

McLennan C O M M U N I T Y C O L L E G E

WACO, TEXAS

COURSE SYLLABUS AND INSTRUCTOR PLAN

BIOLOGY FOR NON-SCIENCE MAJORS 1

BIOL 1408_08 & 1408_09

Sholly Gunter

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. We are also concerned for your safety. We are working through COVID-19 guidelines to make sure we offer a safe environment for you and our faculty. This will include smaller class sizes to manage social distancing and proper cleaning techniques. You will have the advantage of a physical classroom experience but may also need to work part of the time online as we adjust to limited classroom capacity. This will also allow us the flexibility to move online if so directed by federal, state and/or local COVID 19 guidelines. Faculty and staff are preparing now to ensure that you have the best experience in the midst of these uncertain times.

Course Description:

Provides a survey of biological principles with an emphasis on humans, including chemistry of life, cells, structure, function, and reproduction.

Prerequisites and/or Corequisites:

None

Course Notes and Instructor Recommendations:

Individual students will meet in class every other week to review course material and complete lab activities.

Tests are taken online. Students do not need to come to campus.

Instructor Information:

Instructor Name: Sholly Gunter

MCC E-mail: sgunter@mcclennan.edu

Office Phone Number: (254) 299-8170

Office Location: SB344

Office/Teacher Conference Hours: Online by appointment

Other Instruction Information:

Required Text & Materials:

Title: *Biology: The Essentials +CONNECT**

Author: Hoefnagels

Edition: 3rd Edition

Publisher: McGraw Hill

ISBN:

***The e-book and CONNECT are included in the cost of registration. If you are registered and have paid for the course, you already have the required text. The only exception is for students who “opt out” of this program. A hard copy of the book is available for a small additional fee. You could also purchase it used online**

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

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, we encourage you to contact a success coach by calling (254) 299-8226. Students can visit the Completion Center Monday-Friday from 8:00 a.m.-5:00 p.m. to meet with a success coach and receive additional resources and support to help reach academic and personal goals. Paulanne's Pantry (MCC's food pantry) is open 12:00 p.m.-1:00 p.m., Monday-Friday, without an 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 [here](https://www.mclennan.edu/foundation/docs/Emergency_Grant_Application.pdf) (https://www.mclennan.edu/foundation/docs/Emergency_Grant_Application.pdf).

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 contacted/notified through 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.

*** [Click Here for the Minimum System Requirements to Utilize MCC's D2L/Brightspace](https://www.mclennan.edu/center-for-teaching-and-learning/Faculty%20and%20Staff%20Commons/requirements.html) (<https://www.mclennan.edu/center-for-teaching-and-learning/Faculty%20and%20Staff%20Commons/requirements.html>)**

Click on the link above for information on the minimum system requirements needed to reliably access your courses in MCC's D2L|Brightspace learning management system.

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 her/his 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.

Forwarding Emails:

You may forward the 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 become lost or placed in junk or spam filters.

Methods of Teaching and Learning:

exam, quiz, lab, homework, video

Course Objectives and/or Competencies:

Biology 1408 is an introductory course designed to introduce various topics in the natural sciences. They include the scientific method and characteristics of life, chemical and molecular concepts, cellular basis of life, respiration and photosynthetic metabolic processes, control mechanisms, cell and organismal reproduction and developmental stages, evolution and ecology. At the end of this course, the student should be able to:

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

Course Outline or Schedule:

ONLINE SCHEDULE*			FACE TO FACE SCHEDULE*		
Unit	Dates	Course Work	Meeting Day	Group	In-Class Activity
	8/25 - 8/31	Orientation	8/25 T	X	NO IN-CLASS MEETINGS
			8/27 Th	X	
1	9/1 - 9/14	Chp 1: The Scientific Study of Life	9/1 T	1	Chapter 1, 2, 3 Review Lab 1**: Scientific Method & Measurement
		Chp 2: The Chemistry of Life	9/3 Th	2	
		Chp 3: Cells	9/8 T	3	
		EXAM 1	9/10 Th	4	
			9/15 T	1	
2	9/15 - 9/28	Chp 4: The Energy of Life	9/15 T	1	Chapter 4, 5, & 6 Review Lab 2**: Microscopy
		Chp 5: Photosynthesis	9/17 Th	2	
		Chp 6: How Cells Release Energy	9/22 T	3	
		EXAM 2	9/24 Th	4	
			9/29 T	1	
3	9/29 - 10/12	Chp 7: DNA Structure and Gene Function	9/29 T	1	Chapter 7, 8, & 11 Review Lab 3**: DNA
		Chp 8: DNA Replication, Binary Fission, and Mitosis	10/1 Th	2	
		Chp 11: DNA Technology	10/6 T	3	
		EXAM 3	10/8 Th	4	
4	10/13 - 10/26	Chp 9: Sexual Reproduction and Meiosis	10/13 T	1	Chapter 9 & 10 Review Lab 4**: Inheritance
		Chp 10: Patterns of Inheritance	10/15 Th	2	
		EXAM 4	10/20 T	3	
			10/22 Th	4	
5	10/27 - 11/9	Chp 12: Forces of Evolutionary Change	10/27 T	1	Chapter 12 Review Lab 5**: Comparative Anatomy & Speciation
		EXAM 5	10/29 Th	2	
			11/3 T	3	
			11/5 Th	4	
6	11/10 - 11/24	Chp 13: Evidence of Evolution	11/10 T	1	Chapter 13 & 14 Review Lab 6**: Adaptation & Genetic Drift
		Chp 14: Speciation and Extinction	11/12 Th	2	
		EXAM 6	11/17 T	3	
			11/19 Th	4	
	11/24 - 12/7	Online Course Review	11/24 T	X	12/1 - Virtual Field Trip: Baylor University Geology Department**** NO IN-CLASS MEETINGS
		Final Exam	11/26 Th	X	
			12/1 T	X	
			12/3 Th	X	

*The course schedule is tentative and may be changed. Any changes will be announced in class and/or on Brightspace.

**Online lab options on Brightspace

***Virtual field trip will be on 12/1. All students expected to attend via Zoom

Course Grading Information:

Grades will be based on student performance in the following areas:

Labs = 30%

Chapter Homework = 20%

Chapter Quizzes = 20%

Exams (including final) = 30%

Total = 100%

A ≥ 90% B = 80-89.99% C = 70-79.99% D = 60-69.99% F < 60%

Labs:

In-class: Laboratory exercises are intended to be completed in class. They will largely correspond to material covered in our current unit. No lab book is required. Labs will be provided by the instructor and will be completed in class. At the end of the lab period, once we have completed the lab, we will go over the answers to any questions together. In-class lab exercises will be graded Credit or No Credit (100% 0%). If you attend lab, do the exercise, and answer the questions you will get full credit for the lab.

Online: An on-line lab will be available that corresponds to our scheduled in-class lab. If you are absent for any reason, you may complete the online lab for credit in lieu of the in-class lab. The online lab will be graded based on correctness and completion. *Online labs are due by Monday at 11:59 pm of the date range for that unit.*

Chapter Homework: *Homework is by Monday at 11:59 pm of the date range for that unit.* Homework assignments consist of 20 questions drawn from a larger pool and correspond to material covered in the book. Please use your textbook to help you answer the homework questions. You may also use other resources, such as lectures or videos. Homework assignments are not timed and ***you have unlimited chances to answer the homework questions.*** Your highest grade will be recorded and used.

Chapter Quizzes: *Quizzes are due by Monday at 11:59 pm of the date range for that unit.* Quizzes consist of 20 questions drawn from a larger pool and correspond to material covered in the book. Please use your textbook to help you answer the quiz questions. You may also use other resources, such as alternate textbooks or the internet. Quizzes are not timed and you have one chance to take the quiz. Your first grade will be recorded and used.

Exams: There will be six unit exams and one final exam.

Unit 1 Exam – Chapters 1 – 3
Unit 2 Exam – Chapters 4 – 6
Unit 3 Exam – Chapters 7, 8, 11
Unit 4 Exam – Chapters 9 & 10
Unit 5 Exam – Chapter 12
Unit 6 Exam – Chapters 13 & 14
Final Exam – Comprehensive.

Exams are due by Monday at 11:59 pm of the date range for that unit. Exams consist of 50 questions drawn from a larger pool of questions. The exam questions are from the same pool of questions as the quizzes. Therefore, many of the exam questions may be familiar to you. There are several multi-part and labeling questions in each exam. These will take time, and you should start each exam prepared. You have one opportunity to complete an exam. Your first and only grade will be recorded and used. Exams are timed. You have 55 minutes to complete the exam, unless otherwise stated. **You should not use your book or any other resources when taking an exam.**

Late Work, Attendance, and Make Up Work Policies:

Attendance will be taken in accordance with MCC policy. Please consult the MCC Student Handbook for the college's official attendance policy.

Instructor's note on attendance – Due to COVID-19, attendance requirements are more flexible than usual, from the instructor's perspective. You are NOT REQUIRED to attend the face-to-face class meeting, but you are required to complete the work. Lack of work completion is considered non-attendance. Please contact the instructor if you have attendance concerns.

Student Behavioral Expectations or Conduct Policy:

Students should adhere to the General Conduct Policy in the Highlander Guide. "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."

Cheating will not be tolerated on any level. Cheating includes copying answers from another student's work, having another person do work for you and using outside resources for assignments unless it is specifically allowed. Suspected cheating on an assignment or exam will

result in disciplinary action from the instructor, the college or both. Additionally, a student suspected of cheating will be given 0 points for the work, and may receive an F in the class.

*** [Click Here for the MCC Academic Integrity Statement](http://www.mclennan.edu/academic-integrity)**

(www.mclennan.edu/academic-integrity)

The link above will provide you with information about academic integrity, dishonesty, and cheating.

*** [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 guidelines specific to this course.

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. Instructors should not provide accommodations unless approved by the Accommodations Coordinator. For additional information, please visit 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

*** Click Here for more information about Title IX**

(www.mclennan.edu/titleix)

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 (Vice President for Student Success) at 299-8645. Individuals also may contact the MCC Police Department at 299-8911 or the MCC Student Counseling Center at MCC by calling 299-8210. The MCC Student Counseling Center is a confidential resource for students. Any student or employee may report sexual harassment anonymously by visiting the following website: <http://www.lighthouse-services.com/mclennan/>.

McLennan's Title IX webpage (<http://www.mclennan.edu/titleix/>) 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.

** You will need to access each link separately through your Web browser (for example: Internet Explorer, Mozilla, Chrome, or Safari) to print each link's information.*