#### **ANAT 140 Course Outline as of Fall 2015**

### **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	<b>S</b>	Nbr of Weeks	<b>Course Hours Total</b>	
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. Intended for students in dental assisting 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 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:**

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:

Certificate Applicable Course

### **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:**

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: 9-12 quizzes, 2 midterm exams and 1 final exam including objective, labeling, and 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.

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 - 15%

# **Representative Textbooks and Materials:**

Anatomy, Physiology, and Disease: An Interactive Journey for Health Professions, Colbert, Ankney, Lee, Prentice Hall; 2nd edition, 2012 Instructor Prepared Materials