

McLennan

C O M M U N I T Y

COLLEGE

WACO, TEXAS

COURSE SYLLABUS

AND

INSTRUCTOR PLAN

Majors Biology II

1407.87

Liz Mitchell

NOTE: This is a 16-week course.

COVID 19 Notice:

McLennan Community College is committed to providing you with every resource you need to reach your academic goals including your safety. We will continue to monitor the evolving situation with COVID 19 and adjust our safety guidelines to make sure we offer a safe environment for you and our faculty. Please make sure to consult your faculty and the MCC website at <https://www.mclennan.edu/crisis-management/coronavirus-updates/index.html> on any changes to these guidelines.

Majors Biology II
1407.87

Course Description:

The diversity and classification of life will be studied, including animals, plants, protists, fungi, and prokaryotes. Special emphasis will be given to anatomy, physiology, ecology, and evolution of plants and animals. Semester Hours: 4 (3 lecture/3lab per week).

Prerequisites and/or Corequisites:

Successful completion of Biology 1406 with a "C" or better is required.

Course Notes and Instructor Recommendations:

This is a reading intense course.

This course is for students interested in majoring in biology and/or students who are interested in pursuing a degree in a health profession (pre-med, pre-dental, pre-PA, pre-pharmacy, etc.).

As such, the purpose of this course is to lay foundational groundwork upon which many principles of biology will be built. Therefore, this is a content heavy course. Please make sure you have the time commitment necessary to be successful.

This is also a reading intense course. Students will be expected to read the material outside of class.

Instructor Information:

Instructor Name: Liz Mitchell

MCC Email: emitchell@mclennan.edu

Office Phone Number: 254.299.8187 (If I am not in my office, please leave a message. I will be able to listen to the message on my cell phone).

Office Location: Science 220

Office/Teacher Conference Hours: TBD

Other Instruction Information: I can meet you either in-person or on Zoom. Zoom appointments will need to be scheduled ahead of time.

Other Instruction Information: I will be using Remind to send out important messages. Please sign up on Bright Space.

Students will need access to a computer or tablet with internet (smart phones will not work). All Reading Assignments are accessed through the Connect software platform. Students who do not have a computer at home can use the MCC library computers.

Your class is enrolled in Inclusive Access. This means your textbook was paid in your tuition fees. **Unless you specifically opted out of this option, your textbook has already been paid for.**

MCC Bookstore Website: <http://www.mclennan.edu/bookstore/>

Title: *Biology*

Author: Peter Raven, George Johnson, et al.

Edition: 12th

Publisher: McGraw-Hill

ISBN 13: 978-1260565959

ISBN 10: 1260565955

Students will receive a copy of the loose leaf textbook, as part of the above package. Please pick this up from the bookstore.

Students will also need to purchase a subscription of Proctorio. This will be offered through the Connect platform. This is a required purchase to take the proctured quizzes (if you are planning on taking your test at home).

Students will also need to purchase several items for lab. These include:

A whole, dead fish (for example, from the fish counter at HEB)

Fresh flowers (for example, a cheap bouquet from Wal-Mart)

****Please note:** I will have fish and flowers available at MCC for pick-up. I will ask students to tell me they need supplies by a specific date. If students do not tell me they need the supplies, they will be responsible for the supplies on their own.

Students who cannot get to MCC to pick up the supplies will be responsible for the supplies on their own. Please call me at 254.299.8187 if we need to have a discussion on the cheapest places to buy these.

Methods of Teaching and Learning:

This is a CONTENT HEAVY course. There is an enormous amount of content that students are required to learn.

Because this is an online course, a tremendous amount of the responsibility of learning falls onto the student.

This is a challenging course that will take a considerable time commitment on your part to be successful. You *must* have a reliable internet connection. You *must* be self-motivated to learn. You *must* have a backup plan in the event that your normal technology options fail you.

If you were taking this class in person, you would be sitting through lecture for 3 hours each week, plus spending 3 hours each week doing a laboratory assignment, plus about 6 or so more hours *on average* studying and completing homework outside of class, for a total of 12 or so total hours working on biology per week.

You can expect the online version of this class to take just as much time (and possibly more, since more of the responsibility of learning falls directly on the shoulders of the student) as the face-to-face course. The benefit of an online course is the flexibility to choose when you spend your time. However, please understand online courses still require time commitments from students.

Weekly homework, reading assignments, labs, discussions, and team assignments will be assigned to help students learn lecture material. Students will be given tests to assess their mastery of lecture material.

Weekly reading assignments will also be assigned to help students connect the material of the textbook to the material we are learning in class. These assignments are also created to help students understand the material more deeply and broadly.

Labs will help lead to deeper learning of lecture concepts. Labs will also facilitate an understanding of how scientific knowledge is created, scrutinized, and disseminated. Not all labs follow the lecture material.

Students will also be required to attend outside Supplemental Instruction (SI) activities. Students will be required to attend 7 SI sessions during 7 different weeks. Mandatory SI has been scientifically shown to help students achieve higher success in courses.

Majors Biology II
1407.87

Course Objectives and/or Competencies:

Upon successful completion of this course, students will:

Describe modern evolutionary synthesis, natural selection, population genetics, micro and macroevolution, and speciation. Describe phylogenetic relationships and classification schemes. 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. Describe basic animal physiology and homeostasis as maintained by organ systems. Compare different sexual and asexual life cycles noting their adaptive advantages. Illustrate the relationship between major geologic change, extinctions, and evolutionary trends. Apply scientific reasoning to investigate questions, and utilize scientific tools such as microscopes and laboratory equipment to collect and analyze data. Use critical thinking and scientific problem-solving to make informed decisions in the laboratory. Communicate effectively the results of scientific investigations. Demonstrate knowledge of modern evolutionary synthesis, natural selection, population genetics, micro and macroevolution, and speciation. Distinguish between phylogenetic relationships and classification schemes. 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. Describe basic animal physiology and homeostasis as maintained by organ systems. Compare different sexual and asexual life cycles noting their adaptive advantages. Illustrate the relationship between major geologic change, extinctions, and evolutionary trends.

Course Outline or Schedule:

This schedule is subject to change. Information regarding course changes will be communicated on Bright Space. It is up to the student to check Bright Space to be aware of course schedule changes.

Dates	Week	Team Lab Assignments	Discussion	Individual Lab Assignments	Chapter	Chapter Title
January 9 - 16	Week 1	No Team Assignment	Introduction	Review Assignment: The Cell, Tissues, Cell Signaling, Genetics, Proteins, Natural Selection	Orientation/Course Expectations and Overview	
					Chapter 20	Genes within Populations
January 16 - 23	Week 2	No Team Assignment	What is a Theory?	Fish Diversity and Differences Part 1	Chapter 22	The Origin of Species

Majors Biology II

1407.87

January 23 - 30	Week 3	No Team Assignment	No Discussion	Fish Diversity and Differences Part 2	Chapter 23	Phylogenetics	
January 30 - Feb 6	Week 4	No Team Assignment	What is a Species?	Complete Fish Diversity and Differences Part 2	Chapter 25	The Origin and Diversity of Life	
Feb 6 - 13	Week 5	No Team Assignment	No Discussion	Complete Fish Diversity and Differences Part 3	Chapter 26	Viruses	Mini-Test: Chapters 20, 22, 23, 25
Feb 13 - 20	Week 6	No Team Assignment	How can the knowledge of evolution be used in everyday life?	Evolution: Build a Tree	Chapter 27	Prokaryotes	
Feb 20 - 27	Week 7	Find a Team Discussion Board	Find a Team	HHMI: Lizard Ecomorphs	Chapter 28	Protists	
					Chapter 29	Seedless Plants	
Feb 27 - Mar6	Week 8	Team TOA	No Discussion	Finish HHMI: Lizard Ecomorphs	Chapter 30	Seed Plants	
					Chapter 31	Fungi	
March 6 - 12		Spring Break					
March 13 - 20	Week 9	Bear Assignment 1	No Discussion	No Individual Lab	Chapter 32	Animal Diversity and the Evolution of Body Plans	Test 1: Chapters 27 - 31
March 20 - 27	Week 10	Bear Assignment 2	No Discussion	No Individual Lab	Chapter 33	Protostomes	
					Chapter 34	Deuterostomes Part 1	
Marc 27 - April 3	Week 11	Bear Assignment 3	No Discussion	No Individual Lab	Chapter 34	Deuterostomes Part 2	
					Chapter 54	Ecology of Individuals and Populations	

Majors Biology II 1407.87

April 3 - 10	Week 12	Marine Reserves	No Discussion	No Individual Lab	Chapter 56	Dynamics of Ecosystems	
April 13 - 17	Week 13	Gorongosa Trail Cam	Wicked Problems	No Individual Lab	Chapter 35	Plant Form	
April 17 - 24	Week 14	Gorongosa Trail Cam	No Discussion	No Individual Lab	Chapter 41	The Animal Body and Principles of Regulation	Test 2: Chapters 33-34, 54, 56, 35
April 24 - March 1	Week 15	TBD	No Discussion	TBD	Chapter 46	The Digestive System	
March 1 - 4		Week of Finals					

*I will be available Friday February 11th, March 25th, and April 15th from 9 am – 1 pm to administer tests in person. I will only be available until 1 pm.

For students who wish to take their tests in person with me, please plan accordingly to be able to take the test at that time.

Course Grading Information:

	Percent of Total
Tests	54%
Individual Labs	12.5%
Team Lab Assignments	12.5%
Discussions	7.5%
Homework, Reading Assignments	7.5%
Supplemental Instruction	5%
Quizzes	1%

100%

	Points
Mini-Test	75
Test 1	100
Test 2	100
Final Exam	50

**Students can complete team lab assignments by themselves for a 5% grade penalty for each assignment.

**Students who do not tell me their team assignments by the deadline will be issued a 50% penalty on their first team assignment. Students will also be automatically placed in teams by themselves.

Majors Biology II
1407.87

Bonus:

1. For tests:
 - a. For each chapter, write and answer 30 practice test questions. These can be hand-written or typed. These need to be submitted the Sunday by 11:59 PM the week the test starts.
 - b. Each practice test created by a student will be worth 2 points.
2. For the final:
 - a. After your 7 required SI sessions, attending up to 5 further SI sessions spread out over 5 weeks can result in 5 bonus points on the final exam. These points WILL be considered part of the final exam grade that is calculated for the purpose of replacing the lowest test grade.
 - b. You can complete one practice test early (2.5 points), can complete both practice tests (2.5 points), or turn in both practice tests early (5 points). These bonus points WILL NOT be considered part of the final exam grade that is calculated for the purpose of replacing the lowest test grade.

SI Attendance Requirements:

1. Students must attend SI sessions outside of class. Students will have several times to choose from throughout the week.
2. Students must attend 7 SI sessions throughout the semester. These 7 sessions must be attended on 7 different weeks.
3. Students will get an initialed card as attendance of SI. Students will give this card to the instructor the next class period.
4. Cards that are 2 class periods late will not be accepted.
5. Not having a card will mean students will not be counted present.
6. Students who arrive 5 minutes late or leave 5 minutes early will not be counted present.
7. Students who do not participate, are disruptive, are disrespectful, or cause problems will not be allowed to attend SI. These students will receive 0s for the remaining SI grades and will be ineligible to make these grades up.

Late Work, Attendance, and Make Up Work Policies:

Students get the following dropped grades:

Category	
10	Homework/Reading Assignments
2	Quizzes
1	Labs

I will also replace the lowest test grade with the final exam grade.

All assignments are due Sunday at 11:59 PM. Late assignments will not be accepted.

Quizzes

Quizzes will be timed. Students are allowed to use course materials to complete the quiz. However, there will be a time limit to the quizzes. After the time limit has expired, any unanswered questions will be marked incorrect.

Tests

Tests will be timed. Students can either take their test online using the Proctorio software (which they will need to purchase) or with me at MCC on the dates listed above.

If students plan to take their test with me at MCC, students have until the time period listed above to complete their test.

If students plan to take their test using the Proctorio software, it is up to the student to make sure their internet connection, computer, etc. are sufficient to take the test. If there are technical difficulties during the test (and the student is taking the test the final day they can), there will not be a second chance to take the test.

There will be a zero tolerance policy for cheating during tests. Tests are closed note, closed book, etc. Students who are caught cheating will be issued an F for the course. Students will be reported to MCC. Students may be expelled from MCC.

Attendance

Students are expected to complete work each week. For the attendance grade, I will check homework completion.

Students who miss 3 consecutive homeworks OR 4 total homeworks by the drop date will be dropped from the course.

The last day to drop is March 25th. After March 25th, students are not allowed to drop this course.

If a student wishes to drop, they need to notify me by 5 pm on March 25th via email. The student needs to specifically request to be dropped. The student's name and student ID need to be given. My email is emitchell@mclennan.edu.

Supplemental Instruction

Because students only need to attend 7 SI sessions in a 15 week course, no make-up SI sessions will be offered.

Covid Issues

If you have tested positive for Covid, please self-report on the MCC website.

https://mclennan.co1.qualtrics.com/jfe/form/SV_9FiKfG5D85livQN

Because the COVID guidelines have been quickly changing, please check Bright Space to know what the most up-to-date MCC requirements are.

Student Behavioral Expectations or Conduct Policy:

Cheating on tests will result in an F in the course.

Academic dishonesty on other assignments will result in a 0 on that assignment. Second violations will result in an F in the course. It is up to the student to know whether their actions constitute academic dishonesty. Please email me at emitchell@mclennan.edu if you are uncertain whether an action is academically dishonest.

Students are expected to maintain classroom decorum that includes respect for other students and the instructor, prompt and regular attendance, and an attitude that seeks to take full advantage of the education opportunity.

Students who continue to be disruptive in class, either to me or other students, will be asked to leave. Students will be required to meet with me and a third party (who may include the Division Director) before being allowed to return to class.

Students are expected to participate in Discussion board assignments (the expectations will be outlined on Bright Space). Students are expected to treat classmates with respect. Any inappropriate or incendiary comments or disrespectful behavior will result in a 0 for that Discussion Board. Students will not be allowed to participate after a second offense; all remaining Discussion Board grades will be a 0.

Students who are disruptive, disrespectful, or cause problems during SI will be issued one warning. At the second disruption/problem, students will not be allowed to attend SI. Students will receive a 0 for the remaining SI sessions.

Students are expected to attend SI for the duration of SI. Students who come late/leave early will not get credit for that SI session.

[Click Here for the MCC Attendance/Absences Policy](https://www.mclennan.edu/highlander-guide/policies.html)

(<https://www.mclennan.edu/highlander-guide/policies.html>)

Click on the link above for the college policies on attendance and absences. Your instructor may have additional guidelines specific to this course.

McLennan

C O M M U N I T Y

COLLEGE

ACADEMIC RESOURCES/POLICIES

Accommodations/ADA Statement:

Any student who is a qualified individual with a disability may request reasonable accommodations to assist with providing equal access to educational opportunities. Students should contact the Accommodations Coordinator as soon as possible to provide documentation and make necessary arrangements. Once that process is completed, appropriate verification will be provided to the student and instructor. Please note that instructors are not required to provide classroom accommodations to students until appropriate verification has been provided by the Accommodations Coordinator. For additional information, please visit www.mclennan.edu/disability.

Students with questions or who require assistance with disabilities involving physical, classroom, or testing accommodations should contact:

disabilities@mclennan.edu

254-299-8122

Room 319, Student Services Center

Title IX:

We care about your safety, and value an environment where students and instructors can successfully teach and learn together. If you or someone you know experiences unwelcomed behavior, we are here to help. Individuals who would like to report an incident of sexual misconduct are encouraged to immediately contact the Title IX Coordinator at titleix@mclennan.edu or by calling Dr. Drew Canham (Chief of Staff for Diversity, Equity & Inclusion/Title IX) at (254) 299-8645. Individuals also may contact the MCC Police Department at 299-8911 or the MCC Student Counseling Center at MCC at (254) 299-8210. The MCC Student Counseling Center is a confidential resource for students. Any student or employee may report sexual harassment anonymously by visiting <http://www.lighthouse-services.com/mclennan/>.

Go to McLennan's Title IX webpage at www.mclennan.edu/titleix/. It contains more information about definitions, reporting, confidentiality, resources, and what to do if you or someone you know is a victim of sexual misconduct, gender-based violence or the crimes of rape, acquaintance rape, sexual assault, sexual harassment, stalking, dating violence, or domestic violence.

Student Support/Resources:

MCC provides a variety of services to support student success in the classroom and in your academic pursuits to include counseling, tutors, technology help desk, advising, financial aid, etc. A listing of these and the many other services available to our students is available at <http://www.mclennan.edu/campus-resource-guide/>

College personnel recognize that food, housing, and transportation are essential for student success. If you are having trouble securing these resources or want to explore strategies for balancing life and school, we encourage you to contact a Success Coach by calling (254) 299-8226 or emailing SuccessCoach@mclennan.edu. Students may visit the Completion Center Monday-Friday from 8 a.m.-5 p.m. to schedule a meeting with a Success Coach and receive additional resources and support to help reach academic and personal goals. Paulanne's Pantry (MCC's food pantry) provides free food by appointment to students, faculty and staff based on household size. Text (254) 870-7573 to schedule a pantry appointment. The Completion Center and pantry are located on the Second Floor of the Student Services Center (SSC).

MCC Foundation Emergency Grant Fund:

Unanticipated expenses, such as car repairs, medical bills, housing, or job loss can affect us all. Should an unexpected expense arise, the MCC Foundation has an emergency grant fund that may be able to assist you. Please go to <https://www.mclennan.edu/foundation/scholarships-and-resources/emergencygrant.html> to find out more about the emergency grant. The application can be found at https://www.mclennan.edu/foundation/docs/Emergency_Grant_Application.pdf.

MCC Academic Integrity Statement:

Go to www.mclennan.edu/academic-integrity for information about academic integrity, dishonesty, and cheating.

Minimum System Requirements to Utilize MCC's D2L|Brightspace:

Go to <https://www.mclennan.edu/center-for-teaching-and-learning/Faculty-and-Staff-Commons/requirements.html> for information on the minimum system requirements needed to reliably access your courses in MCC's D2L|Brightspace learning management system.

Minimum Technical Skills:

Students should have basic computer skills, knowledge of word processing software, and a basic understanding of how to use search engines and common web browsers.

Backup Plan for Technology:

In the event MCC's technology systems are down, you will be notified via your MCC student email address. Please note that all assignments and activities will be due on the date specified in the Instructor Plan, unless otherwise noted by the instructor.

Email Policy:

McLennan Community College would like to remind you of the policy (<http://www.mclennan.edu/employees/policy-manual/docs/E-XXXI-B.pdf>) regarding college email. All students, faculty, and staff are encouraged to use their McLennan email addresses when conducting college business.

A student's McLennan email address is the preferred email address that college employees should use for official college information or business. Students are expected to read and, if needed, respond in a timely manner to college emails.

Instructional Uses of Email:

Faculty members can determine classroom use of email or electronic communications. Faculty should expect and encourage students to check the college email on a regular basis. Faculty should inform students in the course syllabus if another communication method is to be used and of any special or unusual expectations for electronic communications.

If a faculty member prefers not to communicate by email with their students, it should be reflected in the course syllabus and information should be provided for the preferred form of communication.

Email on Mobile Devices:

The College recommends that you set up your mobile device to receive McLennan emails. If you need assistance with set-up, you may email Helpdesk@mclennan.edu for help.

Forwarding Emails:

You may forward emails that come to your McLennan address to alternate email addresses; however, the College will not be held responsible for emails forwarded to an alternate address that may be lost or placed in junk or spam filters.

Disclaimer:

The resources and policies listed above are merely for informational purposes and are subject to change without notice or obligation. The College reserves the right to change policies and other requirements in compliance with State and Federal laws. The provisions of this document do not constitute a contract.