions: political, cultural, religious, international, disciplinary, economic, lifestyles – and to encouraging and supporting robust debates over matters of academic interest. Below, please find a sample statement addressing intellectual pluralism. This statement was adopted by the Faculty Council and recommended to our office for distribution to the faculty.

The University community welcomes intellectual diversity and respects student rights. Students who have questions or concerns regarding the atmosphere in this class (including respect for diverse opinions) may contact the Departmental Chair or Divisional Director; the Director of the Office of Students Rights and Responsibilities <http://osrr.missouri.edu/> or the MU Equity Office ([equity@missouri.edu](mailto:equity@missouri.edu));

All students will have the opportunity to submit an anonymous evaluation of the instructor(s) at the end of the course.

University of Missouri System Executive Order No. 38 lays out principles regarding the sanctity of classroom discussions at the university. The policy is described fully in Section 200.015 of the Collected Rules and Regulations. In this class, students may or may not make audio or video recordings of course activity – permission must be granted by individual faculty - except students permitted to record as an accommodation under Section 240.040 of the Collected Rules. All other students who record and/or distribute audio or video recordings of class activity are subject to discipline in accordance with provisions of Section 200.020 of the Collected Rules and Regulations of the University of Missouri pertaining to student conduct matters.

Those students who are permitted to record are not permitted to redistribute audio or video recordings of statements or comments from the course to individuals who are not students in the course without the express permission of the faculty member and of any students who are recorded. Students found to have violated this policy are subject to discipline in accordance with provisions of Section 200.020 of the Collected Rules and Regulations of the University of Missouri pertaining to student conduct matters.