Pathophysiology



MASC395

Southwestern College Professional Studies

COURSE SYLLABUS

I. Course Catalog Description

This is a foundational course in the study of physiologic and pathologic concepts of human homeostasis and alterations in homeostasis. It focuses on rationales for adaptations of human functioning to stressors and altered health states. This course provides a basis for understanding alterations in human functioning imposed by disease processes so that application to understanding clinical presentations can be made. Anatomy and Physiology and other supplementary science courses may provide a foundational knowledge base for this course. 3 credit hours

II. Required and Supplementary Instructional Materials

Porth, C.M. (2015). Essentials of pathophysiology: concepts of alteres health states. (4th ed). Philadelphia: Wolters Kluwer (online text in Blackboard course)

III. Learning Outcomes

Learning outcomes describe the knowledge, skills, values, and attitudes that learners gain as the result of a particular learning experience. Southwestern College Professional Studies has learning outcomes specific to each program of study that are in line with the institutional outcomes of critical thinking, ethical reasoning, leadership, communication, and career preparation. Course outcomes support program outcomes and are listed below.

Upon successfully completing this course, the learner will be able to:

- 1. Demonstrate an understanding of pathophysiology and the essential features of cellular function.
- 2. Analyze pathophysiological processes involved in the development of cardiovascular disorders.
- 3. Explain the physiological basis for signs and symptoms of respiratory disorders.
- 4. Differentiate the pathophysiological process of various disorders affecting the renal system.
- 5. Analyze the differences between various disease processes affecting the gastrointestinal system.
- 6. Evaluate the effect of various endocrine disorders on the human body.
- 7. Examine the pathophysiological processes of cancer and other disorders affecting the immune system.
- 8. Analyze the pathophysiological process of various disorders affecting the male and female reproductive systems.
- 9. Differentiate between various disorders affecting the neurological system.
- 10. Examine the relationship between disease processes affecting the musculoskeletal system.
- 11. Develop critical thinking skills by submitted written, visual and oral presentations.

At the end of the course, learners may vary in their ability to achieve these outcomes. You are more likely to achieve these outcomes only if you attend class and/or online activities as required by the syllabus, complete the requirements for all assignments to the best of your ability, participate actively in class activities and group work as directed, and study diligently for exams.

IV. Course Policies

Students are expected to read and abide by the course policies located in the instructor-specific syllabus in the blackboard course.

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V. Course Requirements:

Requirements	Number of Assignments	Points Possible	Percent of Grade
Case Studies	2	100	10%
Discussion Forums	12	420	42%
Introduction Discussion Forum	1	20	2%
Endocrine Concept Map	1	100	10%
Neurological Presentation	1	100	10%
Patient Education Handout Assignment	1	100	10%
Final Comprehensive Paper	1	100	10%
Presentation Over Final Comprehensive Paper	1	60	6%
Total Points			

VI. Course at a Glance:

VI.	Course at a Glance:		
Unit	Reading & Preparation Activities	Graded Work Due	
1	Module 1.1 Why Pathophysiology	Introduction Discussion	
	Module 1.2 Tissues	Unit 1.1 Discussion	
	Module 1.3 Cellular Injury Causes	Unit 1.2 Discussion	
	Module 1.4 Cellular Changes	Unit 1 Case Study	
	Module 1.5 Inflammatory Responses		
	Module 1.6 Function of DNA		
	Module 1.7 Genetic Disorders		
2	Module 2.1 Atheromas	Unit 2.1 Discussion	
	Module 2.2 Heart Failure	Unit 2.2 Discussion	
	Module 2.3 Pericarditis and Infectious Endocarditis	Unit 2 Case Study	
	Module 2.4 Hypertension		
	Module 2.5 Aortic Aneurysms and Dissection		
	Module 2.6 Peripheral Vascular Disease and Leg		
	Ulcers		
	Module 2.7 Congenital Heart Conditions		
	Module 2.8 Complications of Myocardial Infarction		
3	Module 3.1 Respiratory Distress Syndrome	Unit 3.1 Discussion	
	Module 3.2 Obstructive Airway Disorders	Unit 3.2 Discussion	
	Module 3.3 Symptom of Cystic Fibrosis	Neurological Presentation	
	Module 3.4 Arterial Blood Gases		
	Module 3.5 Pulmonary Tuberculosis		
	Module 3.6 Pneumonia		
	Module 3.7 Pneumothorax		
	Module 9.3 Stroke		
	Module 9.4 Seizures		
	Module 9.5 Headaches		
4	Module 4.1 Urinary Tract Obstruction	Unit 4.1 Discussion	
	Module 4.2 Polycystic Kidney Disease	Unit 4.2 Discussion	
	Module 4.3 Acute Kidney Injury	Endocrine Disorder Concept Map	
	Module 4.4 Chronic Kidney Disease		
	Module 4.5 Urinary Incontinence		
	Module 6.1 Endocrine Disorders		
	Module 6.2 Adrenal Cortex Disorders		
	Module 6.3 Hypo and Hyperpituitarism		
	Module 6.4 Diabetes		

Unit	Reading & Preparation Activities	Graded Work Due	
5	Module 7.1: Cancer Grading and Staging	Unit 5.1 Discussion	
	Module 7.2: Cell Proliferation & Differentiation	Unit 5.2 Discussion	
	Module 7.3: Benign Versus Malignant Tumors	Patient Education Handout Assignment	
	Module 7.4:Cancer Genes		
	Module 7.5: Primary Immunodeficiency &		
	Autoimmune Lupus		
	Module 7.6: Hypersensitivity Immune Responses		
	Module 7.7: Innate Immune System		
	Module 7.8: Active and Passive Immunity		
	Module 8.1 Breast Cancer Risk Factors		
	Module 8.2 Ovarian Cancer		
	Module 8.3 Prostate Cancer		
	Module 8.4 Testicular Cancer		
6	Module 5.1 Gastroesophageal Reflux Disease	Unit 6.1 Discussion	
	Module 5.2 Acute and Chronic Gastritis	Unit 6.2 Discussion (Presentation)	
	Module 5.3 Crohn Disease and Ulcerative Colitis	Final Comprehensive Written Paper	
	Module 5.4 Colon Cancer	Presentation on Comprehensive Written Paper	
	Module 5.5 Intestinal Obstruction		
	Module 5.6 Viral hepatitis		
	Module 5.7 Cirrhosis		

VII. Other Policies and Requirements

Follow this link to the Southwestern College Professional Studies <u>Standard Syllabus</u> in Blackboard. You may be required to log in.