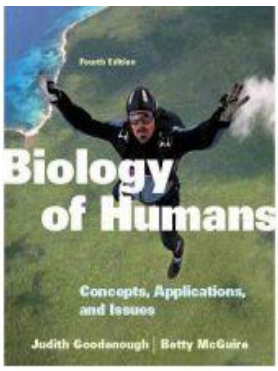
BSC 1409.01E Human Structure and Function
Course Syllabus: Spring 2014

Instructor: Susan Gossett, Adjunct Faculty
Office Location: Science Technology Center, Room 212
Office Hours: Tuesday and Thursday
7:00 a.m. – 9:00 a.m. and 10:45 a.m. - noon
Office Phone: (903) 886 - 5938
Department Fax: (903) 886 - 5997
Email: susan.gossett@tamuc.edu

Course Information

Required Course Materials

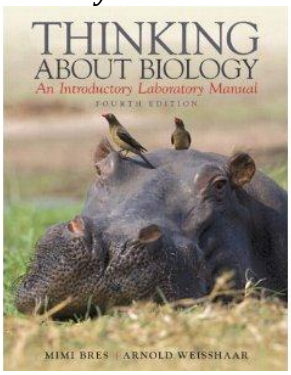
Lecture Textbook



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 rental program offered by the University bookstore.

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.

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.

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.

Course Requirements

Instructional/Methods/Activities/Assessments

This course will provide a variety of activities and assessments to assist you in achieving the learning objectives for the course. You will work toward achieving these objectives through assigned readings, course exams, assignments, and participation in a group presentation. Following is an explanation of each course requirement including due dates, assignment instructions, and other requirements. ***Special Note***: The following information does not include the laboratory portion for the course. The facilitator for the course laboratory section will provide you with specific criteria, such as assignment, due dates, and course assessment percentages, during your initial laboratory class.

Attendance (Not Graded)

Attendance will be taken at the beginning of each class period; however, attendance is not factored into your course grade. Attendance records will be used for institutional reporting (e.g. financial aid, TRiO, mid-term, etc.).

Critical Thinking and Empirical and Quantitative Skills Assessment Assignments

There are two assignments covering specific topics of study which will be used to assess portions of the learning objectives for the course. These assignments are designed to evaluate the student's understanding of the subject matter. Assessments evaluate a student's ability to:

- Analyze, evaluate, or solve a problem when given a set of circumstances or data (Critical Thinking)
- Interpret, test, and demonstrate principles revealed in empirical data (Empirical and Quantitative Skills).

The Critical Thinking assessment will cover the topics of Transcription and Translation. An assessment covering the topic of Genetics and Heredity will be given to assess Empirical and Quantitative Skills. Both assessments will be given after the topics have been covered during class lecture.

Assessment Method (10% of Lecture Grade)

The assessments for Critical Thinking and Empirical and Quantitative Skills will be given on February 20. Each assessment will be given in a multiple choice format. The average from the two assignments represents 10% of the lecture grade. Students will need a scantron (Form Number 882-E) for each of the assignments/assessments. A documented excused absence (refer to the University's Student's Guide Handbook, Polices and Procedures, and Conduct on TAMUC-website) will be required if a student misses the assessments scheduled for this date

Group Presentation

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 chosen topic. Students will select their presentation topic from a list provided by the instructor and also form their group on the first day of class. The group will present their chosen topic on the date indicated on the topic list which correlates with the lecture topic on that date. All students within the group ***must*** participate in the presentation so that a grade might be individually derived for each team member.

Assessment Method (10% of Lecture Grade)

The presentation grade counts as 10% of your lecture course grade. The criteria for the presentation 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 return a feedback form evaluating each member's teamwork contribution. The remaining 60% of the presentation grade will be determined by the instructor based on the Presentation Grading Rubric for Organization, Topic Knowledge, Creativity and Visual Aids, and Communication Skills. Students should incorporate images, videos, or other resources in their presentation to convey their topic. The presentation grading rubric with criteria and point value of presentation components may be found on the following website: **http://faculty.tamuc.edu/sgossett**

Course Exams

There will be a total of seven exams (six intermittently throughout the course and the final exam). This scheduling permits (1) students to have smaller "portions" of biological information in which to be tested over at one time and (2) lower percentages on exams than if only two or three exams were given. 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 work the study guides as they progress through the assigned lecture reading. During lecture, the instructor will make every effort to cover the pertinent points of the assigned reading presented on the study guide; however, students are responsible for obtaining the answers from their textbook. Students needing assistance or clarification not covered during the class lecture may visit with the instructor during office hours. The study guides and accompanying chapter PowerPoint may be located at the following website: **http://faculty.tamuc.edu/sgossett**

Exam	Scheduled Date	Time	% of Lecture Grade
Exam I – Chapters 2, 3, and 4	January 28	9:30 a.m.	10%
Exam II – Chapters 19, 20, and 21	February 18	9:30 a.m.	10%
Exam III – Chapters 5, 6, and 7	March 6	9:30 a.m.	10%
Exam IV – Chapters 8, 9, and 10	March 25	9:30 a.m.	10%
Exam V – Chapters 11, 12, and 13	April 8	9:30 a.m.	10%
Exam VI – Chapters 14, 15, and 16	April 22	9:30 a.m.	10%
Final Exam – Chapters 17 and 18	May 8	8:00 a.m.	20%

Assessment Method (Exam I - Exam VI count 10% each and the Final Exam counts 20% of Lecture Grade)

Each of the course exams will be composed of 50 multiple choice questions. Exam I through Exam VI each count 10% of your lecture grade. The Final Exam constitutes 20% of your lecture grade. Students will need a scantron (Form Number 882-E) for each of the course exams. A documented excused absence (refer to the University's Student's Guide Handbook, Polices and Procedures, and Conduct on TAMUC-website) will be required if a student misses an exam assigned date.

Lecture Grading

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

The final course grade will be derived from your lecture grade (75%) and your laboratory grade (25%). During your scheduled laboratory time, the laboratory facilitator will provide students with a syllabus outlining laboratory grading criteria, policies, and percentages as well as the guidelines for laboratory safety. Students will be permitted to make-up an exam or assignment; however, it will require a **documented official excuse** (refer to the University's Student's Guide Handbook, Polices and Procedures, and Conduct). All make-up work must be completed 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 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.

Course Grading Scale – Lecture and Laboratory Combined

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

Technology Requirements

Students will need access to a computer to access the exam study guides, the grading rubric for the course presentation, and if they choose to view the PowerPoint for the assigned chapter. Should a student not have access to a home computer, they may use those provided by Texas A&M University – Commerce at the library or in the Computer Lab located in the Science and Technology Center, Room 210.

Support

Academic Success Center ...where minds meet

The Academic Success Center (ASC) is focused on providing academic resources to help each student reach their intellectual potential and achieve academic success. They provide excellent resources available on their website to increase your ability to study effectively, facilitate time management strategies, and enhance your

learning. The Academic Success Center also offers on campus tutoring. Please visit their website for more information: http://asc@tamuc.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

Course and University Procedures/Policies

Course Specific Procedures

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. Students should inform the instructor if circumstances prevent their attendance in class. In the event a student is absent on the date of a graded course assignment (e.g. exam, assessment, or presentation), the student is responsible for providing the instructor with the excused documentation and to schedule a time to complete.

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.

ADA Statement

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 and 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@tamuc.edu.

Student Conduct

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.

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.

Course Outline/Calendar of Reading Assignments, Assessments, and Exams Schedule

Week	Date	Class Assignment
1	**January 14**	Introduction to Course and Syllabus Review
1	**January 16**	Chapter 2—Chemistry Comes to Life
2	**January 21**	Chapter 3—The Cell
2	**January 23**	Chapter 4—Body Organization and Homeostasis
3	**January 28**	**Test I over Chapter 2, Chapter 3, and Chapter 4**
3	**January 30**	Chapter 19—Chromosomes and Cell Division
4	**February 4**	Chapter 20—Genetics and Human Inheritance
4	**February 6**	Chapter 21—DNA and Biotechnology
5	**February 11**	Chapter 21—DNA and Biotechnology
5	**February 13**	Chapter 5—The Skeletal System
6	**February 18**	**Test II over Chapter 19, Chapter 20, and Chapter 21**
6	**February 20**	**Critical Thinking and Empirical and Quantitative Skills Assessments**
7	**February 25**	Chapter 6—The Muscular System
7	**February 27**	Chapter 7—Neurons: The Matter of the Mind
8	**March 4**	Chapter 8—The Nervous System
8	**March 6**	**Test III over Chapter 5, Chapter 6, and Chapter 7**
		Spring Break
9	**March 18**	Chapter 9—Sensory Systems
9	**March 20**	Chapter 10—The Endocrine System
10	**March 25**	**Test IV over Chapter 8, Chapter 9, and Chapter 10**
10	**March 27**	Chapter 11—Blood
11	**April 1**	Chapter 12—The Cardiovascular and Lymphatic Systems
11	**April 3**	Chapter 13—Body Defense Mechanisms
12	**April 8**	**Test V over Chapter 11, Chapter 12, and Chapter 13**
12	**April 10**	Chapter 14—The Respiratory System
13	**April 15**	Chapter 15—The Digestive System
13	**April 17**	Chapter 16—The Urinary System
14	**April 22**	**Test VI over Chapter 14, Chapter 15, and Chapter 16**
14	**April 24**	Chapter 17—Reproductive Systems/Sexually Transmitted Diseases
15	**April 29**	Chapter 18—Development throughout Life
15	**May 1**	Chapter 18a—Autism Spectrum Disorders
	May 8	**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.