Midland College Syllabus
2018 - 2019
BIOL 1409 Lab
Introduction to Biology (Non-Majors) Lab
4 Semester Credit Hours
(3 Lecture/3 Lab)
Core Curriculum Course

Instructor Information:
Instructor: Click here to enter text.  
Office: Click here to enter text.  
Phone: Click here to enter text.  
Email: Click here to enter text.  
Office Hours: 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:
Fundamental principles of living organisms including physical and chemical properties of life, organization, function, evolutionary adaptation, and classification. Concepts of reproduction, genetics, ecology, and the scientific method are included. Prerequisite: BIOL 1408.

The laboratory portion of this course is an introduction to basic laboratory techniques that will demonstrate and verify principles presented in the lecture portion of the course.

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 URL for 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 comparing and contrasting the major phyla, divisions, and clades of life using instructor created proctored exams and imbedded departmental exam questions and lab practical exams.

Communication skills – Students will demonstrate communication skills in written, oral, and visual form within the classroom setting through instructor posed questions, collaborative assignments, and exams.
Empirical and Quantitative skills – Students will demonstrate empirical and quantitative skills by analyzing population genetic data and testing hypotheses utilizing the scientific method through course assignments, exams, and lab activities.

Teamwork – Students will demonstrate teamwork skills by functioning as collaborative and cooperative small groups through the dissection of specimens and other lab activities verified by submitted reports, weekly quizzes, and/or visual confirmation by the instructor.

Text, References and Supplies:
Canvas Accessible
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 scientific tools such as microscopes and laboratory equipment to collect and analyze data.
2. Use critical thinking and scientific problem-solving to make informed decisions in the laboratory.
3. Communicate effectively the results of scientific investigations.
4. Define modern evolutionary synthesis, natural selection, population genetics, micro and macroevolution, and speciation.
5. Describe phylogenetic relationships and classification schemes.
6. Identify the major phyla of life with an emphasis on plants and animals, including the basis for classification, structural and physiological adaptations, evolutionary history, and ecological significance.
7. Describe basic animal physiology and homeostasis as maintained by organ systems.
8. Compare different sexual and asexual life cycles noting their adaptive advantages.
9. Illustrate the relationship between major geologic change, extinctions, and evolutionary trends.

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 college catalog. Students that are tardy, take excessive break time, or leave before completion of the day’s exercise (including proper clean-up), may be counted absent. This will be at the discretion of the instructor. Regular attendance is required to do well in lab. Laboratory exercises and laboratory practicals require extensive preparation and set-up. The lab instructor’s handout will outline policies pertaining to absences. It is the student’s responsibility to contact the lab instructor regarding absences.
**Attendance Policy:**
It is the responsibility of the students to know the policies and procedures associated with absences. These policies are set by instructors. Excused absences may include, but are not limited to, illness, severe weather, and death in the family. Instructors will determine whether or not an absence is excused. Please visit the Midland College Catalog.

**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 the 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 spring 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.” Please visit the Midland College Catalog.

**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.

For safety concerns, students are not allowed to eat or drink in the laboratory, and are expected to follow all safety guidelines as instructed. Students are strongly encouraged to seek extra help if they are having difficulty with the assigned material.

**Evaluation of Students:**
- The lab grade constitutes 30% of the course grade. Lab grades will be assessed at the instructors’ discretion within the following parameters:
  - Daily grades (may include, but not limited to attendance, quizzes, or other lab activities) 0-40%
  - Assignments (may include, but not limited to, pre-lab or in-lab assignments, homework, lab reports, quizzes, or other activities) 0-40%
  - Exams: 1-5 exams may be given during the semester 25-100%

**Course Schedule:**
This class meets for 3 lecture hours per week and 3 laboratory hours per week. For a tentative schedule of the class meetings and laboratory meetings, please refer to the schedule distributed to each student on the first class meeting (See Instructor Handout).
ADA Statement:
Midland College provides services for students with disabilities through Student Services. In order to receive accommodations, students must place documentation on file with the Counselor/Disability Specialist. Students with disabilities should notify Midland College prior to the beginning of each semester. Student Services will provide each student with a letter outlining any reasonable accommodations. The student must present the letter to the instructor at the beginning of the semester.

Midland College does not discriminate on the basis of race, color, national origin, sex, disability or age in its programs and activities. The following individuals have been designated to handle inquiries regarding the non-discrimination policies: **Tana Baker, Title IX Coordinator/Compliance Officer, 3600 N. Garfield, SSC 242, Midland, TX 79705, (432) 685-4781, tbaker@midland.edu; Natasha Morgan, Director Human Resources/Payroll, 3600 N. Garfield, PAD 104, Midland, TX 79705, (432) 685-4534, nmorgan@midland.edu.** For further information on notice of non-discrimination, visit [http://wdcrobcolp01.ed.gov/CFAPPS/OCR/contactus.cfm](http://wdcrobcolp01.ed.gov/CFAPPS/OCR/contactus.cfm) or call 1 (800) 421-3481.

Spanish
Midland College no discrimina por motivos de raza, color, nacionalidad, sexo, discapacidad, o edad en sus programas o actividades. Las siguientes personas han sido designadas para responder a cualquier pregunta o duda sobre estas políticas no discriminatorias: **Tana Baker, Title IX Coordinator/Compliance Officer, 3600 N. Garfield, SSC 242, Midland, TX 79705, (432) 685-4781, tbaker@midland.edu; Natasha Morgan, Director Human Resources/Payroll, 3600 N. Garfield, PAD 104, Midland, TX 79705, (432) 685-4534, nmorgan@midland.edu.** Para más información sobre estas políticas no discriminatorias, visite [http://wdcrobcolp01.ed.gov/CFAPPS/OCR/contactus.cfm](http://wdcrobcolp01.ed.gov/CFAPPS/OCR/contactus.cfm) o llame al 1 (800) 421-3481.

Math/Science Division Information:
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