

**ANAT 140 Course Outline as of Fall 2011****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	8	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. For students in dental assisting, psychiatric technician and medical assisting programs.

**Prerequisites/Corequisites:****Recommended Preparation:**

Eligibility for ENGL 100 or ESL 100

**Limits on Enrollment:****Schedule of Classes Information:**

Description: Course covers the fundamentals of human anatomy and physiology. For students in dental assisting, psychiatric technician and medical assisting programs. (Grade or P/NP)

Prerequisites/Corequisites:

Recommended: Eligibility for ENGL 100 or ESL 100

Limits on Enrollment:

Transfer Credit:

Repeatability: Two Repeats if Grade was D, F, NC, or NP

## **ARTICULATION, MAJOR, and CERTIFICATION INFORMATION:**

<b>AS Degree:</b>	<b>Area</b>	<b>Effective:</b>	<b>Inactive:</b>
<b>CSU GE:</b>	<b>Transfer Area</b>	<b>Effective:</b>	<b>Inactive:</b>
<b>IGETC:</b>	<b>Transfer Area</b>	<b>Effective:</b>	<b>Inactive:</b>
<b>CSU Transfer:</b>		<b>Effective:</b>	<b>Inactive:</b>
<b>UC Transfer:</b>		<b>Effective:</b>	<b>Inactive:</b>

**CID:**

**Certificate/Major Applicable:**

Certificate Applicable Course

## **COURSE CONTENT**

### **Outcomes and Objectives:**

Upon completion of this course 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. Summarize the structures and functions necessary to accomplish movement of the body.
4. Compare how body-wide communication is accomplished by the nervous and endocrine systems.
5. Describe the structure and functions of the eye and ear.
6. Name the factors essential for life, and describe how they are supplied, transported and regulated inside the body.
7. Compare the various structures and processes used for defense against injury and infection.
8. Describe human reproductive structures and functions.

### **Topics and Scope:**

- I. Introductory concepts
  - A. levels of biological organization
  - B. anatomical terminology
  - C. body planes, cavities
  - D. homeostasis
- II. Cells, tissues, organs
  - A. cells
    1. organelles
    2. macromolecules
    3. cell membranes
  - B. tissues
  - C. organs
  - D. skin

### III. Support and movement

#### A. Skeletal system

1. bones
2. joints
3. hemopoiesis

#### B. Muscular System

1. muscles
2. movement

### IV. Control systems

#### A. Nervous system

1. neurons and synapses
2. CNS - central nervous system
3. PNS - peripheral nervous system
4. special senses: eye and ear

#### B. Endocrine system

1. endocrine glands
2. hormones

### V. Internal environment

#### A. Circulation

1. cardiovascular system
2. lymphatic system

#### B. Immune system

1. inflammation
2. specific immune response

#### C. Respiratory system

1. lungs, thoracic cavity
2. regulation of respiration

#### D. Urinary System

1. kidneys & nephrons
2. urine formation
3. regulation: water, salt, pH, blood pressure

#### E. Digestive system

1. gastrointestinal tract and accessory glands
2. digestion

### VI. Reproduction

#### A. male reproductive structures and functions

#### B. female reproductive structures and functions

### **Assignment:**

1. Weekly reading in text, 25-30 pages
2. Study of charts, models, and specimens during lab hours
3. Performance of simple physiological lab exercises
4. Homework assignments: brief reports on lab activities, labeling diagrams; averaging one assignment every week
5. Formal assessment: 11 quizzes, 2 midterm exams and 1 final exam including objective, labeling, and essay questions

### **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.

None, This is a degree applicable course but assessment tools based on writing are not included because this course includes essay exams that fulfil the writing component of the course.

Writing  
0 - 0%

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

Homework

Problem solving  
10 - 15%

**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.

Multiple choice, completion, labeling and essay

Exams  
70 - 80%

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

Participation in Lab

Other Category  
5 - 20%

**Representative Textbooks and Materials:**

ANATOMY, PHYSIOLOGY, AND DISEASE, Colbert, Ankney, Lee; Pearson Publishing, 2009  
Instructor Prepared Materials