

**ANAT 1 Course Outline as of Fall 2024****CATALOG INFORMATION**

Dept and Nbr: ANAT 1 Title: GENERAL HUMAN ANATOMY

Full Title: General Human Anatomy

Last Reviewed: 9/23/2024

Units	Course Hours per Week		Nbr of Weeks		Course Hours Total	
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 EMLS 10 (formerly ESL 10)

**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 EMLS 10 (formerly ESL 10)

Recommended:

Limits on Enrollment:

Transfer Credit: CSU;UC.

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>
	C	Natural Sciences	Fall 1981	
<b>CSU GE:</b>	<b>Transfer Area</b>		<b>Effective:</b>	<b>Inactive:</b>
	B2	Life Science	Fall 1981	
	B3	Laboratory Activity		
<b>IGETC:</b>	<b>Transfer Area</b>		<b>Effective:</b>	<b>Inactive:</b>
	5B	Biological Sciences	Fall 1981	
	5C	Fulfills Lab Requirement		
<b>CSU Transfer:</b>	Transferable		<b>Effective:</b>	<b>Inactive:</b>
			Fall 1981	
<b>UC Transfer:</b>	Transferable		<b>Effective:</b>	<b>Inactive:</b>
			Fall 1981	
<b>CID:</b>				
CID Descriptor:	BIOL 110B	Human Anatomy with Lab		
SRJC Equivalent Course(s):		ANAT1		

### **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 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:**

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

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

The above-mentioned systems will also be described and 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. Informal assessment: 0-30 preparatory quizzes and 0-3 reflection papers
3. Formal assessment: 2-4 lecture exams and a cumulative final lecture 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. Informal assessment: 0-30 preparatory quizzes and/or homework assignments
4. Formal assessment: 4-7 lab practical exams, including an optional cumulative final lab exam

### 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.

Reflection papers

Writing  
0 - 10%

**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.

Cadaver dissection

Skill Demonstrations  
4 - 10%

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

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

Exams  
75 - 90%

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

Preparatory quizzes and/or homework assignments

Other Category  
0 - 20%

**Representative Textbooks and Materials:**

Human Anatomy. 9th ed. Marieb, Elaine and Mallatt, Jon and Wilhelm, Patricia. Pearson. 2019  
Principles of Human Anatomy. 14th ed. Tortora, Gerald and Nielsen, Mark. Wiley. 2017  
Human Anatomy. 9th ed. Martini, Frederic and Timmons, Michael and Tallitsch, Robert. Pearson. 2019  
Human Anatomy. 6th ed. McKinley, Michael and O'Loughlin, Valerie and Pennefather-O'Brien, Elizabeth. McGraw Hill. 2021  
A Photographic Atlas Of Histology. 2nd ed. Leboffe, Michael. Morton Publishing. 2013 (classic)  
Instructor prepared materials: lab manual textbook