CATALOG INFORMATION
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Dept & Nbr: BIO 202 Title: HUMAN BIOLOGY
Full Title: Human Biology

Units		Course Hours Per Week		Nbr of Weeks	Course Hours	Total
Max:	3.0	Lecture	3.0	17	Lecture	51.0
Min:	3.0	Lab	0.0		Lab	0.0
		Contact DHR	0.0		Contact DHR	0.0
		Contact Total	3.0		Contact Total	51.0
		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:
This course is designed for non-science majors as a survey of the characteristics, structure, and processes of the human body as they relate to society and the environment. This course is also designed for those students who need a review of the fundamentals of the human body before taking science courses required for the allied health sciences.

PREREQUISITES:

COREQUISITES:

RECOMMENDED PREPARATION:
No advisories.

LIMITS ON ENROLLMENT:

SCHEDULE OF CLASSES INFORMATION:
This course is designed for non-science majors as a survey of the characteristics, structure, and processes of the human body as they relate to society and the environment. This course is also designed for those students who need a review of the fundamentals of the human body before taking science courses required for the allied health sciences. (Grade or CR/NC)
Transfer Credit: CSU; UC.

ARTICULATION and CERTIFICATE INFORMATION
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ASSOCIATE DEGREE: Effective: FALL 2001 Inactive:
Area: A NATURAL SCIENCES

CSU GE: Effective: FALL 2001 Inactive:
Transfer area: B2 LIFE SCIENCE

IGETC: Effective: FALL 2002 Inactive:
Transfer area: 5B BIOLOGICAL SCIENCES

CSU TRANSFER: TRANSFERABLE Effective: FALL 2001 Inactive:

UC TRANSFER: TRANSFERABLE Effective: FALL 2002 Inactive:

CAN:

CERTIFICATE APPLICABLE: N NOT CERTIFICATE/MAJOR APPLICABLE

APPROVAL AND DATES
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Version 02 Submitted by: SUE BLUNDELL Date: 09/23/2008
Department approved: Debra Polak Date: 09/23/2008
Curriculum approved: 12/12/2000 Version approved: 09/12/2008
Prerequisites approved: 12/12/2000 Last reviewed: 09/12/2008
Term effective: SPRING 2009 Last taught: Inactive:

COURSE CONTENT
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OUTCOME AND OBJECTIVES:
1. Develop a broad understanding of the fundamental principles of the human body.
2. Develop an understanding and appreciation of the critical biological and environmental issues facing human beings today.
3. Develop critical thinking skills by using the scientific method of

TOPICS AND SCOPE:
1. Characteristics of Life
2. Scientific Inquiry
3. Biochemistry
   a. Atoms
   b. Water
   c. Acid-bases
   d. Cabon compounds
4. Cell Structure and Function
   a. Cell membranes
   b. Human cells
5. Metabolism
   a. Enzymes
   b. ATP
   C. cellular respiration
6. Tissues
7. Musculoskeletal System
   a. Bone
   b. Skeletal system
   c. Muscle system
   d. Contraction
   e. Fitness components
8. Digestion and Nutrition

a. Gastrointestinal tract
b. Accessory glands
c. Nutrition
d. Energy needs

9. Circulation and Blood
   a. Circulatory system
   b. Blood
   c. Cardiovascular system and disorders
   d. Lymphatic system
10. Immunity
   a. Surface barriers
   b. Nonspecific defenses
   c. Immune system
   d. Immune disorders
   e. HIV and other infectious diseases
11. Respiration
   a. Respiratory system
   b. Mechanisms of breathing
   c. Gas exchange and transport
   d. Effects of environmental hazards relating to gas exchange
12. Salt-water Balance
   a. Extracellular fluid maintenance
   b. Urinary system
   c. Urine formation
   d. Acid-base balance
13. Nervous System
   a. Cells
   b. Chemical synapses
   c. Central nervous system
   d. Peripheral nervous system
   e. Effects of drugs
14. Sensory Reception
   a. Somatic sensations
   b. Special senses
15. Endocrine Systems
   a. Hormones
   b. Local signaling molecules
   c. Stress responses
16. Reproductive Systems
   a. Male reproductive organs
   b. Female reproductive organs
   c. Hormones
   d. Control of fertility
17. Development
   a. Early events of development
   b. Embryonic development
   c. Fetal development
   d. Postnatal development
18. Cell Reproduction
   a. Mitosis
   b. Meiosis
19. Genetics and Inheritance
   a. Mendelian themes

b. Chromosomal variance

c. DNA structure and function
d. Protein synthesis
e. Cancer
f. Biotechnology

20. Evolution
a. Primates
b. Hominids

21. Environmental Issues

ASSIGNMENTS:

Reading Assignments:
Students will be required to ready, study, and critically analyze information in the assigned chapters in the textbook. Students will also be required to read, study, and critically analyze articles from an approved list of periodicals. Examples of appropriate recommended reading are: Science, Scientific American, Omni, and Time.

Writing Assignments:
Students are required to research and write at abstracts from an approved list of periodicals using scientific method as the base for their understanding. They will be required to test hypotheses, systematically question the author, and write a defense for their position. Students will also be required to systematically analyze human case studies and write conclusions regarding possible diagnosis.

Outside Assignments:
Six hours of independent work must be completed outside of class each week. This work includes studying lecture discussions, analyzing and answering questions in the study guide, and completing abstracts from an approved list of periodicals.

METHOD OF INSTRUCTION:

Lecture, slide presentations, discussions, handouts and reading assignments
The content of this course is delivered using some form or forms of distance technology such as television, videotape, audiotape, or the Internet. For telecourses, no less than 11 hours of personal contact between instructor and student shall be included through: group or individual meetings; orientation and review sessions; supplemental in-person activities.
For on-line courses, instructor/student contact may take place in a face-to-face setting and/or through e-mail or other electronic means. Student may interact with each other through in-person study groups, electronic message boards ,or other means.

METHODS OF EVALUATION:

The grade will be based on at least four semester exams plus the final and abstracts. Relative weighting is as follows: Semester exams 60%; Final exam 20%; Abstracts 20%.

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:
Human Biology, Sylvia S. Mader, 10th Edition, 2008

REASON FOR REVISION
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This course is currently a requirement of the Medical Transcription Program and as a recommended prep for students planning on enrolling in Human Anatomy and/or Human Physiology. By offering this course in an online format along with the traditional methodology, students will have a greater opportunity to complete their directed area of study.

RESOURCES REQUIRED
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MISCELLANEOUS
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Advisory generate desc:	N	NO
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:	02	LECTURE
	72	DELAYED INTERACTION
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	