

PATHOPHYSIOLOGY - 2023SS

MEDS4069 (3 Credit Hours) Tu/Th 6:00 pm - 7:20 pm, MSB

COURSE DIRECTOR: Roger T. Worrell, Ph.D.

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CO-COURSE DIRECTOR: Jared T. Iding, MEDS lecturer, 3rd year medical student

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COURSE DESCRIPTION

Pathophysiology is a single-semester, 3-credit-hour, lecture-based course designed to provide students with an in-depth understanding of the function, regulation, and integration of human body organ systems in the disease state. Emphasis is placed on a functional understanding of the dysregulation of homeostatic mechanisms and the corresponding manifestations of disease processes.

The course is primarily textbook-based. MEDS3026 Medical Physiology and MEDS3027C Medical Histology (or Course Director permission regarding Histology) are prerequisites for this course. Course content includes principles of cell injury, cell growth adaptations, inflammation and repair, neoplasia, and diseases of all major organ systems, with a review of pertinent fundamental concepts from the disciplines of biochemistry, genetics, physiology, pharmacology, microbiology, histology, and human anatomy. Links to online textbook sources will be provided. Final grade is based primarily on the results of 3 exams. The course will include written assignments.

CORE TEXTBOOK

Pathophysiology of Disease: An Introduction to Clinical Medicine

Available on AccessMedicine

Latest edition

Lange Medical Books, Gary D. Hammer, Stephen J. McPhee. McGraw



OPTIONAL TEXTBOOK

Robbins & Cotran Pathologic Basis of Disease

Latest edition

Kumar, Abbas, Aster. El Sevier.

LECTURE FORMAT

Lectures will be held in-person and live streamed for those who wish to participate remotely. Course recordings will be made available on Echo360 following each class. In the event the lecturer is unable to attend, a pre-recorded lecture will be posted at the scheduled lecture time or before. Attendance is encouraged but not required. Questions are always welcome during lectures, either in-person or in the live stream chat box. Course content questions outside of lecture time can be emailed to Jared Iding at idingid@ucmail.uc.edu

LEARNING OBJECTIVES

- Develop an understanding of the mechanisms of cell injury, cell death, and cell growth adaptations
- Identify common causes of inflammation and understand how the mediators of inflammation coordinate a local or systemic response
- Explain the processes of repair following injury and inflammation
- Describe the dysregulation involved in the development of neoplasia and the progression that occurs thereafter depending upon the affected tissue
- Develop an understanding of selected diseases of the major organ systems and body tissues including immune system, blood, cardiovascular system, pulmonary system, gastrointestinal system, urinary system, endocrine system, peripheral nervous system, and central nervous system
- Explain how genetic and environmental factors affect the development and severity of disease
- Identify therapeutic targets in disease processes and understand how disease courses are modified based on these treatments

GRADING POLICY

Three exams: Each Exam is worth 30 points of total grade (90 points combined of total grade)

Paper: pathophysiology of disease of choice: Worth 10 points of total grade (10 points combined of total grade)

Total points = 100

The course final grade will be determined by the provided grade calculation sheet.

The final letter grade will be awarded based on the table included in the grade calculation sheet.

 Students should refer to the guidelines in the grade calculation sheet regarding their course grade as it develops. For MEDS4069, please refer to the Medical Sciences student handbook for grading policies. In general, a C or higher is required to receive MEDS elective credit.

COURSE POLICIES

- The student must complete all required assignments and exams in order to receive a passing grade.
- **Missed examinations**: Examinations can only be made-up upon **prior** (before the examination) approval of the course director.

- Students are strongly encouraged to meet with the course director if they have any
 concerns or questions. A University Faculty/Staff Emergency Situations Guide is present
 in the office which covers Helping Students, UC Resources and Resource Contact
 Information. Setting up a time to meet, early on, is particularly important if grade
 expectations are not met. Roger. Worrell@uc.edu, MSB 4251 (558-6489).
- In the case that course capacity is exceeded during the course enrollment period, preference will be given to students enrolled in the Medical Sciences major or minor.
- No lecture or course material shall be distributed by anyone on servers or sites other than the course blackboard site. To do so is illegal. You may download on your personal system for your use only.
- Academic Integrity: The University Rules, including the Student Code of Conduct, and
 other documented policies of the department, college and university related to academic
 integrity will be enforced. Any violation of these regulations, including acts of plagiarism
 or cheating, will be dealt with on an individual basis according to the severity of the
 misconduct: http://www.uc.edu/studentlife/conduct
- Special Needs Policy: If you have any special needs related to your participation in this
 course, including identified visual impairment, hearing impairment, physical impairment,
 communication disorder, and/or specific learning disability that may influence your
 performance in this course, you should meet with the instructor to arrange for
 reasonable provisions to ensure an equitable opportunity to meet all the requirements of
 this course. At the discretion of the instructor, some accommodations may require prior
 approval by Disability Services: http://www.uc.edu/sas/disability
- Counseling services: Students have access to counseling and mental health care through the University Health Services (UHS), which can provide both psychotherapy and psychiatric services. In addition, Counseling and Psychological Services (CAPS) can provide professional counseling upon request; students may receive five free counseling sessions through CAPS without insurance. Students are encouraged to seek assistance for anxiety, depression, trauma/assault, adjustment to college life, interpersonal/relational difficulty, sexuality, family conflict, grief and loss, disordered eating and body image, alcohol and substance abuse, anger management, identity development and issues related to diversity, concerns associated with sexual orientation and spirituality concerns, as well as any other issue of concerns. After hours, students may call UHS at 513556-2564 or CAPS Cares at 513-556-0648. For urgent physician consultation after-hours students may call 513-584-7777.
- Title IX: Title IX is a federal civil rights law that prohibits discrimination on the basis of your actual or perceived sex, gender, gender identity, gender expression, or sexual orientation. Title IX also covers sexual violence, dating or domestic violence, and stalking. If you disclose a Title IX issue to me, I am required forward that information to the Title IX Office. They will follow up with you about how the University can take steps to address the impact on you and the community and make you aware of your rights and resources. Their priority is to make sure you are safe and successful here. You are not required to talk with the Title IX Office. If you would like to make a report of sex or gender-based discrimination,

harassment or violence, or if you would like to know more about your rights and resources on campus, you can consult the website www.uc.edu/titleix or contact the office at 556-3349.

• **Course Withdrawal Policy**: The University policy on withdrawal from this course will be followed. The process for withdrawal and the policies that govern grading are available here: http://www.uc.edu/registrar/withdraw reg.html