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: 10/8/2018

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:

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 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 inflamatory 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 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 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%

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

Exams, DISSECTIONS

Problem solving 10 - 20%

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

DISSECTION TECHNIQUES

Skill Demonstrations 5 - 15%

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

Multiple choice, Matching items, Completion

Exams 40 - 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, 7th ed., by G. Tortora, Harper Collins Publishers, 1995.

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