

**ANAT 1 Course Outline as of Fall 1997****CATALOG INFORMATION**

Dept and Nbr: ANAT 1            Title: GENERAL HUMAN ANAT  
 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	7	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:**

Structure and functional morphology of the human body. Developmental, gross and microscopic structure of human tissues, organs and organ systems including laboratory dissections of human cadavers.

**Prerequisites/Corequisites:**

Bio 10 with grade of "C" or better.

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

Description: Structure and functional morphology of the human body. Developmental, gross and microscopic structure of human tissues, organs and organ systems, including laboratory dissections of human cadavers. (Grade or P/NP)

Prerequisites/Corequisites: Bio 10 with grade of "C" or better.

Recommended:

Limits on Enrollment:

Transfer Credit: CSU;UC. (CAN BIOL10)(PHYSIO 1+ANAT 1=BIOL SEQ B)

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

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

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

### **Certificate/Major Applicable:**

Not Certificate/Major Applicable

## **COURSE CONTENT**

### **Outcomes and Objectives:**

Students completing Anatomy 1 will have described and explained written and oral assignments and by laboratory dissections the gross and histological structure and functional morphology of the following human organ systems/areas.

1. Levels of biological organization.
2. Cellular structure.
3. Tissue organization.
4. Immune and inflammatory responses as a function of connective tissue cells.
5. Glands.
6. Skeletal system.
7. Muscular system.
8. Coelom and viscera body compartments.
9. Nervous system.
10. Circulatory system.
11. Endocrine organs/system.
12. Digestive system.
13. Urinary system.
14. Respiratory system.
15. Reproductive system (male and female)

### **Topics and Scope:**

The course is organized in a systematic format and fifteen major areas/ body systems are covered in both lecture and laboratory as follows:

1. Levels of biological organization.
  - a. cellular thru organ system.
  - b. use of microscope and dissection techniques.
2. Cellular structure.
  - a. cellular organelles and membranes.
  - b. basic functions of each.
  - c. cellular division.
3. Tissue organization.
  - a. basic concepts of tissues.
  - b. epithelial tissues.
  - c. connective tissues.
  - d. muscular tissues.
  - e. nervous tissues.
4. Immune and inflammatory responses as a function of connective tissue cells.
5. Integumentary system.
  - a. dissections of human integument.
6. Skeletal system.
  - a. osseous tissue.
  - b. bones as levers.
  - c. basic skeletal structure.
  - d. blood cell formation.
  - e. articulations.
7. Muscular system.
  - a. types of muscle tissue.
  - b. muscles as organs.
  - c. tendons, bursa, synovial tendon sheaths, ligaments.
  - d. movement and basic planes of motion.
  - e. muscle action.
  - f. sliding filament theory of contraction.
  - g. motor units.
  - h. extrafusal vs intrafusal fibers.
  - i. dissection of human muscles and joints.
8. Coelom and viscera.
  - a. development of: cavities and membranes, inguinal canal, diaphragm, femoral canal and triangle, urogenital diaphragm, spermatic cord, dissections of the above mentioned areas on human cadavers.
9. Nervous system.
  - a. information system concept.
  - b. neuron concept, structure and types.
  - c. nervous tissue.
  - d. spinal cord: structure, tracts, reflex arc.
  - e. brain, regions of and basic functions.
  - f. development of the CNS and PNS.
  - g. meningeal coverings and CSF circulation.
  - h. autonomic nervous system.
  - i. CNS circulation.
  - j. PNS.
  - k. cranial and spinal nerves.
  - l. special senses: eye and ear.

- m. dissections of nervous system on human cadavers.
- 10. Circulatory system.
  - a. basic plan of circulation.
  - b. heart structure and function.
  - c. arteries and veins as organs-histology.
  - d. blood formation and histology.
  - e. lymphatic system: nodes, spleen, tonsils, thymus, lymphatic tissue as immune tissue.
  - f. health and disease.
  - g. dissections of vessels and heart on human cadavers.
- 11. Endocrine system.
  - a. major endocrine glands/organs.
- 12. Digestive system.
  - a. functions of system.
  - b. major organs and histology.
  - c. liver and pancreas functions and histology.
  - d. health and disease.
  - e. dissection of human digestive system.
- 13. Urinary system.
  - a. major functions of system.
  - b. major organs and histology.
  - c. health and disease.
  - d. dissection of human urinary system.
- 14. Respiratory system.
  - a. major functions of system.
  - b. major organs and histology.
  - c. the diaphragm and muscles of respiration.
  - d. health and disease.
  - e. dissection of human respiratory system.
- 15. Reproductive systems.
  - a. male system: major organs; functions, structures, and histology.
  - b. female system: major organs; functions, structures, & histology.
  - c. pregnancy.
  - d. basic concepts of development.
  - e. birth control.
  - f. applications to health and disease.
  - g. dissection of both male and female reproductive systems on human cadavers.

**Assignment:**

1. Reading textbooks, laboratory manual and selected histology texts.
2. Selected dissections on human cadavers and prosections.

**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.

Essay exams	Writing 20 - 30%
<b>Problem Solving:</b> Assessment tools, other than exams, that demonstrate competence in computational or non-computational problem solving skills.	
Exams, DISSECTIONS	Problem solving 10 - 20%
<b>Skill Demonstrations:</b> All skill-based and physical demonstrations used for assessment purposes including skill performance exams.	
DISSECTION TECHNIQUES	Skill Demonstrations 5 - 15%
<b>Exams:</b> All forms of formal testing, other than skill performance exams.	
Multiple choice, Matching items, Completion	Exams 40 - 50%
<b>Other:</b> Includes any assessment tools that do not logically fit into the above categories.	
None	Other Category 0 - 0%

**Representative Textbooks and Materials:**

PRINCIPLES OF HUMAN ANATOMY, 7th ed., by G. Tortora, Harper Collins Publishers, 1995.

HUMAN ANATOMY, by F.H. Martini and M.J. Timmons, Prentice Hall Publishers, 1995.