

PATHOPHYSIOLOGY: 11:067:490

FALL 2020

MONDAYS AND WEDNESDAYS 2:15-3:35 EASTERN STANDARD TIME (EST)

SYNCHRONOUS VIRTUAL INSTRUCTION VIA ZOOM

*Please note *all times* are in the Eastern Standard Time Zone (EST)*

CONTACT INFORMATION:

Instructor(s): Anna Hausmann, DVM

Office Location: 213D Bartlett Hall

Phone: 848-932-9240

Email: annahausmann@rutgers.edu

Office Hours: Thursdays 2:30-4:00pm, or by appointment

COURSE WEBSITE, RESOURCES AND MATERIALS:

Supplemental Textbook:

The course textbook is **NOT** required for student purchase. Students who like to have a written resource for a course or like to have readings that correspond to the lecture material are encouraged to purchase the course textbook **OR** go to the Chang Library in Foran Hall where the course textbook is on hold. Examinations will be composed of material only from lectures. The course textbook is as follows:

Capriotti, T., & Frizzell, J.P. (2016). *Pathophysiology: Introductory concepts and clinical perspectives*. Philadelphia: F.A. Davis Company.

COURSE DESCRIPTION:

Pathophysiology 490 focuses on the molecular origins of disease and how that relates to disease processes. This course allows students to understand why, and how, diseases present at a macroscopic level due to what is occurring at the microscopic level. Multiple species of animals will be used as models to connect the molecular origin of disease to what is visualized at the organismal level. This is an intensive course that will cover all the mammalian body systems and how each of these systems interact with one another to try to maintain a homeostatic balance.

LEARNING GOALS:

- Understand basic cellular biology (organelles, genetics, fluid and electrolyte balance, acid base homeostasis, etc.). (PLG 2)
Assessment: Examinations
- Understand mechanisms of defense (barriers, inflammation, the immune system, etc.) and how these mechanisms can protect an organism and how they can also be overwhelmed. (PLG 3)
Assessment: Examinations
- Understand the molecular basis of disease within the organ systems of mammals (cardiovascular, gastrointestinal, muscular, neurologic, pulmonary, renal, etc.). (PLG3)
Assessment: Examinations
- Apply molecular biology knowledge to disease processes through case studies. (PLG 3)
Assessment: Examinations will involve critical thinking and analyzing cases

PLGs– See <https://animalsciences.rutgers.edu/undergraduate/mission.html> for the program learning goals (PLGs).

ASSIGNMENTS/RESPONSIBILITIES:

Grading Procedure:

Exam 1: 100 points (lectures 1-7) ; **September 30th** at normal lecture time
 Exam 2: 100 points (lectures 8-16) ; **November 4th** at normal lecture time
 Exam 3: 100 points (lectures 17-24) ; **December 7th** at normal lecture time
 Pathophysiology Poetry Assignment: 20 points ; **December 9th** at normal lecture time
 Final Examination: 150 points (lectures 1-24) ; **TBA**, during finals week

Grades will be calculated as follows:

A = 90% or above, B+= 86% - 89%, B = 80% - 85%, C+= 76% - 79%, C = 70% - 76%, D = 60% - 69%, F = less than 60%

Examinations:

ALL exams will be administered through the Canvas Pathophysiology webpage via **Proctor Track**. Please note, students **MUST** be able to use Proctor Track to take the examinations. This includes, but is not limited to, a webcam, high-speed internet, and photo identification.

ACCOMODATIONS FOR STUDENTS WITH DISABILITIES

Please follow the procedures outlined at <https://ods.rutgers.edu/students/registration-form>. Full policies and procedures are at <https://ods.rutgers.edu/>

ABSENCE POLICY

There are no make-ups for exams or the final assignment except for appropriately documented and approved absences by the **Dean of Students** (deanofstudents@echo.rutgers.edu). Students are expected to attend **every** class period.

MINIMUM TECHNOLOGY REQUIREMENT

For this course, it is necessary that you meet the technical requirements below:

- A computer (desktop/laptop) or mobile device (smartphone/tablet) that is ideally less than five years old.
- Speakers/headphones/earbuds for listening to audio or videos.
- Webcam and microphone for interacting in course activities (Zoom), video test proctoring (Proctor Track), and other third-party tools.
- A stable Internet connection. A speed at or above 25 Mbps is recommended for smooth video stream and conferencing.

COURSE SCHEDULE:

Course Schedule* **Fall Term 2020 M/W 2:15-3:35PM ; SYNCHRONOUS VIA ZOOM**
PLEASE NOTE THE SECOND WEEK OF CLASS AND THANKSGIVING WEEK SCHEDULE CHANGES FOR FALL 2020

Date:	Lecture:	Topic:	Textbook:
Sept 2	1	Introduction, Review, and Fluid, Electrolyte, and Acid-Base Homeostasis	Chapters 1,2,3,7,8
Sept 8	2	Infection and Inflammation	Chapters 9,10,11
Sept 9	3	Hematologic Disorders	Chapters 12,13,14
Sept 14	4	Hematologic Disorders Case Studies	Chapters 12,13,14
Sept 16	5	Cardiovascular Disorders	Chapters 15,16,17,18,19

Sept 21	6	Cardiovascular Disorders	Chapters 15,16,17,18,19
Sept 23	7	Cardiovascular Disorders Case Studies	Chapters 15,16,17,18,19
Sept 28	8	Pulmonary Disorders	Chapters 20,21
Sept 30	EXAM 1	Covering lectures 1-7	Chapters 1-3, 7-19
Oct 5	9	Pulmonary Disorders Case Studies	Chapters 20,21
Oct 7	10	Renal and Urological Disorders	Chapters 22,23
Oct 12	11	Renal and Urological Disorders Case Studies	Chapters 22,23
Oct 14	12	Endocrine and Reproductive Disorders	Chapters 24,25,26,27,28
Oct 19	13	Endocrine and Reproductive Disorders	Chapters 24,25,26,27,28
Oct 21	14	Assignment Details Due Endocrine and Reproductive Disorders Case Studies	Chapters 24,25,26,27,28
Oct 26	15	Gastrointestinal Disorders	Chapters 29,30,31,32
Oct 28	16	Gastrointestinal Disorders Case Studies	Chapters 29,30,31,32
Nov 2	17	Neurological Disorders	Chapters 33,34,35,36
Nov 4	EXAM 2	Covering lectures 8-16	Chapters 20-32
Nov 9	18	Neurological Disorders Case Studies	Chapters 33,34,35,36
Nov 11	19	Musculoskeletal Disorders	Chapters 37,38,39
Nov 16	20	Musculoskeletal Disorders Case Studies	Chapters 37,38,39
Nov 18	21	Integumentary Disorders	Chapters 41,42
Nov 23	22	Integumentary Disorders Case Studies	Chapters 41,42
Nov 30	23	Cancer and Obesity and Nutritional Imbalances	Chapter 5, 40
Dec 2	24	Cancer and Obesity and Nutritional Imbalances Case Studies	Chapter 5, 40
Dec 7	Exam 3	Covering lectures 17-24	Chapters 5, 33-42
Dec 9	25	Pathophysiology Poetry Showcase	Chapters 1-3, 5, 7-42

Schedule subject to change

Cumulative final exam date TBD (during finals week) Covering lectures 1-24 (Chapters 1-3, 5, 7-42)

FINAL EXAM DATE AND TIME

Online Final exam Schedule: <http://finalexams.rutgers.edu/>

ACADEMIC INTEGRITY

The university's policy on Academic Integrity is available at <http://academicintegrity.rutgers.edu/academic-integrity-policy>. The principles of academic integrity require that a student:

- properly acknowledge and cite all use of the ideas, results, or words of others.
- properly acknowledge all contributors to a given piece of work.
- make sure that all work submitted as his or her own in a course or other academic activity is produced without the aid of impermissible materials or impermissible collaboration.
- obtain all data or results by ethical means and report them accurately without suppressing any results inconsistent with his or her interpretation or conclusions.
- treat all other students in an ethical manner, respecting their integrity and right to pursue their educational goals without interference. This requires that a student neither facilitate academic dishonesty by others nor obstruct their academic progress.
- uphold the canons of the ethical or professional code of the profession for which he or she is preparing.

Adherence to these principles is necessary in order to ensure that

- everyone is given proper credit for his or her ideas, words, results, and other scholarly accomplishments.
- all student work is fairly evaluated and no student has an inappropriate advantage over others.
- the academic and ethical development of all students is fostered.

- the reputation of the University for integrity in its teaching, research, and scholarship is maintained and enhanced.

Failure to uphold these principles of academic integrity threatens both the reputation of the University and the value of the degrees awarded to its students. Every member of the University community therefore bears a responsibility for ensuring that the highest standards of academic integrity are upheld.

Enter optional text or delete. Copy and paste elsewhere if you wish to edit. Here is an example from a syllabus (spring 2010 Andy Egan 01:730: 252 Eating Right: Cheating on tests or plagiarizing materials in your papers deprives you of the educational benefits of preparing these materials appropriately. It is personally dishonest to cheat on a test or to hand in a paper based on unacknowledged words or ideas that someone else originated. It is also unfair, since it gives you an undeserved advantage over your fellow students who are graded on the basis of their own work. In this class we will take cheating very seriously. All suspected cases of cheating and plagiarism will be automatically referred to the Office of Judicial Affairs, and we will recommend penalties appropriate to the gravity of the infraction. To help protect you, and future students, from plagiarism, we require all papers to be submitted through Turnitin.com.

STUDENT WELLNESS SERVICES

The Rutgers University Student Assembly urges that this information be included at the end of every syllabus. Edit or delete as you wish:

Just In Case Web App <http://codu.co/cee05e>

Access helpful mental health information and resources for yourself or a friend in a mental health crisis on your smartphone or tablet and easily contact CAPS or RUPD.

Counseling, ADAP & Psychiatric Services (CAPS)

(848) 932-7884 / 17 Senior Street, New Brunswick, NJ 08901/ www.rhscaps.rutgers.edu/

CAPS is a University mental health support service that includes counseling, alcohol and other drug assistance, and psychiatric services staffed by a team of professional within Rutgers Health services to support students' efforts to succeed at Rutgers University. CAPS offers a variety of services that include: individual therapy, group therapy and workshops, crisis intervention, referral to specialists in the community and consultation and collaboration with campus partners.

Violence Prevention & Victim Assistance (VPVA)

(848) 932-1181 / 3 Bartlett Street, New Brunswick, NJ 08901 / www.vpva.rutgers.edu/

The Office for Violence Prevention and Victim Assistance provides confidential crisis intervention, counseling and advocacy for victims of sexual and relationship violence and stalking to students, staff and faculty. To reach staff during office hours when the university is open or to reach an advocate after hours, call 848-932-1181.

Disability Services

(848) 445-6800 / Lucy Stone Hall, Suite A145, Livingston Campus, 54 Joyce Kilmer Avenue, Piscataway, NJ 08854 / <https://ods.rutgers.edu/>

Rutgers University welcomes students with disabilities into all of the University's educational programs. In order to receive consideration for reasonable accommodations, a student with a disability must contact the appropriate disability services office at the campus where you are officially enrolled, participate in an intake interview, and provide documentation: <https://ods.rutgers.edu/students/documentation-guidelines>. If the documentation supports your request for reasonable accommodations, your campus's disability services office will provide you with a Letter of Accommodations. Please share this letter with your instructors and discuss the

accommodations with them as early in your courses as possible. To begin this process, please complete the Registration form on the ODS web site at: <https://ods.rutgers.edu/students/registration-form>.

Scarlet Listeners

(732) 247-5555 / <http://www.scarletlisteners.com/>

Free and confidential peer counseling and referral hotline, providing a comforting and supportive safe space.