

BSC 1406- Biology for Science Majors

COURSE SYLLABUS: Fall 2023

INSTRUCTOR INFORMATION

Instructor: Justin Anderton

Office Location: Commerce High School Room A 127

Office Hours:

M-F 9:28am – 10:13AM

Wednesdays: 3:30PM -4:30PM

Office Phone:

Office Fax:

University Email Address: justin.anderton@tamuc.edu

Commerce HS Email Address: justin.anderton@commerceisd.edu

COURSE INFORMATION

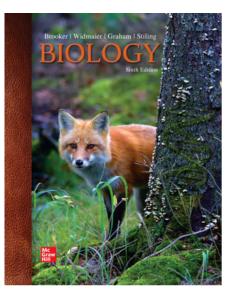
Materials – Textbooks, Readings, Supplementary Readings

Biology, 6th Edition

ISBN10: 1264039719 | ISBN13: 9781264039715 By Robert Brooker, Eric Widmaier, Linda Graham and Peter Stiling © 2023

BSC 1406 - Introductory Biology I - Four

semester hours (3 lec/1 lab). This course is the first half of the Introductory Biology series. It is designed for the following majors: Broad field Biology, Pre-Med, Pre-Allied Health, and Pre-Vet. Topics covered include biological evolution, biochemistry,



cellular and molecular biology, genetics, and microbiology. Note: Students must register for both lecture and lab sections.

Course Description

Course Objectives: This course is designed as the first half of the freshman biology sequence and covers topics including biological evolution, biochemistry, cellular biology, and molecular genetics. With successful competition of this course, students will be able to demonstrate understanding of the above concepts by definition, explanation, and use of these ideas in examinations and laboratory exercises.

Student Learning Outcomes Students will be able to interpret, test and demonstrate principles revealed in empirical data. 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. Students will be able to analyze, evaluate, or solve problems when given a set of circumstances or data.

COURSE REQUIREMENTS

Student Responsibilities or Tips for Success

in the Course NOTE THAT This is a Majors-level course, and you are expected to allot adequate time to regularly studying the material on your own- this material forms the foundation for your advanced classes in the coming terms. You are expected to read all textbook chapters corresponding to topics covered in lecture. It is also strongly recommended that you read the preface of the textbook, with hints on how to best use it. We will not use every chapter of the textbook in lecture, and we may discuss some aspects in more detail than your text goes intoso be sure to keep up with lecture notes too! If you miss a lecture, you are still responsible for that day's material- read the chapter, get notes from someone in class, review the powerpoints (posted at D2L), and see me for any clarification. If you have difficulty with the material, feel free to see me as soon as you can for advice on how best to improve.

Instructional Methods

Daily face-to-face course with multiple types of instruction—lecture, texts, videos, and student-led projects. By the end of this course, the class will have read an array of literary forms including poetry, fiction, drama, graphic narrative, and nonfiction. During the semester you will complete several major assignments designed to allow you to demonstrate your understanding of a particular piece of literature and its importance to the human experience. The following categories will determine your final grade in this course.

Class participation and lab work

(preparedness, discussion, in-class activities) Class participation is vital in class. Your questions and comments may help clarify the content for your peers. Group work is an integral part of this course. Collaboration of an investigative team during labs is essential to gaining the best perspective and will be considered when participation points are awarded. Everyone's attention and participation is key to this approach.

GRADING

Students will be given the following opportunities to demonstrate knowledge of class material.

Research and Writing Assignments- There will be <u>1 major research paper and 2 Article</u> <u>Reviews</u> done during this course. The Research Assignment is broken down as follows:

| Research Topic Selection | Peer Review | Article Review# 2 |
|--------------------------|-------------------|-------------------|
| Research Paper Outline | Final Paper | |
| Introduction | Article Review #1 | |

Exams - Exams are done online outside of class

You will have 1 exam per unit plus a final exam. Each unit exam will consist of 60 MC/TF questions and will have a time limit to complete.

The final exam will be 100 questions and will have a time limit to complete. The final will also be cumulative.

Quizzes- Quizzes are done online outside of class

You will have a quiz for each chapter covered in this course. Each Quiz will be 15 MC/TF questions and will have a time limit to complete.

Lab Reports and Assignments

Lab reports- Formal lab reports will be required for each lab activity conducted in this course. Please follow the "Lab Report Template" provided to you in D2L

Final grades in this course will be based on the following scale:

A = 90%-100% B = 80%-89% C = 70%-79% D = 60%-69% F = 59% or Below

Total points corresponding to the final letter grades

A = 900- 1000 Points

B = 899- 800 Points

C = 799- 700 Points

| Week | Chapter | Assignment |
|------|---|--|
| 1 | Ch2. Chemistry | Writing topic Selection |
| 2 | Ch.3 water | |
| 3 | Ch.4 Carbon | |
| 4 | Ch5. Macromolecules | Exam 1 (ch 1-5)/Lab Activity1 |
| 5 | Ch6. The Cell | Research Introduction |
| 6 | Ch7. and Ch8. Cell Membrane and Metabolism | Lab Activity2 |
| 7 | Ch.9 Cellular Respiration | Lab Activity 3 |
| 8 | Ch.10 Photosynthesis | Exam 2 and article 2 summary |
| 9 | Ch.12 Mitosis | Lab Activity 4 |
| 10 | Ch. 13 Meiosis | |
| 11 | Ch. 14 Mendel | |
| 12 | Mendel continued | Peer Review Due Exam 3 |
| 13 | Ch. 17 From Gene to Protein | |
| 14 | Thanksgiving Break | |
| 15 | Ch. 27 Bacteria | Lab activity 5 and Research Paper Due |
| 16 | Finals | Exam 4 |
| | | |

TECHNOLOGY REQUIREMENTS

LMS

All course sections offered by Texas A&M University-Commerce have a corresponding course shell in the myLeo Online Learning Management System (LMS). Below are technical requirements

LMS Requirements:

https://community.brightspace.com/s/article/Brightspace-Platform-Requirements

LMS Browser Support:

https://documentation.brightspace.com/EN/brightspace/requirements/all/browser_support.htm

Zoom Requirements:

https://support.zoom.us/hc/en-us/articles/201362023-Zoom-system-requirements-Windows-mac OS-Linux

ACCESS AND NAVIGATION

You will need your campus-wide ID (CWID) and password to log into the course. If you do not know your CWID or have forgotten your password, contact the Center for IT Excellence (CITE) at 903.468.6000 or helpdesk@tamuc.edu.

Note: Personal computer and internet connection problems do not excuse the requirement to complete all course work in a timely and satisfactory manner. Each student needs to have a backup method to deal with these inevitable problems. These methods might include the availability of a backup PC at home or work, the temporary use of a computer at a friend's home, the local library, office service companies, Starbucks, a TAMUC campus open computer lab, etc.

COMMUNICATION AND SUPPORT

If you have any questions or are having difficulties with the course material, please contact your Instructor.

Technical Support

If you are having technical difficulty with any part of Brightspace, please contact Brightspace Technical Support at 1-877-325-7778. Other support options can be found here:

https://community.brightspace.com/support/s/contactsupport

Interaction with Instructor Statement

COURSE AND UNIVERSITY PROCEDURES/POLICIES

Course Specific Procedures/Policies

Syllabus Change Policy

The syllabus is a guide. Circumstances and events, such as student progress, may make it necessary for the instructor to modify the syllabus during the semester. Any changes made to the syllabus will be announced in advance.

University Specific Procedures

Student Conduct

All students enrolled at the University shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment. The Code of Student Conduct is described in detail in the <u>Student Guidebook</u>.

http://www.tamuc.edu/Admissions/oneStopShop/undergraduateAdmissions/studentGuidebook.aspx

Students should also consult the Rules of Netiquette for more information regarding how to interact with students in an online forum: <u>https://www.britannica.com/topic/netiquette</u>

TAMUC Attendance

For more information about the attendance policy please visit the <u>Attendance</u> webpage and <u>Procedure 13.99.99.R0.01</u>.

http://www.tamuc.edu/admissions/registrar/generalInformation/attendance.aspx

http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13stu dents/academic/13.99.99.R0.01.pdf

Academic Integrity

Students at Texas A&M University-Commerce are expected to maintain high standards of integrity and honesty in all of their scholastic work. For more details and the definition of academic dishonesty see the following procedures:

Undergraduate Academic Dishonesty 13.99.99.R0.03

Undergraduate Student Academic Dishonesty Form

http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/docu ments/13.99.99.R0.03UndergraduateStudentAcademicDishonestyForm.pdf

Graduate Student Academic Dishonesty Form

http://www.tamuc.edu/academics/graduateschool/faculty/GraduateStudentAcademicDishonesty Formold.pdf http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13stu dents/undergraduates/13.99.99.R0.03UndergraduateAcademicDishonesty.pdf

Students with Disabilities-- ADA Statement

The Americans 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 an accommodation, please contact:

Office of Student Disability Resources and Services

Texas A&M University-Commerce

Velma K. Waters Library Rm 162

Phone (903) 886-5150 or (903) 886-5835

Fax (903) 468-8148

Email: studentdisabilityservices@tamuc.edu

Website: Office of Student Disability Resources and Services http://www.tamuc.edu/campusLife/campusServices/studentDisabilityResourcesAndServices/

Nondiscrimination Notice

Texas A&M University-Commerce will comply in the classroom, and in online courses, with all federal and state laws prohibiting discrimination and related retaliation on the basis of race, color, religion, sex, national origin, disability, age, genetic information or veteran status. Further, an environment free from discrimination on the basis of sexual orientation, gender identity, or gender expression will be maintained.

Campus Concealed Carry Statement

Texas Senate Bill - 11 (Government Code 411.2031, et al.) authorizes the carrying of a concealed handgun in Texas A&M University-Commerce buildings only by persons who have been issued and are in possession of a Texas License to Carry a Handgun. Qualified law enforcement officers or those who are otherwise authorized to carry a concealed handgun in the State of Texas are also permitted to do so. Pursuant to Penal Code (PC) 46.035 and A&M-Commerce Rule 34.06.02.R1, license holders may not carry a concealed handgun in restricted locations.

For a list of locations, please refer to the Carrying Concealed Handguns On Campus

document and/or consult your event organizer.

Web url:

http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/34Saf etyOfEmployeesAndStudents/34.06.02.R1.pdf

Pursuant to PC 46.035, the open carrying of handguns is prohibited on all A&M-Commerce campuses. Report violations to the University Police Department at 903-886-5868 or 9-1-1.

A&M-Commerce Supports Students' Mental Health

The Counseling Center at A&M-Commerce, located in the Halladay Building, Room 203, offers counseling services, educational programming, and connection to community resources for students. Students have 24/7 access to the Counseling Center's crisis assessment services by calling 903-886-5145. For more information regarding Counseling Center events and confidential services, please visit <u>www.tamuc.edu/counsel</u>