

CATALOG INFORMATION

=====

Dept & Nbr: BIO 230 Title: HUMAN ANATOMY

Full Title: Human Anatomy

Units	Course Hours	Per Week	Nbr of Weeks	Course Hours	Total
Max: 5.0	Lecture	3.0	17	Lecture	51.0
Min: 5.0	Lab	6.0		Lab	102.0
	Contact DHR	0.0		Contact DHR	0.0
	Contact Total	9.0		Contact Total	153.0
	Non-contact DHR	0.0		Non-contact DHR	0.0

Title 5 Category: 01 AA Degree Applic
Grading: GC Credit course for grade or CR/NC
Repeatability: 00 No repeatability allowed or defined
Also listed as:

CATALOG DESCRIPTION:

An introduction to human cytology and cellular organization, fundamental tissues and organ systems, and appropriate laboratory study of basic human anatomy.

PREREQUISITES:

COREQUISITES:

RECOMMENDED PREPARATION:

Completion of BIO 202.

LIMITS ON ENROLLMENT:

SCHEDULE OF CLASSES INFORMATION:

Recommended: Completion of BIO 202.
Health professionals, biology majors, and general interest students will study the structure of major human organ systems. (Grade or CR/NC)
Transfer Credit: CSU; UC. (CAN BIOL 10)

ARTICULATION and CERTIFICATE INFORMATION

=====

ASSOCIATE DEGREE:		Effective: FALL	1990	Inactive:
Area:	A	NATURAL SCIENCES		
CSU GE:		Effective: FALL	1990	Inactive:
Transfer area:	B2	LIFE SCIENCE		
	B3	LAB ACTIVITY		
IGETC:		Effective: FALL	1991	Inactive:
Transfer area:	5B	BIOLOGICAL SCIENCES		

CSU TRANSFER: TRANSFERABLE Effective: FALL 1990 Inactive:

UC TRANSFER: TRANSFERABLE Effective: FALL 1990 Inactive:

CAN:

BIOL 10 Grp Nbr: 01 Effective: FALL 1990 Inactive:

CERTIFICATE APPLICABLE: N NOT CERTIFICATE/MAJOR APPLICABLE

APPROVAL AND DATES

=====

Version 01 Submitted by: SUE BLUNDELL Date: 10/10/2001
 Department approved: Date:
 Curriculum approved: 10/10/2001 Version approved: 10/10/2001
 Prerequisites approved: 10/10/2001 Last reviewed: 10/10/2001
 Term effective: SPRING 2002 Last taught: SUMMER 2008 Inactive:

COURSE CONTENT

=====

OUTCOME AND OBJECTIVES:

1. Be familiar with the structure of the major organ systems of the human body.
2. Know the major tissues of the human body.
3. Understand the general function of the major human organ systems.
4. Develop the fundamental laboratory skills, which enhance the study of human anatomy and that are essential to further study.

TOPICS AND SCOPE:

LECTURE

1. Introduction to Biological Systems/Body Organization
 - a. anatomical position
 - b. body planes, sections
 - c. body cavities and regions
 - d. directional terms
 - e. basic terminology
 - f. levels of organization
2. Cell Structure
3. Tissues
 - a. Epithelium
 - b. Connective
4. Integument
 - a. general functions of the skin
 - b. gross and microscopic anatomy of the skin and accessory structures
 - c. roles of the specific tissue layers of skin
 - d. roles of accessory structures
5. Bone Tissue
 - a. general functions of bone and the skeletal system
 - b. histology and structure of a typical bone
 - c. physiology of bone formation, growth, remodeling, and repair
 - d. names and markings of bones
6. Skeletal Structure
7. Articulation

8. Muscle Tissue
 - a. general functions of muscle tissue
 - b. identification, general location, and comparative characteristics of skeletal, smooth, and cardiac muscle tissue
9. Muscle System
 - a. nomenclature of skeletal muscles
 - b. group actions of skeletal muscles
 - c. location and function of skeletal muscles
10. Digestive System
 - a. general functions of the digestive system
 - b. gross and microscopic anatomy of the GI tract and the accessory organs of digestions
11. Respiratory System
 - a. general functions of the respiratory system
 - b. gross and microscopic anatomy of the respiratory system and related organs
12. Urinary System
 - a. general functions of the urinary system
 - b. gross and microscopic anatomy of the urinary tract
 - c. innervations and control of the urinary bladder
13. Reproductive System
 - a. general functions of the reproductive systems
 - b. gross and microscopic anatomy of the male and female reproductive tracts
14. Nervous System
 - a. general functions of the nervous system
 - b. organization of the nervous system from anatomical and functional perspectives
 - c. gross and microscopic anatomy of nerve tissue
 - d. sensory receptors
 - e. division, origin, and function of component parts of the brain
 - f. protective roles of the cranial bones, meninges, and cerebro-spinal fluid
 - g. structure and function of cranial nerves
 - h. anatomy of the spinal cord and spinal nerves
 - i. reflexes and their roles in nervous system function
 - j. sensory and motor pathways of the brain
 - k. autonomic nervous system
 - l. comparison of somatic and autonomic systems
15. Endocrine
16. Lymphatic System
17. Cardiovascular System
 - a. general functions of the cardiovascular system
 - b. gross and microscopic anatomy of the heart
 - c. structure of blood vessels
 - d. pattern of blood circulation throughout the body, including systemic, pulmonary, coronary, hepatic portal, and fetal circulations

LABORATORY

1. Microscopic Observations
2. Anatomical Terminology
3. Epithelium
4. Connective Tissue

5. Bones of the Skeleton
6. Bone Tissue
7. Muscle Structure
8. Major Human Muscles
9. Dissection of Cadaver
10. Splanchnology
11. Internal Organ Dissection
12. Structures of the Central Nervous System
13. Heart Dissection
14. Major Human Blood Vessels
15. Major Spinal Nerves and related structures
16. Structures of the Eye and Ear

ASSIGNMENTS:**READING ASSIGNMENTS:**

Students will be required to read and study assigned chapters in the textbook, as well as assignments from the laboratory manual prior to laboratory experiments. Supplemental reading from selected journal articles will be assigned. Examples of appropriate recommended reading are: Scientific American; New England Journal of Medicine; Journal of the American Medical Association; and Biological Bulletin.

WRITING ASSIGNMENTS:

Students are required to answer questions about anatomical structures in essay form.

OUTSIDE ASSIGNMENTS:

Six hours of independent work must be completed outside of class each week. This work includes studying lecture discussions, reviewing and writing laboratory results, answering questions presented in lecture at the textbook and preparing for upcoming laboratory assignments.

ASSIGNMENTS THAT DEMONSTRATE CRITICAL THINKING:

The experimental laboratory by its very nature requires critical thinking on the part of the student. Students must analyze laboratory observations and demonstrate their understanding by interpreting these observations on laboratory practical exams and discussions.

METHOD OF INSTRUCTION:

Lecture, laboratory experiments, slide presentation, handouts, reading assignments, laboratory skill demonstrations and class discussions.

METHODS OF EVALUATION:

The grade will be based on at least four lecture exams and four laboratory practical exams each with equal weighting.

BASIS FOR GRADING:

The assignment of a grade is based on the level of achievement of the outcomes and objectives of the course outline and is reflected in quantifiable terms in the course syllabus.

REPRESENTATIVE TEXTBOOKS:

Anatomy and Physiology: The Unity of Form and Function, Kenneth Saladin,
2 edition, WCB McGraw-Hill
Color Atlas of Anatomy, Rohen & Yokoshi, 4th Edition, Williams & Wilkins,
1998

RATIONALE

=====

RESOURCES REQUIRED

=====

MISCELLANEOUS

=====

Advisory generate desc:	Y	YES
Area department:	BIO	BIOLOGICAL SCIENCES
Audit flag:	N	NOT AUDITABLE
Basic skills:	X	NOT BASIC SKILLS
Classification:	A	Liberal Arts and Sciences
Cost level:	01	
Disciplines:		BIOLOGICAL SCIENCES
Division:	02	MERIDITH RANDALL
Faculty service areas:		BIOLOGY
Fee:	\$0.00	
In-service:	X	NOT IN-SERVICE
Level below transfer:	X	NOT APPLICABLE
Matric-requiring:	X	Exempt from assessment
Maximum class size:	0	
Maximum wait list:	0	
Method of instruction:	03	LECTURE/LABORATORY
Non-credit category:	X	NOT APPLICABLE, CREDIT COURSE
Open entry/exit:	N	Not open entry/exit
Pacs activity:	0401	BIOLOGY GENERAL
Pacs program project:	0000	
Preq/coreq generate desc:	N	NO
Preq/coreq provisional:	N	NO
Preq/coreq reg check:	N	NO PREREQUISITE RULES EXIST
Repeat group id:		
Requires instructor sig:	N	INSTRUCTOR'S SIGNATURE NOT REQUIRED
SAM classification:	E	Non-occupational
Selected/special topic:	N	NOT A SELECTED TOPIC COURSE
Special class:	X	NOT A SPECIAL COURSE
TOP code:	0410.00	ANATOMY & PHYSIOLOGY
Workload:	0.0000	