ANAT 140 Course Outline as of Spring 2022

CATALOG INFORMATION

Dept and Nbr: ANAT 140 Title: FUNDAMENTALS ANAT/PHYSIO Full Title: Fundamentals of Anatomy and Physiology Last Reviewed: 2/10/2020

Units		Course Hours per Week		Nbr of Weeks	Course Hours Total	
Maximum	2.00	Lecture Scheduled	1.50	17.5	Lecture Scheduled	26.25
Minimum	2.00	Lab Scheduled	2.00	6	Lab Scheduled	35.00
		Contact DHR	0		Contact DHR	0
		Contact Total	3.50		Contact Total	61.25
		Non-contact DHR	0		Non-contact DHR	0

Total Out of Class Hours: 52.50

Total Student Learning Hours: 113.75

Title 5 Category:	AA Degree Applicable
Grading:	Grade or P/NP
Repeatability:	00 - Two Repeats if Grade was D, F, NC, or NP
Also Listed As:	
Formerly:	

Catalog Description:

Course covers the fundamentals of human anatomy and physiology. Intended for students in medical assisting programs.

Prerequisites/Corequisites:

Recommended Preparation:

Limits on Enrollment:

Schedule of Classes Information:

Description: Course covers the fundamentals of human anatomy and physiology. Intended for students in medical assisting programs. (Grade or P/NP) Prerequisites/Corequisites: Recommended: Limits on Enrollment: Transfer Credit: Repeatability: Two Repeats if Grade was D, F, NC, or NP

ARTICULATION, MAJOR, and CERTIFICATION INFORMATION:

AS Degree: CSU GE:	Area Transfer Area	Effective: Effective:	Inactive: Inactive:
IGETC:	Transfer Area	Effective:	Inactive:
CSU Transfer	: Effective:	Inactive:	
UC Transfer:	Effective:	Inactive:	

CID:

Certificate/Major Applicable:

Both Certificate and Major Applicable

COURSE CONTENT

Student Learning Outcomes:

At the conclusion of this course, the student should be able to:

- 1. Describe the structure of the major organs and organ systems of the human body.
- 2. Summarize the major functions of the body in the context of homeostasis.

Objectives:

At the conclusion of this course, the student should be able to:

- 1. Explain the basic structural plan of the human body and the concept of homeostasis.
- 2. Name the organ systems, identify the major organs, and describe their functions.
- 3. Name the factors essential for life, and describe how they are supplied, transported and regulated inside the body.
- 4. Compare how body-wide communication is accomplished by the nervous and endocrine systems.
- 5. Describe the structures and functions necessary to accomplish support, movement, vision, hearing, digestion, reproduction, and defense against injury and infection.

Topics and Scope:

- I. Introductory Concepts
 - A. Levels of biological organization
 - B. Anatomical terminology
 - C. Body planes and cavities
 - D. Homeostasis
- II. Cells, Tissues, and Organs
 - A. Cells
 - 1. organelles
 - 2. macromolecules (including proteins)
 - 3. cell membranes
 - B. Tissues
 - C. Organs (including skin)
- III. Support and Movement
 - A. Skeletal system

- 1. bones
- 2. joints
- 3. hemopoiesis
- B. Muscular System
 - 1. skeletal muscles
 - 2. process of movement
- IV. Control Systems
 - A. Nervous system
 - 1. neurons and synapses
 - 2. central nervous system
 - 3. peripheral nervous system
 - 4. special senses
 - a. eye
 - b. ear
 - B. Endocrine system
 - 1. endocrine glands
 - 2. hormones
- V. Internal Environment
 - A. Circulation
 - 1. cardiovascular system
 - 2. lymphatic system
 - B. Defense
 - 1. inflammation
 - 2. specific immune response
 - C. Respiratory system
 - 1. lungs
 - 2. process and regulation of respiration
 - D. Urinary System
 - 1. kidneys & nephrons
 - 2. process of urine formation
 - 3. regulation of water, salt, pH, and blood pressure
 - E. Digestive system
 - 1. gastrointestinal tract and accessory organs/glands
 - 2. process of digestion
- VI. Reproduction
 - A. male reproductive structures and basic functions
 - B. female reproductive structures and basic functions
- VII. Laboratory Exercises
 - A. The above mentioned structures will be studied by means of models, charts, and specimens in the anatomy lab.
 - B. Simple physiological lab exercises will be performed on the following topics:
 - 1. muscle contraction
 - 2. sensory receptor function
 - 3. eye and ear function
 - 4. blood pressure
 - 5. blood typing
 - 6. acid base balance
 - 7. respiration
 - 8. renal function

Assignment:

Lecture- and Lab-Related Assignments:

- 1. Weekly reading in text, approximately 20-30 pages
- 2. Homework assignments: brief reports on lab activities and/or labeling diagrams, averaging one assignment every week
- 3. Formal assessment: quizzes (9-17), two exams (combining lecture and lab material), and a final exam. Exams include identification questions and essay questions requiring short written answers.

Methods of Evaluation/Basis of Grade:

Writing: Assessment tools that demonstrate writing skills and/or require students to select, organize and explain ideas in writing.

Homework assignments

Problem Solving: Assessment tools, other than exams, that demonstrate competence in computational or non-computational problem solving skills.

None

Skill Demonstrations: All skill-based and physical demonstrations used for assessment purposes including skill performance exams.

None

Exams: All forms of formal testing, other than skill performance exams.

Quizzes, exams, and final exam

Other: Includes any assessment tools that do not logically fit into the above categories.

Participation

Representative Textbooks and Materials:

Anatomy, Physiology, and Disease: An Interactive Journey for Health Professions. 3rd ed. Colbert, Bruce and Ankney, Jeff and Lee, Karen. Prentice Hall. 2020 Instructor Prepared Materials

	10 - 15%
than exams, that or non-	
	Problem solving 0 - 0%
physical ses including skill	
	Skill Demonstrations 0 - 0%
than skill	
	Exams 70 - 80%
do not logically	

Writing

Other Category

5 - 15%