#### **ANAT 1 Course Outline as of Fall 1981**

## **CATALOG INFORMATION**

Dept and Nbr: ANAT 1 Title: GENERAL HUMAN ANAT

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	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:**

Developmental, gross and microscopic structure of mammalian tissue and organs with emphasis on the human.

# **Prerequisites/Corequisites:**

College biology with grade of "C" or better.

### **Recommended Preparation:**

Eligibility for English 100A or equivalent.

### **Limits on Enrollment:**

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

Description: Developmental, gross & microscopic structure of mammalian tissues & organs with

emphasis on the human. (Grade or P/NP)

Prerequisites/Corequisites: College biology with grade of "C" or better.

Recommended: Eligibility for English 100A or equivalent.

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:**

AS Degree: Area Effective: Inactive:

C Natural Sciences Fall 1981

CSU GE: Transfer Area Effective: Inactive:

B2 Life Science Fall 1981

B3 Laboratory Activity

**IGETC:** Transfer Area Effective: Inactive:

5B Biological Sciences Fall 1981

5C Fulfills Lab Requirement

**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:

Not Certificate/Major Applicable

## **COURSE CONTENT**

## **Outcomes and Objectives:**

Students who have completed anatomy will have demonstrated their ability to understand, critically evaluate, and demonstrate knowledge in the following areas/topics.

- 1. Levels of biological organization.
- 2. Cellular structure.
- 3. Tissue organization.
- 4. Immune and inflamatory responses as a function of connective tissue cells.
- 5. Gland.
- 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 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 inflamatory responses as a function of connective tissue cells.
- 5. Integumentry 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, inquinal canal, diaphragm, femoral canal and triangle, urogential diaphragm, spermatic cord, dissections of the above mentioned areas on human cadavers.
- 9. Nervous sytem.
  - 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.
  - 1. special senses: eye and ear.
  - m. disections 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 textbook and lab text.
- 2. Selected dissections on human cadavers.

#### 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

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

Exams, DISSECTIONS

Problem solving 0 - 20%

**Skill Demonstrations:** All skill-based and physical demonstrations used for assessment purposes including skill performance exams.

Class performances

Skill Demonstrations 0 - 0%

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

Multiple choice

Exams 0 - 50%

**Other:** 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, 4th ed., by G. Tortora, Harper and Row Publishers, 1986.

BASIC HUMAN ANATOMY, 2nd ed., by A. Spence, Benjamin Cummings Publishers, 1986.

FUNCTIONAL HUMAN ANATOMY, 4th ed., J. Crouch, Lea and Febiger Publishers, 1985.