

Midland College Syllabus

2022-2023

BIOL 1408 Lecture and Lab Online
Introduction to Biology (Non-Majors)
4 Semester Credit Hours
(3 Lecture/3 Lab)
Core Curriculum Course

Instructor Information:

Instructor: [Click here to enter text.](#)
Phone: [Click here to enter text.](#)

Office: [Click here to enter text.](#)
Office [Click here to enter text.](#)

Notice: Students MUST actively participate by completing an academic assignment required by the instructor by the official census date. Students who do not actively participate in an academically-related activity may be reported as never attended and dropped from the course.

Course Description:

Survey of the fundamental biological principles of living organisms with emphasis on humans, including chemistry of life, cells, function, and reproduction. Laboratory activities will reinforce these components. This course is suitable as a required lab science for non-biology majors and may not be substituted for BIOL 1406. Prerequisite: TSI complete in Reading.

Core Objectives:

This course fulfills four hours of the Life and Physical Science requirement in the Midland College **Core Curriculum**. The Core Curriculum is a set of courses that provide students with a foundation of knowledge, skills, and educational experiences that are essential for all learning. The Core Curriculum is available in the [Midland College Catalog](#). As part of the core, this course addresses the following four objectives:

Critical thinking skills – Students will demonstrate critical thinking by analyzing and applying appropriate terminology and knowledge to interpret results from cell physiology, enzyme, and genetics experiments. (CO1)

Communication skills – Students will demonstrate communication skills in written, oral, or visual form within the classroom setting through instructor-posed questions, collaborative peer assignments, and/or exams. (CO2)

Empirical and Quantitative skills – Students will demonstrate empirical and quantitative skills by analyzing the results of cell physiology, enzyme, and genetic experiments and testing hypotheses utilizing the scientific method through assignments, exams, and/or lab activities. (CO3)

Teamwork – Students will demonstrate teamwork skills by functioning in collaborative and cooperative class activities. (CO4)

Text, References, and Supplies:

Canvas Accessible

Textbook: Access to any current college-level Biology textbook. A link to Open Stax will be provided in the course information on Canvas.

Computer: Access to a working computer throughout the course with the ability to access the Internet and Canvas.

Student Learning Outcomes:

Upon successful completion of this course, students will:

1. Apply scientific reasoning to investigate questions, and utilize online scientific resources such as virtual microscopes and laboratory equipment to collect and analyze data.
2. Use critical thinking and scientific problem-solving to make informed decisions in lab activities.
3. Communicate effectively the results of scientific investigations.
4. Distinguish between prokaryotic, eukaryotic, plant, and animal cells, and identify major cell structures.
5. Identify stages of the cell cycle, mitosis (plant and animal), and meiosis.
6. Interpret results from cell physiology experiments involving movement across membranes, enzymes, photosynthesis, and cellular respiration.
7. Apply genetic principles to predict the outcome of genetic crosses and statistically analyze the results.
8. Identify the importance of karyotypes, pedigrees, and biotechnology.
9. Identify parts of a DNA molecule, and describe replication, transcription, and translation.
10. Analyze evidence for evolution and natural selection.

Student Contributions, Responsibilities, and Class Policies:

It is the student's responsibility to read and understand the official Midland College attendance and withdrawal policies as stated in the [Midland College catalog](#). As stated previously, attendance will be based on timely and continuing online participation in this class. Other course policy information is given separately in this Canvas course module.

Attendance Policy:

It is the responsibility of the student to know the policies and procedures associated with absence. Excused absences and makeup work are determined by the instructor.

Withdrawal Policy:

Students who have enrolled in a Texas public institution of higher education as a first-time freshman in fall 2007 or later are permitted to drop no more than six courses during their entire undergraduate career. This limit includes all transfer work taken at a Texas institution of higher education and to second baccalaureate degrees. This statute was enacted by the State of Texas in the spring of 2007 (Texas Education Code 51.907). Any course that a student drops after Census Day

is counted toward the six-course limit if “(1) the student was able to drop the course without receiving a grade or incurring an academic penalty; (2) the student’s transcript indicates or will indicate that the student was enrolled in the course; and (3) the student is not dropping the course in order to withdraw from the institution.”

To drop a course, the student must complete an [official withdrawal form](#) with Student Services.

Scholastic Dishonesty:

Midland College does not tolerate scholastic dishonesty or academic misconduct in any form. Please read the MC Student Handbook on this subject. Please visit the [Midland College Catalog](#)

Students are strongly encouraged to seek extra help if they are having difficulty with the assigned material.

Evaluation of Students:

The course grade will be determined as follows:

Combination lecture/lab quizzes/exams40 – 60 %

Assignments such as labs, discussion boards, and other activities40-60%

Grades will be assigned as follows: A = 90-100; B=80-89; C=70-79; D=60-69; F=below 60. There will be no exceptions to these grade ranges.

Exams will be given at the discretion of the instructor. Makeup work will be at the discretion of the instructor.

Course Schedule:

This class is 100% online. This class is not self-paced. A tentative schedule of course assignments is provided in a module on CANVAS.

Non-Discrimination Statement

Midland College does not discriminate on the basis of race, color, national origin, sex, disability or age in its programs and activities. The following individual has been designated to handle inquiries regarding the non-discrimination policies:

Tana Baker

Title IX Coordinator/Compliance Officer

3600 N. Garfield, SSC 131

Midland, Texas 79705

(432) 685-4781

tbaker@midland.edu

For further information on notice of non-discrimination, visit the ED.gov Office of Civil Rights website, or call 1 (800) 421-3481.

Americans with Disabilities Act (ADA) Statement:

Midland College provides services for students with disabilities through Student Services. In order to receive accommodations, students must visit www.midland.edu/accommodation and complete the Application for Accommodation

Services located under the Apply for Accommodations tab. Services or accommodations are not automatic, each student must apply and be approved to receive them. All documentation submitted will be reviewed and a "Notice of Accommodations" letter will be sent to instructors outlining any reasonable accommodations.

Continuity of Instruction Statement

In the event that on campus activities are suspended due to extenuating circumstances, such as weather or quarantine, the instructor will continue instruction in a manner that best supports the course content and student engagement. In this event, your instructor will notify students of the change via [Click here to enter text](#). At that time, they will provide details about how instruction and communication will continue, how academic integrity will be ensured, and what students may expect during the time that on campus activities are suspended. If a student becomes unable to continue class participation due to extenuating circumstances, (e.g., health and safety, loss of power, etc.) the student should contact their instructor and advisor for guidance. Resources are available to students via the SOS program. Information can be found at <https://www.midland.edu/services-resources/student-services/sos.php>.

Grievances or complaints

Concerns should be expressed as soon as possible to allow for early resolution. Midland College encourages students to discuss their concerns with their instructor first. If you feel uncomfortable discussing your situation with your instructor, students should discuss their concerns with the Chair of the appropriate department (Biology Chair – Mr. Tomas Hernandez (432-685-6751), Chemistry Chair – Mr. John Anderson (432-685-6737), Engineering and Physics Chair – Dr. Brian Flowers (432-685-4586), Geology Chair – Mr. Antony Giles (432-685-5580), Kinesiology Chair – Ms. Sheena Thompson (432-685-4579), Math Chair – Dr. Krista Cohlmia (432-685-4541) then the Dean of Math and Science – Dr. Miranda Poage (432-685-4561). If a resolution is still not possible, students may proceed with the formal complaint process.

<http://catalog.midland.edu/content.php?catoid=14&navoid=2579#grievances-and-complaints>

Math & Science Division Information:

Division Office: AHSF 124 (432) 685-4561
Division E-Mail: mns@midland.edu

Department Chair: Mr. Tomas Hernandez (432) 685-6751
Dean: Dr. Miranda Poage
Secretary: Sarah Anderson
Clerk: Liliana Orcutt

Contents

Midland College Syllabus	1
Instructor Information:	1
Instructor:	1

Phone:	1
Notice	1
Course Description:	1
Core Objectives:	1
Critical thinking skills	1
Communication skills	1
Empirical and Quantitative skills.....	1
Teamwork.....	1
Text, References, and Supplies:	2
Computer:	2
Student Learning Outcomes:	2
Student Contributions, Responsibilities, and Class Policies:	2
Attendance Policy:	2
Withdrawal Policy:	2
Scholastic Dishonesty:	3
Evaluation of Students:	3
Course Schedule:	3
Non-Discrimination Statement	3
Americans with Disabilities Act (ADA) Statement:	3
Continuity of Instruction Statement	4
Grievances or complaints	4
Math & Science Division Information:	4