### 50:120:347:01 Pathophysiology Fall 2018

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<u>Course:</u> 50:120:347:01 (3-credit Biology Elective AND Nursing Major Requirement)

## Prerequisite: 50:120:253/254 with labs 255/256 OR 50:120:300/301 with labs 302/303 These prerequisites assume students have taken Biology 101 or 127 and Chemistry

Time/Room: Tues/Thurs 2:00-3:20 PM (SCI-LH)

**Course Description:** (3,0) **Pathophysiology** is the introductory course into altered states of the human body. It explores the functional and structural changes in cells, tissues, and organs that cause or are caused by disease. It examines the effects of cellular and organ changes on the whole body while considering the affect of human factors such as age, sex, lifestyle, and social status on prognosis. The course explores the etiology, pathogenesis, morphology, clinical manifestations, diagnosis, and potential evolution of disease. The nervous, endocrine, circulatory, lymphatic, respiratory, urinary, Integumentary, digestive, musculoskeletal and reproductive systems are analyzed along with immunity, electrolyte function, acid-base disorder, genetic disorders, and cancer.

<u>NOTE:</u> This course assumes the student has a thorough knowledge of Human Anatomy & Physiology, a required prerequisite, in order to understand how pathogenic processes alter the healthy normal body state and homeostatic mechanisms.

#### Required Texts:

**Essentials of Pathophysiology, 4th edition (book)** bundled together with **PrepU** (study guide for practice - this is a lot of material, so you'll need practice!) by Carol Porth

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You can get the **ebook bundled with PrepU** for a lower cost. This is called **"Coursepoint for Porth Essentials** iSBN: 9781496303349"

Porth, C M, <u>Essentials of Pathophysiology</u> Lippincott, Williams, & Wilkins, Phila., PA, 4ed 2011 ISBN #9781469884127 This textbook is bundled with "PrepU" adaptive self-quizzing online access code.

<u>Optional</u> (You may find these very helpful and should be able to find used copies if you want them): Porth, CM, <u>Study Guide to accompany Essentials of Pathophysiology</u> LWW, Phila., PA, 4ed, 2011 can be purchased from the publisher (Many students find this helpful)

Lippincott, **Pathophysiology Made Incredibly Easy, 5ed**. LWW, 9781451146233 (Also available from same publisher)

Online Resources:

**SAKAI:** I will communicate with you and post your grades on SAKAI.

**PrepU:** Online assignments will be posted here. You will receive an access code from PrepU to create your account and gain access. Once you have access, you can sign up for my class w/ the following info: (School: Rutgers University @ Camden) (Class Name: Pathophysiology Camden – FRIED) (Class Code: E3E5F678)

## EVALUATION OF GRADE

Lecture Exams (7) Prep-U online assignments/quizzes (7) In-class activities (7) Total 70% 9% (for completion at level indicated) <u>21%</u> 100%

<u>PHONES or ELECTRONIC DEVICES</u> OF ANY KIND ARE NOT PERMITTED DURING ANY EXAM. If I see a cell phone or any other electronic device out anytime during an exam or before every student has finished and turned in his/her exam booklet, that student will take a "0" on that exam. NO **EXCEPTIONS.** TURN RINGER OFF DURING LECTURE. I will report all acts of cheating to Rutgers Academic Integrity.

<u>Attendance:</u> Students are expected to be on time and to attend every class, ESPECIALLY for days with inclass assignments.

**Exams:** Only documented, excused exam misses can be made up on the first day you return to school. All other missed exams will receive a "0" grade. **Exam booklets MUST NEVER LEAVE the classroom**. Taking a booklet will be considered cheating and you will receive a "0" for the exam. All makeup exams for documented absences and all accommodated exams will be alternate tests. Each exam is worth **10% of your grade**!

**In-class activities:** These activities will take place during the lecture prior to each exam. They will involve different formats and are to help you prepare for the exam. Students missing class that day can not makeup the assignment unless they have a documented medical/emergency excuse. Please tell me ahead of time if you are going to miss the in-class activity day. Each activity is worth **3% of your grade**!

<u>Prep-U online assignments/quizzes:</u> I will assign these online assignments following each exam so that you have plenty of time to complete them. They will be due the lecture prior to the exam. I will not accept any late assignments. They are open book. Feel free to work with a group when completing them. Each assignment is worth approximately **1.3% of your grade**!

**EVALUATION for grades**: No extra credit is available. You should see me early for additional help and study advice. Grades are based on points earned.

**Lecture Slides:** I will post lecture slides to Sakai the day before each class. These will be my rough slides and won't include all information, so it is advised to come to class to get the full picture of the material. You DO NOT have permission to share my note files, PPT files, or the authors resources in whole or in part with any other students from this or any other section or other school. Unless otherwise stated in class, all material in each chapter is fair game for exam questions.

**Cancellation of class:** In the event classes are cancelled, we will do the planned lecture or test at the next scheduled class unless otherwise announced on Sakai. If classes are not cancelled, instructors are expected to hold classes if they can make it to campus. Check Sakai early in the day on a bad weather day for word from me in case I cancel the class. If an exam is scheduled on the date of closure, we will take the exam on the next day we meet.

<u>Students with Disabilities Statement:</u> Rutgers University complies with Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990. Students requesting academic accommodations MUST register with the Office of Disability Services and are responsible for picking up their accommodation letters at the beginning of each semester to present to the instructor. I am available to discuss the necessary accommodations and will work directly with the student to find the best way to help.

<u>Cheating/plagiarism</u>: Any student caught cheating will receive an "F ". Cheating and plagiarism are serious offenses that become a permanent part of your record and can separate you from the University. This includes copying another person's work, cheating on exams, or helping someone else to cheat by giving them answers or allowing them to copy your work. Trust me here. Risking cheating is absolutely NEVER worth it.

<u>University Academic Integrity Statement</u>: The college regards academic dishonesty on the part of the students as unacceptable behavior that could result in dismissal. Every incident of academic dishonesty is required to be reported to the provost. These incidents will be kept in a confidential file by the provost so that a record of the infractions is available when reports are made.

# Definitions:

Academic Dishonesty – includes, but is not limited to, plagiarism, cribbing, or cheating on exams.

<u>Plagiarism</u> – unacknowledged borrorring or duplication of an author's words or ideas whether intentional or not. Common forms:

- (a) Text without quotation marks or proper documentation,
- (b) With documentation but without quotation marks or correct quotation format,
- (c) In paraphrase without proper documentation.

## Course Objectives - Students will:

- 1) Correlate anatomic and physiologic phenomena with common acute and chronic diseases.
- 2) Examine relationships between the natural history of diseases and selected patient education strategies.
- 3) Explain how the evolution of common disease trajectories relates to health protection and promotion strategies
- 4) Analyze the relationships among clinical manifestations of common acute and chronic diseases, appropriate surveillance strategies, pertinent diagnostic work-up, and differential diagnoses.
- 5) Evaluate interventions designed to improve patient outcomes based on acute and chronic disease pathophysiology.

## Student learning outcomes:

At the completion of the course the student will be able to:

- 1. Relate normal physiology and selected pathologic processes encountered across the lifespan.
- 2. Discuss the following for selected disease processes in patients across the lifespan:
  - a. etiology and natural history
  - b. developmental considerations
  - c. pathogenesis
  - d. clinical manifestations
- 3. Correlate pathophysiology with signs and symptoms in patients across the lifespan.
- 4. Examine diagnostic data for disease conditions across the lifespan utilizing appropriate pathophysiologic concepts.
- 5. Analyze the responses to illness and appropriate treatment modalities across the lifespan

<u>Chapter Learning Objectives:</u> Prior to every exam, I will post the learning objectives from each chapter that you should focus on. Consider this as a study guide!

<u>Tentative Schedule:</u> The schedule on the following page may be revised during the course as needed. Exams are scheduled once material has been covered. Exams should occur +/- a week of the scheduled below. \*\*\*\*Lecture will follow each exam on the same day

|          |     |       |      |         | 50:120:347:01 Pathoph                       | 50:120:347:01 Pathophysiology Fall 2018 Tentative Schedule |                   |                           |
|----------|-----|-------|------|---------|---|--|-------------------|---------------------------|
| Week     | Day | Date  | Unit | Chapter | Topic                                       | Exam   | In-class Activity | Online quiz/worksheet due |
| •        | ⊢   | 9/4   | 1    | 1       | Intro to Pathophysiology xix; terminology   |  |                   |                           |
| •        | R   | 9/6   | 1    | 1-2     | Cell and Tissue Function                    |  |                   |                           |
| ſ        | Т   | 9/11  | 1    | 3-5     | cont.                                       |  |                   |                           |
| 7        | R   | 9/13  | 1    | 9       | cont.                                       |  |                   |                           |
| ſ        | T   | 9/18  | 1    | 7       | cont.                                       |  |                   |                           |
| r        | R   | 9/20  | 2    | 8       | Integrative Body Functions                  |  | Yes               | Yes                       |
| •        | Т   | 9/25  | 2    | 6       | cont.                                       | Exam#1 Unit I (Ch 1-7)                                     |                   |                           |
| 4        | R   | 9/27  | 2    | 10      | cont.                                       |  |                   |                           |
| L        | Т   | 10/2  | 3    | 11      | Hematopoietic Function                      |  |                   |                           |
| n        | R   | 10/4  | 3    | 12      | cont.                                       |  | Yes               | Yes                       |
| ų        | Т   | 10/9  | 3    | 13      | cont.                                       | Exam #2 Unit 2 (Ch 8-10)                                   |                   |                           |
| D        | R   | 10/11 | 3    | 13      | cont.                                       |  |                   |                           |
| r        | Т   | 10/16 | 4    | 14      | Infection and Immunity                      |  |                   |                           |
| ,        | R   | 10/18 | 4    | 15      | cont.                                       |  | Yes               | Yes                       |
| c        | Т   | 10/23 | 4    | 16      | cont.                                       | Exam #3 Unit 3 (Ch 11-13)                                  |                   |                           |
| ø        | R   | 10/25 | 5    | 17      | Circulatory Function                        |  |                   |                           |
| C        | ⊢   | 10/30 | 5    | 18      | cont.                                       |  |                   |                           |
| ח        | R   | 10/1  | 5    | 19-20   | cont.                                       |  | Yes               | Yes                       |
| <b>ç</b> | Т   | 11/6  | 6    | 21      | Respiratory Function                        | Exam #4 Unit 4 (Ch 16) & Unit 5 (Ch 18-20)                 |                   |                           |
| ρT       | R   | 11/8  | 6    | 22-23   | cont.                                       |  |                   |                           |
| 11       | Т   | 11/13 | 7    | 24-25   | Kidney and Urinary Tract Function           |  |                   |                           |
|          | R   | 11/15 | 7    | 26-27   | cont.                                       |  | Yes               | Yes                       |
| ,        | Т   | 11/20 | 8    | 28      | Gastrointestinal and Hepatobiliary Function | Exam #5 Unit 6 (Ch 22-23) & Unit 7 (Ch 25-27)              |                   |                           |
| 71       | R   | 11/22 |      |         |   | HOLIDAY - no class   |                   |                           |
| ,        | Т   | 11/27 | 8    | 29-30   | cont.                                       |  |                   |                           |
| CI       | R   | 11/29 | 6    | 31      | Endocrine System                            |  |                   |                           |
| 77       | Т   | 12/4  | 6    | 32-33   | cont.                                       |  |                   |                           |
| t<br>F   | R   | 12/6  | 10   | 34-35   | Nervous System                              |  | Yes               | Yes                       |
| 1        | ⊢   | 12/11 | 10   | 36      | cont.                                       | Exam #6 Unit 8 (Ch 29-30) & Unit 9 (Ch 32-33)              |                   |                           |
| G        | Я   | 12/13 | 10   | 37-38   | cont.                                       |  | Yes               | Yes                       |
| Finals   | ⊢   | TBD   |      |         |   | Exam #7 Unit 10 (Ch 35-38)                                 |                   |                           |
|          |     |       |      |         |   |  |                   |                           |