### ANAT 1 Course Outline as of Summer 2020

## **CATALOG INFORMATION**

Dept and Nbr: ANAT 1 Title: GENERAL HUMAN ANATOMY Full Title: General Human Anatomy Last Reviewed: 10/8/2018

Units		Course Hours per Week		Nbr of Weeks	<b>Course Hours Total</b>	
Maximum	5.00	Lecture Scheduled	3.00	17.5	Lecture Scheduled	52.50
Minimum	5.00	Lab Scheduled	6.00	8	Lab Scheduled	105.00
		Contact DHR	0		Contact DHR	0
		Contact Total	9.00		Contact Total	157.50
		Non-contact DHR	0		Non-contact DHR	0

Total Out of Class Hours: 105.00

Total Student Learning Hours: 262.50

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:**

Study of gross and microscopic structure of human tissues, organs and organ systems; includes dissection of human cadavers. (Intended for nursing and dental hygiene majors.)

#### **Prerequisites/Corequisites:**

Completion of BIO 10 or higher (V7) and Course Completion of ENGL 1A (OR ESL 10) or appropriate placement based on AB705 mandates

### **Recommended Preparation:**

### **Limits on Enrollment:**

### **Schedule of Classes Information:**

Description: Study of gross and microscopic structure of human tissues, organs and organ systems; includes dissection of human cadavers. (Intended for nursing and dental hygiene majors.) (Grade or P/NP) Prerequisites/Corequisites: Completion of BIO 10 or higher (V7) and Course Completion of ENGL 1A (OR ESL 10) or appropriate placement based on AB705 mandates Recommended:

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

AS Degree: CSU GE:	<b>Area</b> C <b>Transfer Area</b> B2 B3	Natural Science Life Science Laboratory Act		Effective: Fall 1981 Effective: Fall 1981	Inactive: Inactive:
IGETC:	<b>Transfer Area</b> 5B 5C	a Biological Sciences Fulfills Lab Requirement		Effective: Fall 1981	Inactive:
CSU Transfer	: Transferable	Effective:	Fall 1981	Inactive:	
UC Transfer:	Transferable	Effective:	Fall 1981	Inactive:	

### CID:

CID Descriptor:BIOL 110B	Human Anatomy with Lab
SRJC Equivalent Course(s):	ANAT1

## **Certificate/Major Applicable:**

Major Applicable Course

## **COURSE CONTENT**

## **Student Learning Outcomes:**

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

1. Describe in detail the structure and basic functions of the tissues, organs, and systems of the human body.

2. Identify tissues and organs of the body using histological slides, models, charts, specimens, human cadavers, and skeletons.

## **Objectives:**

In order to achieve these learning outcomes, during the course the students will:

- 1. Describe the basic anatomical design of the human body, including its bilateral symmetry, segmentation, tube-within-a-tube design, cavities, and fluid compartments.
- 2. Name the organ systems of the body and describe their basic structure and functions.
- 3. Recognize and describe the organs of each system, including their location in the body, gross anatomy, histological features, and functions.
- 4. Differentiate the four major tissue types, identify the subtypes of each of the major tissue types, and locate them in body structures.
- 5. Identify the specific anatomical structures listed in the lab textbook using histological slides, models, charts, specimens, human cadavers, and skeletons.
- 6. Evaluate the various features of the body which provide protection for the essential organs and functions.
- 7. Perform a dissection of some major organs in a cadaver.

## **Topics and Scope:**

- I. Human Body Introduction
  - A. Human body plan
  - B. Body cavities
  - C. Planes and reference terms
  - D. Levels of biological organization
- II. Cells and Tissues
  - A. Cell diversity and organelles
  - B. Epithelial tissues
  - C. Connective tissue proper
- III. Integumentary System
  - A. Skin
- B. Accessory structures: hair, nails, glands
- IV. Skeletal System
  - A. Bone and cartilage tissue
  - B. Bones as organs
  - C. Axial skeleton
  - D. Appendicular skeleton
  - E. Joints
  - F. Surface anatomy
- V. Muscular System
  - A. Muscle tissue
  - B. Sliding filament theory of muscle contraction
  - C. Muscles as organs
  - D. Muscle actions
- VI. Circulatory Systems
  - A. Coelom and viscera
  - B. Heart structure and function
  - C. Circuits and blood vessels
  - D. Blood composition and cells
  - E. Lymphatic System
- VII. Nervous System
  - A. Nervous tissue
  - B. Central nervous system
    - 1. spinal cord
    - 2. brain
    - 3. meninges and cerebrospinal fluid circulation
  - C. Peripheral nervous system
    - 1. cranial nerves
    - 2. spinal nerves
  - D. Autonomic nervous system
  - E. Special senses
    - 1. eye
    - 2. ear
- VIII. Digestive System
  - A. Organs of the gastrointestinal tract
  - B. Accessory organs and glands
- IX Respiratory System
- X. Urinary System
- XI. Reproductive System
  - A. Male reproductive system
  - B. Female reproductive system

### XII. Laboratory Material

All of the above mentioned structures will also be identified by means of histological slides, models, charts, specimens, human cadavers, and skeletons during the laboratory portion of the course.

### Assignment:

Lecture Related Assignments:

- 1. Weekly reading in text: 30-60 pages per week
- 2. Formal assessment: 2-4 midterm exams and a cumulative final exam including objective and essay questions that demonstrate writing skills and require students to select, organize and explain ideas in writing with correct spelling

Lab Related Assignments:

- 1. Selected dissection on human cadavers
- 2. Study of histological slides, models, charts, specimens, human cadavers, and skeletons during regular and open lab hours: 8-12 hours per week
- 3. Formal assessment: 7 lab practical exams

### 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.

**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.

Cadaver dissection

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

Lab practical exams; midterm exams and cumulative final exam including multiple choice, completion, diagramming, and essay questions

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

Writing 0 - 0%

Problem solving 0 - 0%

Skill Demonstrations 5 - 10%

> Exams 90 - 95%

### **Representative Textbooks and Materials:**

Human Anatomy. 8th ed. Marieb, Elaine and Mallatt, Jon and Wilhelm, Patricia. Pearson. 2017 Principles of Human Anatomy. 13th ed. Tortora, Gerald and Nielsen, Mark. Wiley. 2013 Human Anatomy. 8th ed. Martini, Frederic and Timmons, Michael and Tallitsch, Robert. Pearson. 2014

Human Anatomy. 4th ed. McKinley, Michael and O'Loughlin, Valerie and Harris, Ronald. McGraw Hill. 2014

A Photographic Atlas Of Histology. 2nd ed. Leboffe, Michael. Morton Publishing. 2013 Instructor prepared materials: lab manual textbook