

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_5H

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 complete lab activities. In-person lecture is available (in limited capacity) through sign up.

Tests are taken in-person.

Instructor Information:

Instructor Name: Sholly Gunter

MCC E-mail: sgunter@mclennan.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.**

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

Methods of Teaching and Learning:

exam, pretest, lab, lecture, 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.

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Course Outline or Schedule:

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

Date	Lecture Period (8:00-9:20am)	Lab Group	Lab Period (9:30 - 10:50am)
1/12	Intro	x	No Lab
1/14	The Scientific Study of Life (Chp 1)	x	
1/19	The Scientific Study of Life (Chp 1)	1	Scientific Measurement
1/21	The Chemistry of Life (Chp 2)	2	Scientific Measurement
1/26	The Chemistry of Life (Chp 2)	3	Scientific Measurement
1/28	Cells (Chp 3)	4	Scientific Measurement
2/2	Exam 1 (8:00 am or 9:30am)		
2/4	Exam 1 (8:00 am or 9:30am)		
2/9	The Energy of Life (Chp 4)	1	Microscopy
2/11	The Energy of Life (Chp 4)	2	Microscopy
2/16	Photosynthesis (Chp 5)	3	Microscopy
2/18	How Cells Release Energy (Chp 6)	4	Microscopy
2/23	Exam 2 (8:00 am or 9:30am)		
2/25	Exam 2 (8:00 am or 9:30am)		
3/2	DNA Structure and Gene Function (Chp 7)	1	DNA
3/4	DNA Structure and Gene Function (Chp 7)	2	DNA
3/9	SPRING BREAK		
3/11			
3/16	DNA Replication, Binary Fission, and Mitosis (Chp 8)	3	DNA
3/18	DNA Technology (Chp 11)	4	DNA
3/23	Exam 3 (8:00 am or 9:30am)		
3/25	Exam 3 (8:00 am or 9:30am)		
3/30	Sexual Reproduction and Meiosis (Chp 9)	1	Inheritance
4/1	Sexual Reproduction and Meiosis (Chp 9)	2	Inheritance
4/6	Patterns of Inheritance (Chp 10)	3	Inheritance
4/8	Patterns of Inheritance (Chp 10)	4	Inheritance
4/13	Exam 4 (8:00 am or 9:30am)		
4/15	Exam 4 (8:00 am or 9:30am)		
4/20	Forces of Evolutionary Change (Chp 12)	1	Adaptation
4/22	Forces of Evolutionary Change (Chp 12)	2	Adaptation
4/27	Evidence of Evolution (Chp 13)	3	Adaptation
4/29	Evidence of Evolution (Chp 13)	4	Adaptation
5/4	Exam 5 (9:35 am or 10:35 am)		
5/6	Exam 5 (8:00 am or 9:00 am)		

Course Grading Information:

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

Labs =	30%
Chapter PreTests =	30%
Exams =	30%
Participation =	<u>10%</u>

Total = 100%

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

Labs: *Labs will be held in-class.* You will be required to sign up for a lab-group in Brightspace. There are four lab groups containing eight people, and each lab group meets once every two weeks. Once you sign up for a lab group, you will stay in that group for the entire semester. Please see the calendar for lab meeting dates of each group.

Laboratory exercises are designed to teach basic laboratory skills and/or reinforce material covered in our course. 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.

Chapter PreTests: *Chapter pretests will be done online.* Pretests are due prior to starting that chapter's lecture. For example, if we are starting the lecture for chapter 2 on 1/21, then the pretest is due by 8:00 am on 1/21.

Pretests 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 questions. Pretests are not timed and *you have unlimited chances to answer the questions correctly.* Your highest grade will be recorded and used.

Exams: *Exams will be taken in class.* You will be required to sign up for an exam time in Brightspace. Please see the calendar for specific exam times.

All exams have 40 – 50 multiple choice questions. You may bring one 8.5 x 11" sheet of notes (front and back) to each exam. **The notes must be HANDWRITTEN.**

There will be five exams. There is no final exam.

Exam 1 – Chapters 1 – 3

Exam 2 – Chapters 4 – 6

Exam 3 – Chapters 7, 8, 11

Exam 4 – Chapters 9 & 10

Exam 5 – Chapter 12 & 13

Participation: Your participation grade is largely dependent on your attendance in lecture, either in-person or via Zoom. Attendance will be monitored by your Zoom login and answers to questions asked throughout the lecture. You will get credit for attendance if you answer all questions asked during lecture. Students who come to lecture in-person automatically get credit for attending that day. Other factors considered in your participation grade are class conduct and general class participation.

Extra Credit: During our lectures, I will ask questions about the current topic we are covering. For every question you get correct you will receive **one** extra credit point on your next 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 REQUIRED to attend lecture, either in-person or via Zoom. Absence from lecture 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](#)**

(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>)

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

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

McLennan

C O M M U N I T Y

COLLEGE

ACADEMIC RESOURCES/POLICIES

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. Students can 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.

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.

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](http://www.mclennan.edu/titleix)
(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 (Chief of Staff for Equity & Inclusion/Title IX) 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 Mozilla Firefox, Chrome, Microsoft Edge, or Safari) to print each link's information.*