

BY216-4B Introduction to Human Pathophysiology
Volker 101A, T/TH 5:30 – 6:45 P.M.

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Office Hours: MWF. 1:30-2:30 PM
T / TH 11:00 – 12:00
Prearranged Visit by Request

Course Materials:

Required Text *Pathophysiology: Biological and Behavioral Perspectives 3rd Ed.*,

Copstead and Banasik. Publisher W. B. Saunder, Philadelphia, PA.

Class Web Site: <http://main.uab.edu/show.asp?durki=25078>

COURSE DESCRIPTION: We will examine numerous diseases affecting the human body in a systemic fashion. Discussions begin with the foundations to cellular life, factors contributing to cell injury and death, and the bodily response to threats and injury (**UNIT I**). Next, we shall examine the disease models common to any and all systematic dysfunction and with the use of specific examples, illustrate conceptual components of the disease model (**UNIT II**). **Unit III** consists of Hematopoetic and Oxygen transport dysfunction that ultimately affect all vital function. **Unit IV** examines the importance of soluble gas exchange and fluid physiology as important processes maintaining blood acidity and volume.

As Pathophysiology is the accumulative knowledge from several scientific disciplines, this course involves gaining the scientific truths determined from medical physiology, microbiology, histology, cytology, molecular biology and epidemiology. In the broadest sense, the **OBJECTIVES** to meet for this course include Mastered understanding of normal and pathological **processes** of topics discussed, the clinical **presentation**, and the bodily compensatory **responses** as well as various **treatment** strategies utilized in present medical protocol. More detailed objectives for units will be made available to the students when covering a given topic. Your background knowledge in science, particularly human science, is paramount to understanding the information describe in course topics. By gaining a comprehensive understanding of this course's material, you will be better equipped to communicate effectively with your clients and other health professionals. Additionally, the course promotes the framework necessary toward achieving comprehensive understanding of our environment and human disease, our personal wellness responsibilities and research development for medical intervention.

LECTURE: Lectures will primarily follow the order of text Chapters except where noted on the schedule (see back page) The lecture is presented in the PowerPoint and outlines of the lecture are available to students through the class web page. I strive to provide thorough and pictorial descriptions and therefore will be providing additional information beyond the template notes online, in the form of graphs, charts, pictorials, active learning worksheets and class participation exercises. The PowerPoint presentations used in lecture will NOT be made available to students through the class web site or outside the lecture period. Students are expected to have achieved satisfactory knowledge of chemistry and **Human Science** prior to enrollment. Also expected are well developed academic skills such as good note taking practices, prelecture preparedness and attentive lecture attendance. Materials found on the web site are intended to aid you and is **NOT** a contract of any kind between the student, the instructor or UAB (See website disclaimer). My goal is to provide the most reliable and truthful information about the bodily struggle to avoid and heal from disease. The student should emerge from the course having gained the essentials necessary for comprehending human pathology and potential consequences.

EXAMS & GRADING

Exams: All material from lecture, handouts, class discussions and assigned reading is subject to evaluation. Examinations are comprised of various question formats with a majority being of multiple-choice, matching and True / False. Exams may also include fill in the blank, short answer and essay format. You will need a lead number 2 pencil for the lecture exams as the majority of scoring is through scantron answer sheets. Exams evaluate various degrees of understanding and mastery of course objectives that include a **LEVEL I** for factual comprehension, **LEVEL II** for meaningful concepts and associated modeling and **LEVEL III** that determines a student's ability to critically analyze and problem solve. The majority of questioning will evaluate Level II and III mastery. The course has **Four** (4) exams, given during regular class time with the exact date and material references for each **ANNOUNCED** in Lecture approximately 1 week prior to the evaluative date. The course includes a **VOLUNTARY, COMPREHENSIVE, BONUS FINAL** that may yield as much as 3 percent toward the total grade based on exam performance. The bonus final is given during finals week (see lecture schedule).

Exam Policies

Unit exams will be conducted on regular lecture days with the exception of Unit IV Exam which is held at the day of the Final. Exams are timed and the student will have only the time allotted to complete the exam. Extended time requests are not considered without registration through Disabled Student Services (see below in Additional Information). The Student will receive a grade report for each exam approximately within 1 to 2 class meetings and therefore all student information must be accurately completed on both the exam and answer sheet to generate the report. Disputed grade reports must be brought to attention within **1 WEEK** of having received the Grade Report. Exams are the sole property of UAB and the Instructor and anyone **pirating** an exam copy will have the same action taken against him or her similar to theft of University property. Tardiness on testing days may result in either a zero grade or makeup exam as **No one** will be allowed to participate in an exam once the first student has reached completion. This has typically been about 30 minutes past the exam start time. No **early** exams are permitted regardless of circumstance. **Electronic communication** devices or calculators are prohibited and will be placed out of sight. **During exams**, students are not permitted to **leave** the test area unless extreme circumstances arise.

Makeup exams will not be given unless a University approved excuse is submitted (Health of self or immediate family, Family death, Emergency circumstances, University Sponsored Events) on the **Request for Makeup Form within 1 class meeting of the missed requirement**. The **Request for Makeup** is obtained from the Instructor and proof of the absence is to be presented at the time of the Request. No more than **1 makeup exam for each student** over the course of the semester is permitted unless extreme, extenuating circumstances prevail. The Instructor will verify the excuse submitted for authenticity. The student will have at least two **end of the semester** optional dates to complete the missed course requirement. Failure to provide the excuse or attend the arranged makeup date will result in a zero grade. Makeup exams cover the same material but are constructed from different questions and formats. **No makeup or early Exam completion** is available for the Voluntary, Bonus Final Exam.

Grading Each exam is scored for the number correct (raw) and the exam percent is determined by: (Raw / Total possible) X 100. The following scale is then applied - 100 - 89.45% (A), 89.44 - 79.45 (B), 79.44 - 69.45 (C), 69.44 - 59.45 (D), and at or below 59.44 (F) scale.

The course average is calculated by averaging your 4 exams and adding the amount of Bonus from the Final Exam then applying the same grade scale as shown above.

Example: Exam 1 = 88.7, Exam 2 = 91.1, Exam3 = 89.7, **Exam4 = 81.4**

Course Avg. (prior to Bonus Final) = $(88.7 + 91.1 + 89.7 + 81.4) / 4 = 87.7$ (B)

Course Avg. for "A" = 89.45. Therefore the bonus final must aid at least $(89.45 - 87.7) = 1.75$.

Bonus Final Avg. to achieve 89.45 (A) then = $(1.75 / 3) \times 100 = 58.4\%$

ADDITIONAL INFORMATION

Class Conduct. Students are expected to conduct themselves in accordance with UAB policy covering Academic and Non-Academic conduct as set forth in the Catalog of undergraduate programs pages 45 – 47 and in UAB's *DIRECTIONS* supplement. Failure to adhere to UAB student conduct policies will result in the appropriate notification and disciplinary action if necessary. Please, at all times be respectful of your fellow students in every way possible. In the large lecture setting, disruptive conduct may go unnoticed by the lecturer and therefore, I ask students to notify me of any disruptive behavior.

Participation - No individuals (including children) not registered for the course are allowed admittance during regular lecture, Unit exams, or Final exam.

Electronic Media - Only restricted Emergency use is permitted for cell phones and/or pagers during regular lecture. Cell phone and/or Pager ringers are to be **set Vibrate or turned off**. During examinations, electronic devices are prohibited and should either be left home or disabled.

Class discussions are restricted to the lecture topics and occur such that all students may benefit. I invite and look forward to constructive questions from you the student during lecture as I feel it effectively enhances our discussions. However, please refrain from asking diagnostic questions concerning self or others as I am not a medical physician and would be legally negligent if I were to render any diagnosis and or treatment suggestions. Additionally, questions should aim toward enhancing the Course Topics and not Course Administration. If you have questions about administrative policy, please schedule an Appointment.

Recording of lectures is restricted to audio only and students are responsible for all technical procedures and use.

PowerPoint presentations used in lecture are the sole property of the Instructor and available for viewing ONLY during the lecture presentation.

Fairness and Treatment - All administrative policies enforced throughout the school semester are at the Instructors discretion and are implemented on the basis of fairness to all students enrolled. There is **NO preferential treatment** such that any student gains benefit while their peers are without same benefit and this includes requests for BONUS work. I aim to assist in your EARNED success by providing equal opportunity to all.

Severe Weather announcements concerning UAB closings and class cancellations may be obtained by calling the instructor's office voice mail (934-3526) and listening to the announcement or by tuning and listening to 90.3 FM WBHM.

Students officially registered with **Disability Student Services** are required to submit their paperwork to the Instructor at the beginning of the semester. DSS users are responsible for reminding the Instructor of the arrangements agreed upon prior to **EACH** course requirement.

BY 216 -4B Pathophysiology Class Schedule Fall 2007

All Topics, Reading Assignments, and Exam dates presented are subject to change at the Instructors discretion

| Calendar | Lecture Topics | Advanced Text Reading | Exams | Announcements |
|---------------------------|---|-----------------------|-----------------|---|
| Week 1 Aug. 23 | Introduction and Pathophysiology as a Science | Ch. 1 | | Review Chapter 3 and 5 on Cellular Physiology |
| Week 2 Aug. 28 / 30 | Cell Damage / Death | Ch. 4 | | |
| Week 3 Sept. 4 / 6 | Body Defenses to threats and Injury | Ch. 2 / 9 | | UAB Close Sept. 3rd |
| Week 4 Sept. 11 / 13 | Model of Disease - Genetic Defects | Ch. 5/6 | Exam 1 | |
| Week 5 Sept 18 / 20 | Model of Disease - Neoplasia | Ch. 7 | | Bring # 2 Pencil to Exam |
| Week 6 Sept. 25 / 27 | Model of Disease - Infection | Ch. 8 | | |
| Week 7 Oct. 2 / 4 | Model of Disease - Immune Dysfunction | Ch. 10 - 12 | | |
| Week 8 Oct. 9 / 11 | Hematopoietic Diseases | Ch. 13 | Exam 2 | |
| Week 9 Oct. 16 / 18 | Hematopoietic Diseases Vascular Injury | Ch. 14 - 15 | | |
| Week 10 Oct. 23 / 25 | Cardiac Deficiency and Failure | Ch. 18 - 19 | | Withdraw deadline 10/22 |
| Week 11 Oct. 30/Nov. 1 | Circulatory Failure | Ch. 20 | | |
| Week 12 Nov. 6 / 8 | Pulmonary Failure | Ch. 21 | Exam 3 | |
| Week 13 Nov. 13 /15 | Obstructive & Restrictive Pulmonary Disease | Ch. 22 - 23 | Makeup Exam TBA | |
| Week 14 Nov. 20 | Fluid homeostasis and disease | Parts Ch. 24 - 26 | | Thanksgiving Holiday Nov 21 - 25 |
| Week 15 Nov. 27 / 29 | Intrarenal Disorders and Failure | Parts Ch. 27 - 28 | | |
| Week 16 Dec. 4 | Exam 4 | | Exam 4 | Weather Day Dec. 6 |
| Finals Week Dec 11 | Testing begins at 4:15 PM | | Optional Final | Final Bonus Max 3% toward Course Average |