BSC 1409.01E Human Structure and Function Syllabus
Fall 2013

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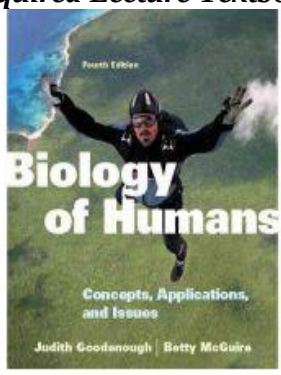
Office Hours: Tuesday and Thursday
8:00 a.m. – 9:00 a.m. and 11:00 a.m. - noon
Others by Appointment

Course Description

BSC 1409 is a course for non-biology majors designed to apply the principles of biology to humans as a functional unit of our social organization. Fundamental principles of humans, as in all living organisms, include physical and chemical properties of life, organization, and function. This course will explore basic biological concepts in a manner that stresses relevance to the human population by focusing on current issues and should engage the student in thought-provoking analyses to reflect and integrate into societal interactions.

Required Course Textbooks

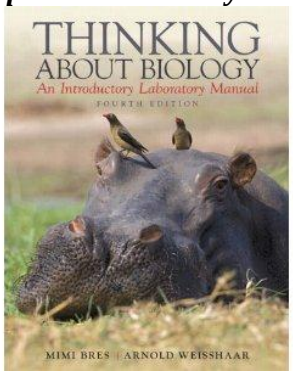
Required Lecture Textbook



ISBN 13: 9780321707024

Known for its unique "Special Topic" chapters and emphasis on everyday health concerns, the Fourth Edition of Biology of Humans: Concepts, Applications, and Issues continues to personalize the study of human biology with a conversational writing style, stunning art, abundant applications, and tools to help students develop critical-thinking skills. The authors provide students a practical and friendly introduction for understanding how their bodies function and for preparing them to navigate today's world of rapidly expanding and shifting health information.
Special Note: The lecture textbook has been chosen to participate in the new rental program offered by the University bookstore. Students wanting to save some money may want to check into this new option.

Required Laboratory Textbook



ISBN 13: 9780321791955

This manual offers a unique, class-tested approach to introductory biology laboratory. A full range of activities show how basic biological concepts can be applied to a wide variety of plants, animals, and microorganisms. This helps students in non-majors introductory biology courses with a human focus to: (1) gain practical experience that will help them understand lecture concepts; (2) acquire the basic knowledge needed to make informed decisions about biological questions that arise in everyday life; (3) develop the problem-solving skills that will lead to success in academics and in a competitive job market; and (4) learn to work effectively and productively as a member of a team.

Student Learning Objectives

The core objectives for this course are:
Critical Thinking **-** Students will be able to analyze, evaluate, or solve problems when given a set of circumstances or data.
Communication - In written, oral, and/or visual communication, A&M - Commerce students will communicate in a manner appropriate to audience and occasion, with an evident message and organizational structure.
Empirical and Quantitative Skills **-** Students will be able to interpret, test, and demonstrate principles revealed in empirical data.
Teamwork **-** Students will be able to work together toward a shared purpose relevant to the course or discipline with a sense of shared responsibility for meeting that purpose.

Attendance

As in any class, a vital indicator of a student's success is attendance, therefore, your presence and participation will be essential. Your success in the course will be determined by your presence, your participation in class discussion, reading assignments, your attention to the class discussion, whether by the instructor or a fellow student, and scheduled exams. Students should read the assigned readings prior to attending class. Students should arrive on time (**LATE** arrivals are disruptive and not conducive to a learning environment). It is the **student's responsibility** to maintain contact with the instructor and to inform me of any absences which may occur that prevent their attendance and participation in coursework, assignments, or exams.

In order to create a "learning environment" free of disruptions, students **MUST TURN OFF** their cell phones as well as all other electronic devices. The only acceptable electronic device is a laptop computer students are using to take class notes. You give up the privilege of using your laptop in class if you are caught "surfing the web," reading email, watching videos, etc.

Obligatory Statements

Plagiarism is a criminal activity. The student must cite all sources of information. The copying of material, whether parts of sentences, whole sentences, paragraphs, or entire articles, will result in a grade of zero and can result in further disciplinary action. You are being educated to be credible in your field of study. If you plagiarize or cheat, you lose the credibility that is precious to any field. As in any unacceptable behavior, actions are accompanied by a result/consequence. As a consequence of plagiarism or cheating in this course, the result/consequence to your action will be an "F" for the course and could also incur further University disciplinary consequences.

All students enrolled at Texas A&M University-Commerce shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment. This policy is enforced both in traditional and virtual classroom environments. The student should refer to the University's Student's Guide Handbook, Polices and Procedures, and Conduct.

The American with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this

legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you have a disability requiring accommodation please contact: Office of Student Disability Resources or Services, Texas A&M University-Commerce, Gee Library, Room 132, phone (903) 886-5150 or (903) 886-5835, fax (903) 468-8148, or email StudentDisabilityServices@tamu-commerce.edu.

Early Intervention for First-Year Students

Early intervention for freshmen is designed to communicate the University's interest in their success and a willingness to participate fully to help students accomplish their academic objectives. The university through faculty advisors and mentors will assist students who may be experiencing difficulty to focus on improvement and course completion. This process will allow students to be knowledgeable about their academic progress early in the semester and will provide faculty and staff with useful data for assisting students and enhancing retention. Grade reports will be mailed by the end of the sixth week of the semester.

Lecture Course Grading

The final course grade will derive from your lecture grade (75%) and your laboratory grade (25%). During your scheduled laboratory time, the Graduate Assistant for laboratory instruction will provide you with a syllabus outlining laboratory grading policies and laboratory safety guidelines. Students will be permitted to make-up an exam or other assignment, but it will require an **official excuse**. All make-up work must be taken within two (2) days of the date noted on the student's official excuse for returning to school. It is the student's responsibility to schedule a time during the instructor's office hours to complete the make-up assignment and/or exam. All assignments and/or exams not taken or not in compliance with official excused absences will be recorded as a score of zero.

Assignments

During the semester, there will be two assignments given covering specific study topics. These assignments are designed to evaluate the student's understanding of the subject matter. Assignments will evaluate a student's ability to:

- Analyze, evaluate, or solve a problem when given a set of circumstances or data.
- Interpret, test, and demonstrate principles revealed in empirical data.

Students will be provided with the topics for the assignments prior to the scheduled in class assessment.

Class Presentations

Students will work within a team environment to research, compose, and present assigned biological concepts (e.g. skeletal muscle contraction, action potential generation, negative feedback etc.) and/or its influence on society (e.g. one amino acid change that results in sickle cell anemia, how uncontrolled restraints on cell division lead to cancer, the effects of cigarette smoking, etc.). Students should be able to effectively interpret and present the principles of their given topic. The criteria for the presentations are as follows: Organization (10%); Topic Knowledge (20%);

Creativity and Visual Aids (10%); Communication Skills (20%); and Effectiveness as a Team Member (40 %). Team members will be provided and return a feedback form evaluating each member's teamwork contribution. Students should incorporate images, videos, or other resources in their presentation to convey their topic. The grading rubric for presentations may be found on the following website: **http://faculty.tamuc.edu/sgossett**

The topic for the presentations will be selected from a list provided by the instructor after the course begins and teams are selected. The group will present their presentation on the date indicated on the instructor's list. The due dates for the presentations are designed to coincide with the topic under study. All students within the group ***must*** participate in the presentation so that a grade might be individually derived for each team member.

Course Exams

There will be a total of seven exams (six intermittently throughout the course and the final exam). The final exam will **not** be comprehensive and will cover only those chapters indicated on the course schedule. This scheduling permits students to have smaller "chunks" of biological information in which to be tested over at one time. In an effort to allow students to focus their study in preparation for exams, study guides for each of the chapters covered this semester is provided at the website below. Students should print and bring the appropriate study guide for the scheduled lecture to class. Although students should read the assigned material prior to attending class and work the study guides, the instructor will cover the chapter's material and the pertinent information on the study guide to clarify any questions students may have.

NOTE: Exam study guides, chapter objectives, and accompanying PowerPoint for each of the assigned chapters is posted for you to print at the following email address: http://faculty.tamuc.edu/sgossett

Lecture Course Grading

	Grade Determination
Assignments	**10%**
Presentation	**10%**
Chapters Tests (Total of 6)	**60%**
Final Exam	**20%**
Total Lecture	**100%**

Course Grading Scale – Lecture and Laboratory Combined

A	**90 -100**
B	**80 - 89**
C	**70 - 79**
D	**60 - 69**
F	**59 or lower**

Week	Date	Class Assignment
1	**August 27**	Introduction to Course and Syllabus Review
1	**August 29**	Chapter 2—Chemistry Comes to Life
2	**September 3**	Chapter 3—The Cell
2	**September 5**	Chapter 4—Body Organization and Homeostasis
3	**September 10**	**Test I over Chapter 2, Chapter 3, and Chapter 4**
3	**September 12**	Chapter 19—Chromosomes and Cell Division
4	**September 17**	Chapter 20—Genetics and Human Inheritance
4	**September 19**	Chapter 21—DNA and Biotechnology
5	**September 24**	Chapter 21—DNA and Biotechnology
5	**September 26**	Chapter 5—The Skeletal System
6	**October 1**	**Test II over Chapter 19, Chapter 20, and Chapter 21**
6	**October 3**	Chapter 6—The Muscular System
7	**October 8**	Chapter 7—Neurons: The Matter of the Mind
7	**October 10**	Chapter 8—The Nervous System
8	**October 15**	**Test III over Chapter 5, Chapter 6, and Chapter 7**
8	**October 17**	Chapter 9—Sensory Systems
9	**October 22**	Chapter 10—The Endocrine System
9	**October 24**	Chapter 11—Blood
10	**October 29**	**Test IV over Chapter 8, Chapter 9, and Chapter 10**
10	**October 31**	Chapter 12—The Cardiovascular and Lymphatic Systems
11	**November 5**	Chapter 13—Body Defense Mechanisms
11	**November 7**	Chapter 14—The Respiratory System
12	**November 12**	**Test V over Chapter 11, Chapter 12, and Chapter 13**
12	**November 14**	Chapter 15—The Digestive System
13	**November 19**	Chapter 16—The Urinary System
13	**November 21**	Chapter 17—Reproductive Systems/Sexually Transmitted Diseases
14	**November 26**	**Test VI over Chapter 14, Chapter 15, and Chapter 16**
14	**November 28**	**Happy Thanksgiving**
15	**December 3**	Chapter 18—Development throughout Life
15	**December 5**	Chapter 18a—Autism Spectrum Disorders
16	**December 12**	**Final Exam over Chapter 17 and Chapter 18** **8:00 a.m. – 10:00 a.m.**

* The instructor reserves the right to administer revisions to the class schedule if circumstances require.