ANAT 140 Course Outline as of Fall 2020

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:	**Area**	Effective:	Inactive:
CSU GE:	**Transfer Area**	Effective:	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:
Students will 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	Writing 10 - 15%

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

None	Problem solving 0 - 0%

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

None	Skill Demonstrations 0 - 0%

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

Quizzes, exams, and final exam	Exams 70 - 80%

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

Participation	Other Category 5 - 15%

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