American Public University System

The Ultimate Advantage is an Educated Mind

School of Health Sciences
SCIN255
Pathophysiology and Pharmacology
Credit Hours: 3
Length of Course: 16 weeks
Prerequisite: HIMA100

Instructor Information

Please refer to the online classroom for your instructor's contact information and biography.

Course Description (Catalog)

This course introduces students to the fundamental physiologic principles of disease and injury and the mechanisms and use of drugs in the care and treatment of human beings. It is intended to prepare students for careers in the health sciences and healthcare systems (medical assisting, medical technology, radiologic technology, respiratory technology, health information management, medical coding, etc.). Initial lessons provide an overview of cellular injury, inflammation, immunity, drug naming, classification, and common mechanisms of drug action. Later lessons examine the common diseases and medications affecting each organ system.

Course Scope

This course is required in obtaining a Bachelor of Science in Health Information Management. For a student to be able to produce work with this degree, the student must know about and understand the fundamental physiologic principles of disease and injury and the mechanisms and use of drugs in the care and treatment of human beings. After the completion of this course, a student will be able to do all of the following tasks that are essential to health information management:

 Obtaining a foundation in medical and pharmacology vocabularies used in HIM classification systems.

- Be able to survey and understand health records adequately.
- Be able to understand coding manuals and guidelines.

Course Learning Objectives

After successfully completing this course, students will be able to:

- CO 1 Describe the factors that lead to disease and injury in the human body.
- CO 2 Explain the inflammation response.
- CO 3 Explain the immune response to disease and injury.
- CO 4 Explain the pathophysiology of common diseases.
- CO 5 Describe the naming and classification of drugs.

Course Delivery Method

This course delivered via distance learning will enable students to complete academic work in a flexible manner, completely online. Course materials and access to an online learning management system will be made available to each student. Online assignments are due weekly as noted on the course outline and can include Forum questions and written assignments. Assigned faculty will support the students throughout this sixteen-week course.

Course Materials

Required Course Textbooks:

Principles of Pathophysiology and Pharmacology by Neighbors, Tannehill-Jones, Woodrow, Colbert, and Smith; 1st Edition; 2017

Available through Vital Source; ISBN: 9781337792127; 978-1-337-79158-8

This is a custom textbook for this class that contains a compilation of material from *Human Diseases by Neighbors & Tannehill-Jones* and *Essentials of Pharmacology for Health Professions by Woodrow, Colbert, and Smith*. Reading assignments are listed as from the individual texts.

Academic Writing Requirements:

The School of Health Sciences requires use of APA format and style and all students are encouraged to have a current copy of the *APA Publication Manual*. All written assignments are to be submitted in APA format style unless otherwise noted in the assignment directions.

Web Sites

In addition to the required course texts, the following public domain web sites are useful. Please abide by the university's academic honesty policy when using Internet sources as well. Note web site addresses are subject to change.

- AHIMA Home American Health Information Management Association (n.d.). Retrieved December 2, 2014, from http://www.ahima.org/
- HIMSS Healthcare Information and Management Systems Society, (n.d.). Retrieved December 2, 2014, from http://www.himss.org/

Evaluation Procedures

Forum

Please join the forums each week. Replies must be posted in the week due and replies after the end of each week will not be graded. The forums are for student interaction and input should be submitted before the week ends in order to fully participate in the discussions. Students should demonstrate their own knowledge in the forums and avoid copying and pasting from websites.

Guidelines:

- The Introduction forum must be submitted by 11:55 pm, ET, Sunday of week 1 to maintain course registration.
- All subsequent initial forum responses must be posted by 11:55 pm, ET, Wednesday of each week.
- Initial responses are to be original in content and demonstrate a thorough analysis of the topic.
- Reply to <u>at least 2</u> of your classmates in each forum by 11:55 pm, ET, Sunday of each week
- Responses to classmates are significant to advance the forum.
- All forums can be accessed in the Forums section of the course.
- Respond to all questions posed to you in your initial post by instructor and/or peers.
- Forums posted after the week has ended (i.e. after Sunday), will receive no points. The discussion is over and you will not receive credit for participation.

Please reference the <u>Forum Grading Rubric (Attachment A)</u> for details on how your forum assignments will be evaluated.

Course Grading Outline

Item	Total Number	Percentage Each	Percentage of Final Grade
Weekly Forums	16	1.25	20
Weekly Quizzes	12	1.67	20

Examinations	4	10	40
Research Paper	1	20	20
Total			100

Course Outline					
Lesson	Topic	Course Objective(s)	Reading(s)	Assignment(s) (Due by Sunday at 11:55 pm, ET)	Forum(s)
1	Mechanisms of Disease	CO-1	Text Chapter 2 (Human Diseases)	Week 1 Quiz	Week 1 Forum Introduction
2	Neoplasms	CO-1 CO-4	Text Chapter 3 (Human Diseases) Text Chapter 14 (Pharmacology)	Week 2 Quiz	Week 2 Forum
3	Inflammation and Infection	CO-2	Text Chapter 4 (Human Diseases) Text Chapter 17 (Pharmacology)	Week 3 Quiz	Week 3 Forum
4	Review Examination 1		None	Examination #1	Week 4 Forum
5	Immune System Diseases and Disorders	CO-3 CO-4 CO-5	Text Chapter 5 (Human Diseases)	Week 5 Quiz	Week 5 Forum
6	Musculoskeletal System Diseases and Disorders	CO-4 CO-5	Text Chapter 6 (Human Diseases) Text Chapter 21 (Pharmacology)	Week 6 Quiz	Week 6 Forum

7	Cardiovascular System Diseases and Disorders	CO-4 CO-5	Text Chapter 8 (Human Diseases) Text Chapter 25 (Pharmacology)	Week 7 Quiz	Week 7 Forum
8	Review Examination #2		None	Examination #2	Week 8 Forum
9	Respiratory System Diseases and Disorders	CO-4 CO-5	Text Chapter 9 (Human Diseases) Text Chapter 26 (Pharmacology)	Week 9 Quiz	Week 9 Forum
10	Digestive System Diseases and Disorders	CO-4 CO-5	Text Chapter 11 (Human Diseases) Text Chapter 16 (Pharmacology)	Week 10 Quiz	Week 10 Forum
11	Urinary System Diseases and Disorders	CO-4 CO-5	Text Chapter 13 (Human Diseases) Text Chapter 15 (Pharmacology)	Week 11 Quiz	Week 11 Forum
12	Review Examination #3		None	Examination #3	Week 12 Forum
13	Endocrine System Diseases and Disorders	CO-4 CO-5	Text Chapter 14 (Human Diseases) Text Chapter 23 (Pharmacology)	Week 13 Quiz	Week 13 Forum

14	Reproductive System Diseases and Disorders	CO-4 CO-5	Text Chapter 17 (Human Diseases) Text Chapter 24 (Pharmacology)	•	Week 14 Forum
15	Integumentary System Diseases and Disorders		Text Chapter 18 (Human Diseases) Text Chapter 12 (Pharmacology)		Week 15 Forum
16	Review Examination #4 Research Paper			Examination #4 Research Paper Due by 11:55 pm, ET, Sunday Course Review	Week 16 Forum

Policies

Please see the <u>Student Handbook</u> to reference all University policies. Quick links to frequently asked question about policies are listed below.

Drop/Withdrawal Policy
Plagiarism Policy
Extension Process and Policy
Disability Accommodations

ATTACHMENT A

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HIMA Forum Grading Rubric

Focus/quality of work (includes responses to any instructor's questions):	20
Content/subject knowledge/critical thinking:	20
Initial post submitted by Wednesday at 11:55pmEST	20
At least two replies to classmates by Sunday at 11:55pmEST	20
Writing (grammar/mechanics):	15
Submission by deadline:	5
TOTAL	100