Division of Natural and Computational Sciences
Department of Biology
BIOL 1472 GENERAL BIOLOGY II
College Mission

Texas College is a Historically Black College founded in 1894, by the Colored Methodist Episcopal Church, now the Christian Methodist Episcopal Church (CME). Our mission continues to embody the principles of the Christian Methodist Episcopal Church. The College shall prepare students with competencies in critical and creative thinking related to the knowledge, skills, and abilities as defined in areas of study. Additionally, the College shall provide an environment to inspire intellectual, spiritual, ethical, moral, and social development, which empowers graduates to engage in life-long learning, leadership, and service. *(Restated October 26, 2023)*

Textbook and Electronic Devices

Mader,S., and Windelspecht, M. (2020). ***Biology***, New York, New York: McGraw-Hill Publishers. 14th Edition. ISBN13: 9781260710878

Required Viewing/Resources:

- https://www.bing.com/videos/search?q=video+origin+of+the+earth&docid=608037476946162920&mid=FABD0DD09152488CF257FABD0DD09152488CF257&view=detail&FORM=VIRE Origin of the Earth
- https://www.youtube.com/watch?v=H476c8UjLXY First Mass Extinction
- Understanding Human Behavior - Human Psychology (Ep. 1 of 30) - YouTube Human Behavior

Other Requirements:

Access to Computer or Laptop. The School can loan you a Laptop through the Business Office..

Course Description:

General Biology II (4 credit hours). This course is designed to serve as a continuation of the General Biology I Course (BIOL 1471) for those students who wish to become biology majors. It emphasizes the origin of the earth, Systematics, Major Evolutionary Events, Human Behavior, and the overall unity and diversity of life and living organisms. **Course Prerequisite: General Biology I (BIOL 1471).**

TEXAS COLLEGE OUTCOMES

1. Critical Thinking Skills
2. Communication Skills
3. Empirical and Quantitative Skills
4. Teamwork
5. Social Responsibility
6. Personal Responsibility

Furthermore, this course ensures the following institutional objectives:
1. Enhance communicative skills (oral and written)
2. Enhance critical thinking and technology skills.
3. Enhance leadership abilities and spiritual awareness.
4. Create opportunities for professional and pos-graduate pathways.

All learning objectives reflect the Texas College Core Values.

Academic Excellence: Developing a culture of curiosity and creativity that will challenge the frontiers of teaching/learning; stimulate research; raise the level of analytical reasoning and inquiry; and enable students to acquire leadership, human relations, communication, and technology skills.

Integrity: Instilling the pursuit of character, honesty, and sincerity of purpose as the moral rubrics upon which the behaviors of our graduates and College family are anchored.

Perseverance: Implanting diligence, enterprise, and pride in the application of skills, knowledge and abilities developed during the course of study at Texas College.

Social Responsibility: Promoting in the College community a conscious awareness that we are all stewards of the resources entrusted to our care.

Tolerance: Emphasizing openness to divergent points of view, applying an eclectic approach to rational and analytical thinking.

Community Service: Encouraging self-extension in service to others as the heart and soul of our educational enterprise.

STUDENT LEARNING OBJECTIVES & OUTCOMES

When you have completed your study in this course you should be proficient in meeting the following: objectives as described in the chart below. Tests and assignments will be taken virtually on JICS.

TENTATIVE WEEKLY COURSE SCHEDULE

Week/Chapter	Unit 1: Syllabus; Lab Safety; Pretest on Coursework; Syllabus Quiz on Coursework	*Emphasis on Course Requirements as appropriate*	Total hours –4	SLO 1; TC 1 & 2

3/18	Unit 1: Origin and History of Life	Lecture; Video; Homework assignments; Lab	Total hours-- 4	SLO 1; TC 1 & 2
4/18	Unit 1: Origin and History of Life	Lecture; Video; Homework assignments; Lab	Total hours - 4	SLO 1; TC 1 & 2
5/19	Unit 1: Taxonomy, Systematics, and Phylogeny	Lecture Video; Homework assignment; Lab	Total hours - 4	SLO 2; TC 1 & 2
6/19	Unit 1: Taxonomy, Systematics, and Phylogeny	Lecture Video; Homework assignment; Lab	Total hours - 4	SLO 2; TC 1 & 2
7/19	Unit 1: Taxonomy, Systematics, and Phylogeny	Lecture Video; Lab	Total hours - 4	SLO 2; TC 1 & 2
8/30	Unit 2: Human Evolution	Lecture Video; Homework assignment; Lab	Total hours - 4	SLO 3; TC 1, & 2
Week 9	**Spring Break**			
10/43	Unit 3: Animal Behavior	Lecture Video; Lab	Total hours - 4	SLO 5; TC 1, & 2
11/43	Unit 3: Animal Behavior	Lecture Video; Homework assignment; Lab	Total hours - 4	SLO 5; TC 1, & 2
12/43	Unit 3: Animal Behavior	Lecture Digestive System; Video; Homework assignment; Lab	Total hours - 4	SLO 6; TC 1 & 2
13/43	Unit 3: Animal Behavior	Lecture Digestive System; Video; Homework assignment; Lab	Total hours - 4	SLO 6; TC 1 & 2
Week 14	Review and Finals			TC 1, 2, 3, 4
IMPORTANT DATES FOR THE SEMESTER Add or Drop a Course January 11 and 12 (without a fee charged) Midterm Exams: March 4-8 Final Exam for Prospective Graduating Seniors: April 15-19 Last Day to apply for May 2024 Graduation is February 29. Final Exam for Non-Graduates: April 29-May 3				

Baccalaureate: May 3 Commencement: May 4 HolidaySpring Break: March 11-15 Holiday MLKJr: Remembrance January 15 Holiday: Study Day: April 26 (This is the Friday before the beginning of Final Exams). <u>IMPORTANT INFORMATION FOR SUCCESS IN THE COURSE</u> Not missing class. Assignments are in Coursework-Keep up with new assignments and the Due Date. Keeping up with your School Email.				
	Total reading hours—60 (4 credit hour course)	**Total participation hours—120 (4 credit hour course)**	**Total Student Contact Hours TOTAL—180 (4 credit- hour course)**	

After completion of this <u>course</u>, students will be able to do the following:

Origin and History of Life

After learning about the Origin and History of Life, the student will be able to do the following with 80% accuracy.

a. List and describe the four stages of the origin of life.
b. Differentiate between the stages of chemical and biological evolution.
c. Describe the protocell membrane and structureand its importance to the evolution of the first living cell.
d. Summarize at least one hypothesis that explains each of the four stages of the origin of life.

Taxonomy, Systematics, and Phylogeny

After learning about taxonomy, systematics, and phylogeny, the student will be able to do the following with 80% accuracy.

a. Differentiate between taxonomy, classification, and systematic biology.
b. Reconstruct the levels of the Linnaean classification hierarchy.
c. Identify the genus and species of an organism from its scientific name.

Human Evolution

After learning about vertebrate evolution, the student will be able to do the following with 80% accuracy.

a. Identify the major groups of primates.
b. Discuss the traits common to the primates.
c. Arrange the groups of primates in an evolutionary tree that shows their relationship.

Animal Behavior

After learning about animal behavior, the student will be able to do the following with 80% accuracy.

a. Explain the key aspects of studies that suggest behavior has a genetic basis.
b. Describe the body systems that play a role in influencing behavior.

Instructional Strategies:

- Inclass Discussion
- Inclass and Virtual Presentations
- Relevant videos

Student Activities:

- Participation
- Essay Questions
- Internet researc
- Midterm and Final Exams
- Chapter Exams
- Laboratory Assignments

Method of Instruction:

- Web-based environment
- Class discussion to examine the topics on the course outline.
- Required readings and online activities.
- Use of online tools and resources to facilitate a deeper understanding of the readings and the class discussions.

Note: Designated time will be given to each student to discuss student progress. See your instructor for more information.

SOFTWARE AND SUPPLIES

Software and Programs:

1. Access to websites as referenced in class. *Students attempting to gain access through Mac books, or outdated equipment may experience difficulties with certain websites or videos. It is the student's responsibility to locate a computer lab with viable equipment.*

2. Access to JICS. *It is the student's responsibility to become familiar with* JICS.

3. Documents in this course will be in Word format. PowerPoints will also be used.

4. *Students should be prepared to back up files on their own Flash Drive. Work should be saved more than once, as it is not the instructor's responsibility if technology issues suddenly occur and information is lost.*

COURSE REQUIREMENTS

SUBMISSION OF ASSIGNMENTS

All assignments must be submitted on time **in JICS. Submitting assignments through email is discouraged.** If **extenuating circumstances** prevent you from turning in an assignment, please contact the Instructor **before** the due date. Late work will be accepted **only if** emergencies are documented or

Texas College is experiencing IT difficulties. Students are required to have access to internet that is JICS compatible.

Students are expected to submit assignments on or before the due date.

ATTENDANCE POLICY

The student is responsible for attending all lectures and other required functions for each registered class. A student will be permitted one unexcused absence per credit hour of the course by the instructor in which he/she is enrolled. Any student whose unexcused absences exceed the number permitted by the instructor may be vulnerable to failing the course. The administration endorses student participation in activities and exercises that represent the college to the external public. However, students are still responsible for the successful completion of coursework. Below is a list of the excused absences and acceptable documentation considered by administration.
Excused Absences and the required documentation can be found on page 37 of the College Catalog. The Catalog can be found on the Texas College Website under the Office of Academic Affairs.
The student is responsible for attending all lectures and other required functions for each registered class—beginning with the first day of the scheduled class—in order to verify registration with instructors and to complete all work assigned for the course. If a student does not attend class during the first week (first five instructional days) of the semester, or does not attend five consecutive class sessions, and does not give prior notification to the instructor of reasons for absence, and intent to attend the class, the student may be recommended to the Vice-President for Academic Affairs to be administratively withdrawn from the course. The instructor should read the rules governing class attendance and absences to each of the assigned classes at the beginning of each semester.

These attendance regulations will be strictly enforced.

The student will be held accountable for adhering to the College Attendance Policy. Instructors are not obligated to allow students to submit late assignments because of their absence unless the absences have been officially approved. An officially approved absence, however, gives the individual who missed the class an opportunity to turn in the assignment late but in no way excuses the student from the work required. Official excuses are granted by the vice president for student affairs for authorized College activities, verified personal illness, or illness or death in the student's immediate family. Students should understand that absences may jeopardize their grades. A student will be permitted one unexcused absence per credit hour of the course in which he/she is enrolled. Any student whose unexcused absences exceed the number permitted may, at the discretion of the instructor, be assigned a grade of "F" or be dismissed from the class.

Absences will count from the first official date of classes and not from the first day the student attends. It is the responsibility of the instructor to keep an accurate attendance record of all students enrolled. Students receiving veterans' benefits are required to attend classes according to the regulations of the Veterans Administration in addition to those regulations set by the College for all students.
EXCUSED ABSENCES AND ACCEPTABLE DOCUMENTATION: From page 37 of the College Catalog:

- Personal illness or illness of immediate family member-Physician's statement.
- Death in immediate family-Funeral program.
- Patriotic duty (military or jury duty; court appearance)-Copy of notice or summons.
- Performance of co- or extra-curricular obligations to the College (travel with athletic teams, class field trips, conferences, seminars, fine arts performances -Written statement from sponsor or notice from either the Office of Academic Affairs or Student Affairs College Assembly Attendance.

ACADEMIC HONESTY

Academic Integrity Policy:
Texas College believes that strength of character is as important as academic achievement, therefore, the College expects everyone in the academic community to maintain personal integrity in academic matters and not to contribute or condone the dishonesty of others. Scholastic dishonesty (which includes any form of plagiarism, cheating, falsification of records, and collusion with others to defraud) is improper and will not be tolerated. Texas College reserves the right to apply disciplinary actions to a student who has committed scholastic dishonesty. For further information, see the ***Texas College Catalog found on the Texas College website (www.texascollege.edu) page 35, Item: Academic Integrity Policy.***

INSTRUCTIONAL METHOD

Texas College observes **remote synchronous instruction** defined as a two-way, real-time/live, virtual instruction between instructors and students when students are not on campus, and maybe observing COVID-19 distance requirements.

In this method, the required amount of instructional time related to courses will be scheduled each day, and communication is generated when attendance is recorded daily at a locally selected time utilizing school-purchased Software. Synchronous instruction is provided through a computer or other electronic device or over the phone. The instructional method will address the course and degree program requirements. If a student who is originally scheduled to receive instruction through the on-campus or synchronous instructional method is not present at the designated official course time, the student will be not be considered present for the day by engaging through the remote synchronous method.

In the remote synchronous instructional method, student engagement is measured daily, and attendance is assigned based on the student's completion of that day's course engagement measure. Students who do not complete the daily measure of engagement are to be counted absent for that day, and that absence cannot be changed to remote synchronous present if the student completes the engagement measure on a later date.

Attendance is measured as synchronous interaction for scheduled courses. Attendance depends on the **active participation of students whether virtual (synchronous) or in class (non-synchronous)**. Students are expected to attend online sessions just as students will do in a face-to-face means of instruction.. Appropriate lighting is encouraged for better engagement when the video feature of Zoom is in us.

PROGRAM FOR WHICH THE COURSE IS REQUIRED

General Biology II is a requirement for Biology Majors which leads to a Bachelor of Science (BS) Degree in Biology.

METHOD OF STUDENT EVALUATION

Tests are typically composed of multiple choice, fill in the blank, short answer, and true/false questions aimed at using critical thinking. Examinations are 100 points each, except for the final examination which is 200 points.

Evaluation Components	**% of Grade**
Lecture	**75**
Classroom Assignments	
Chapter Examinations	

Midterm Examination
Final Examination
Laboratory **25**
Total:

Grading Rubric:

A = 90-100	Transformative (and submitted on time)
B = 80-89	Proficient
C = 70-79	Developing
D = 60-69	Beginning
Below 60	Not Submitted on time

***Grade of C or above is required to pass the course. The course must be repeated for Biology Majors if grade is a D or below.**

Course Assignments-Lecture and Laboratory: (Assignments and their Due Dates on Posted on JICS Coursework).

Each student is expected to complete the assignments as specified. There will be No exceptions.

ASSESSMENT

Performance based standards for each learning opportunity will be explained prior to each assignment. Students will work toward successful attainment of all standards. The assessment is designed to require use of high level thinking skills and to provide authentic opportunities for students to demonstrate an understanding of effective classroom management. Assessment of the course objectives may include but is not limited to methods such as simulation, debate, and research.

Missed assignments cannot be made up. This is a measure of your attendance, and participation, as well as your thinking skills.

SPECIAL NEEDS LEARNING

Students who have a disability for which an accommodation is necessary, are encouraged to contact both their instructor and the Office of the Vice President for Academic Affairs at (903) 593-8311 x. 2335 for accommodations. Requests are encouraged to be made as early as possible in the term.

DIVERSITY STATEMENT

Texas College is committed to creating a community that affirms and welcomes persons from diverse backgrounds and experiences and supports the realization of their human potential. We recognize that there are differences among groups of people and individuals based on ethnicity, race, socioeconomic status, gender, exceptionalities, language, religion, sexual orientation, and geographical area. All persons are encouraged to respect the individual differences of others.

Caveat:
In the event of extenuating circumstances, the schedule and requirements for this course may be modified.

TECHNOLOGICAL STATEMENT

This course is infused with technology in order to:

- Participate in Courses Synchronously
- To provide access for course information
- Use the Internet and electronic databases to conduct searches for research projects
- Create multimedia presentations to present class projects to teachers and peers
- PowerPoint Presentations

WRITING ACROSS THE CURRICULUM

Strong communication skills are critical for professionals. In an effort to maintain a commitment to developing effective writing skills for all students, all writing assignments will be evaluated for overall communicative competence. The following will be considered when grading written assignments:

- Word-processed (12 font), double-spaced, one inch left, right, top and bottom margins
- Content
- Clarity and Organization
- Source(s)
- Depth of thought/Originality
- Technology and Delivery
- Grammar and mechanics

RESOURCES

Unit 1 Origin and History of Life	
Origin of Life on Earth	1. https://www.youtube.com/watch?v=8SgnnV8nV9g
Origin of Life	2. https://www.youtube.com/watch?v=QE5Js-9AzHo
Timeline of Life on Earth	3. https://www.youtube.com/watch?v=-Wfu0GR-mE8
Finch Evolution and the Galapagos Islands	https://www.digitalatlasofancientlife.org/learn/evolution/
Unit 2 Human Evolution	
Human Origins	1. https://www.youtube.com/watch?v=ehV-MmuvVMU
Human Evolution	2. https://www.youtube.com/watch?v=DZv8VyIQ7YU
Human Evolution Past to Present 3. https://www.google.com/search?q=video+on+human+evolution&sxsrf=ALiCzsa0GOaZOoee9MwyTosYObpOsNqmxw%3A1670711194052&source=hp&ei=mgeVY_xb0c_Q8Q_elqOgCA&iflsig=AJiK0e8AAAAAY5UVqn3QWQRijStjkgE_hyjMizORHRYE&oq=video+on+human+evolution&gs_lcp=Cgdnd3Mtd2l6EAEYADIFCAAQgAQyBggAEBYQHjIGCAAQFhAeMgUIABCGAzIFCAAQhgMyBQgAEIYDOgQIIxAnOgUIABCRAjoICAAQsQMQgwE6CwgAEIAEELEDEIMBOg0IABCABBCHAhCxAxAUOggIABAWEB4QD1AAWIEmYNw8aABwAHgAgAGcBYgBlCWSAQwwLjExLjIuMS4zLjGYAQCgAQE&sclient=gws-wiz#fpstate=ive&vld=cid:c67d36b6,vid:hsqwtiiUsfs	
Unit 3: Animal Behavior	
Animal Behavior	1. https://www.youtube.com/watch?v=S3JsTHMWgss
10 Animal Behaviors	2. https://www.youtube.com/watch?v=gFL-A3IBL-8

BIOLOGY PROFESSIONAL ORGANIZATIONS/ASSOCIATIONS

Professional Associations are a great source of information about internships, career pathways, conferences, scholarships, opportunities to meet people in your field, and a whole host of career-related topics. Usually associations will provide a discounted membership rate for students enrolled in college. A few of these organizations include:

- American Academy of Forensic Sciences
- American Association for the Advancement of Science
- American Institute of Biological Sciences
- The American Physiological Society
- American Society for Biochemistry and Molecular Biology
- American Society of Crime Laboratory Directors
- American Society for Human Genetics
- American Society for Microbiology
- Association for Women in Science
- The International Association for Science, Technology and Society
- National Academy of Science

https://www.purdue.edu/science/careers/build_professional_profile/professional_orgs/bio_orgs.html

- American Association of Black Physicians

THE RULES

1. The class starts on time with no exceptions. Students who are late will not be allowed to enter the class and will be counted absent.
2. This class is only offered Face-to-Face.
3. Midterm: All lecture assignments, excluding tests, will close at 11:55 PM **March 2** and WILL NOT BE REOPENED NO MATTER THE REASON. The purpose of Class assignnents is to prepare you for the exams.
4. Final: All lecture assignments, excluding tests, will close at 11:55 PM **May 4** and WILL NOT BE REOPENED NO MATTER THE REASON.
5. Students who submit their assignments on time will receive 5 Extra Points on each on-time assignment.
6. Late Assignments will receive 70% of the earned grade.
7. Assignments written by another organization, person, plagiarized, or deemed dishonest will receive no credit for the assignment.
8. Labs will start at the beginning of the assigned class and will last for 50 minutes. Labs will close and not be reopened at the end of the 50 minute time period. The Biology Department does not offer Makeup Labs.
9. Five points will be deducted from your grade each time you are on your phone.
10. Should you leave the class to answer the phone, you will not be able to reenter the class and will be counted absent.
11. All grade documentation will be available in the instructors office.