

Updated 07/18/2023



WACO, TEXAS

**COURSE SYLLABUS
AND
INSTRUCTOR PLAN**

GENERAL BIOLOGY II - FOR SCIENCE MAJORS

BIOLOGY 1407.002 and 1407.003

STEPHANIE RANDELL

NOTE: This is a 16-week course.

NOTE: This is a Face-to-Face course

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:

1. To succeed in this course, the student should have available in their personal schedule, and adhere to, a minimum of **12-16 study hours/week** to study for this course.
2. Syllabus/Policy Modification: The instructor may modify the syllabus to meet individual class needs. Modifications will be announced at the beginning of class. It is the student’s responsibility to keep up with these modifications. It is the student’s responsibility to keep informed of class scheduling and policy changes.
3. **This course has mandatory out-of-class study sessions - one-hour/per week (at least 8 per semester). Attendance and participation are included in your grade average.**

Instructor Information:

Stephanie Randell

MCC E-mail: srandell@mclennan.edu

Office Phone Number: 254-299-8183

Office Location: S209

Office/Teacher Conference Hours: **M/W 2-2:30pm; Tues 11:00-noon; or by appointment/Zoom appointment. You may come by my office during any scheduled office hour!**

***Other Instruction Information:** **Professor will check and** generally respond to your **emails** within 24 hours, except for Friday afternoon, Saturday, Sunday, and MCC holidays.

I am physically in class Monday -Thursday: These are the best times to email/contact me:

Monday/Wednesday: Email checked regularly between 2:00 – 4:00pm when I am out of class.

Tuesday/Thursday: Email checked regularly 11:00am - 4:00pm when I am out of class.

Friday: Email checked regularly 9:00am - 4:00 pm.

*On Fridays: I will stop checking emails at 4:00pm. Therefore, if you need to reach me before Monday, have your emails in my box before that time. If my response does not come within this stated timeline, please resend your email, as it may not have reached me.

I will not check emails on Saturday, Sunday, or MCC Holidays.

Required Text & Materials:

*This course is an Inclusive Access course. As such, when you pay for your class, these required materials and texts are already included in your payment. **You just need to pick them up at the MCC bookstore.**

The access code for the text is also included and will automatically link to the online labs in Brightspace. You may check the course requirements at this book store link: Under “**Get Your Textbooks:**” <https://www.bkstr.com/mclennancstore/home>

Title: BIOLOGY (The same text from BIOL 1406)
Author: Raven, Johnson, Mason, Losos, Duncan
Edition: 13th
ISBN: 9781265547998
Publisher: MCGRAW HILL CREATE (CUSTOM PUBLISHING)
Formats: Loose-Leaf

PICK THESE UP FROM THE MCC BOOKSTORE:

Title: Lecture Notes (BIOL 1407)
Author: Lecture Notes (BIOL 1407)
Publisher: MCC Shop

Title: Connect for Biology w/Proctorio 1407 (0482)
Author: Raven
Edition: 13th
Publisher: MCGRAW HILL (CUSTOM PUBLISHING)
ISBN: 9781265864262

Title: Photo Atlas for General Biology (0482 CUSTOM)
Author: Strete
Edition: 4th

Publisher: McGraw-Hill
ISBN: 9781266006517

MCC DISSECTION KIT #20 ST 482

Ward Protective Eyewear/Safety

Other Required Materials:

Digital camera or Phone with camera

Three, 1-inch three-ring notebooks with pockets; one each for (1) loose leaf text, (2) lecture notes; (3) lab notebook

Paper for lecture and lab notebooks

Pencils and pens

Required technology:

- Students must bring a portable laptop or iPad to class each day to take quizzes and exams.
- Students must have **consistent, strong internet at home and online students require a fully functioning webcam** for exams.
- All students must be able to download **Respondus/Respondus Monitor** for use during quizzes and exams.
- ***Chromebooks and computers with Screencastify** may need adjustments to engage Respondus.

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

Methods of Teaching and Learning:

Lectures, Recorded Zoom lectures and notetaking, Socratic method, critical thinking reviews and exercises, reviews, assigned readings, videos, animations, online labs, labs, WebQuests, quizzes,

lab exams, discussions boards, scientific notebooks, team work and research , professional presentations, **mandatory out-of-class study sessions**, and lecture exams.

***Class participation is required;** *therefore, it is essential to class performance and success that students be optimally prepared for each class by mastering the foundational material before each class!*

Course Objectives and/or Competencies:

FOR LECTURE:

1. Describe modern evolutionary synthesis, natural selection, population genetics, micro and macroevolution, and speciation.
2. Describe phylogenetic relationships and classification schemes.
3. 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.
4. Describe basic animal physiology and homeostasis as maintained by organ systems.
5. Compare different sexual and asexual life cycles noting their adaptive advantages.
6. Illustrate the relationship between major geologic change, extinctions, and evolutionary trends.

FOR LAB:

Laboratory activities will reinforce study of the diversity and classification of life, including animals, plants, protists, fungi, and prokaryotes. Special emphasis will be given to anatomy, physiology, ecology, and evolution of plants and animals.

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. Demonstrate knowledge of modern evolutionary synthesis, natural selection, population genetics, micro and macroevolution, and speciation.
5. Distinguish between 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.

Course Objectives and/or Competencies:

1. Interpret phylogenetic trees and explain the criteria/evidence upon which those trees are based.
2. Distinguish between viral structure, replication, and lineages.
3. Explain three criteria used for categorizing species and discuss the strengths and limitations associated with each.
4. Recognize and discuss the human impact and ecological significance of viruses, bacteria, protists, plants, fungi, and animals.
5. Explain the morphological, physiological, and metabolic diversity among taxonomic groups of bacteria, protists, plants, fungi, and animals.
6. Explain gram stain procedure and its association with bacterial cell wall characteristics and antibiotic treatment.
7. Recognize and explain principle elements and cycles in ecology and address ecological concerns and causes of/for sustainability, global warming, and dead zone formation.
8. Describe the chronology and structures of animal embryology, as well as germ layer formation and tissue development.
9. Discuss the major adaptations of plants and animals to life on land.
10. Use taxonomy to classify, compare, and contrast major groups of living organisms.
11. Discuss changes and trends in biological classification and correctly write scientific names.
12. Participate in the scientific community and exhibit scientific collaboration.

13. Make and record scientific observations; maintain a scientific notebook.
14. Develop scientific professionalism: adapts to scientific procedure, writing, and editing.
15. Describe modern evolutionary synthesis, natural selection, population genetics, micro and macroevolution, and speciation.
16. Illustrate the relationship between major geologic change, extinctions, and evolutionary trends.

Course Attendance/Participation Guidelines:

Attendance is required to succeed in this course. In this class, **attendance is taken at the start of lecture and lab. If a student is not present during roll-check at the beginning of class, they are marked absent.** If a student arrives within 10 minutes after roll check, they are not marked absent as long as they they notify their professor during that class day of their arrival. Under those circumstances they are marked tardy. Every two tardies count as one absence. Absences cannot be changed after the day they occur. When a student misses 25% of classes (lectures OR labs) they will be dropped from the course.

If a student is not in attendance in accordance with the policies/guidelines of the class as outlined in the course syllabus as of the course census date, faculty are required to drop students from their class roster prior to certifying the respective class roster. A student's financial aid will be re-evaluated accordingly and the student will only receive funding for those courses attended as of the course census date.

Before the 60% point of the semester, a student who is absent for 25% or more of a face-to-face or blended course or who misses 25% or more of assigned work for an online course will be withdrawn from the course with a grade of W. A student may also request to be withdrawn with a grade of W before the 60% point of the semester. After the 60% point of the semester, the student may request to be withdrawn if the student is passing, or be assigned the final grade earned at the end of the semester after grades have been updated to reflect missing work.

Course Outline or Schedule:

*Tentative schedule - modifications will be given at the beginning of in-person classes or as an announcement on Brightspace.

<u>Week</u>	<u>Lectures</u>	<u>Chapter</u>
Before Class start	Brightspace	Start Here Module

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1	Intro and Taxonomy	22; 23
2	1. MLK Holiday 2. Taxonomy/Viruses	23
3	Viruses	26
4	Bacteria	27
5	1. Exam 1 2. Fungi Self-study/Protists	31;28
6	1. Protists 2. Wild Protist Lab – Entire Class - <u>Lab Notebook Grade</u>	28
7	1. Fungi Self-study due/Review for Lab Practical 2. LAB PRACTICAL / Review for Exam	
8	1. Exam 2 2. Plants Intro	29
	*****SPRING BREAK*****	
9	Plants Intro and Early Plants	29
10	Seed Plants	30
11	1. Flower Dissections - Entire class - <u>Lab Notebook Grade</u> 2. Animals Intro	32
12	1. Exam 3 2. Animals - Porifera, Cnidaria	32
13	Animals - Protostomes: Lophotrochozoans: Platyhelminthes Mollusca, Annelida	33
14	1. Animals – Protostomes:	

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	Ecdysozoans: Nematoda, Arthropoda	33
	2. Animals - Deuterostomes: Echinodermata	34
15	Animals – Deuterostomes: Chordata Ecology	34

Final Lab Notebook Checks

16	<u>Final exams:</u> Monday, April 29 (11:10 - 1:10) Tuesday, April 30 (9:35 – 11:35 am)
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Exam Schedule:

Exam 1:	Feb 5 (Mon.) and Feb 6 (Tues) - <u>Taken in class</u> - bring laptop, iPad for testing
Exam 2:	Feb 26 (Mon) and Feb 27 (Tues) - <u>Taken in class</u> - bring laptop, iPad for testing
Exam 3:	April 1 (Mon) and April 2 (Tues) - <u>Taken in class</u> - bring laptop, iPad for testing

Final exams:

Monday, April 29 (11:10-1:10) - Taken in class, S138 - bring laptop, iPad for testing
Tuesday, April 30 9:35-11:35 am) - Taken in class, S138 - bring laptop, iPad for testing

Course Grading Information:

Evaluation and grading:

Grade:	90-100	A
	80-89	B
	70-79	C
	60-69	D
	<60	F

Lecture Exams (60% of final grade)

3 Lecture exams - 100 points each
1 Comprehensive Final - 100 points

Labs/Assignments: (32% of final grade)

Lab practical or exams (1-2) - 100 points each
Lab Notebook Grades (1-5) – 100 points each
Online labs - (100 point each)

Mastery Quizzes - (5% of final grade) -100 points each

Study Session Attendance/Participation – (3% of final grade)

A student receives a 100 for attending 8 mandatory Supplemental Instructor (SI) led study sessions. Attendance to fewer sessions results in a proportional reduction of grade.

Plagiarism: ANY copied work - even if cited; uncited work; submitting work other than your own original work; AI assisted work; copying from other students; adding your name to work that is not yours (teamwork, etc.) etc; cheating on exams; will result in a “0”. See **“Some examples of cheating”** under “Student Behavior and Conduct” further down this syllabus. The Class Participation Grade is subjective and can help a student in borderline cases. Class participation grade comes from the student’s class and online discussions, participation during reviews, attendance, promptness, class preparedness, ability to perform independent and original work, adaptability to adapt to laboratory and scientific protocol, and attitude.

Exam security: : no students will have access to physical copies of exams other than for actual testing purposes. In addition, students should be prepared for exam security on exam day, some things that may be employed (but not limited to): removal of all biology-related materials from testing region, requirement to keep your face in the center of the screen throughout the duration of the exam, restriction of departure from the classroom or computer after the start of an exam or **if online** - after the environmental scan, removal of cell phones, tablets, ear buds, and watches with shaded faces, use of only simple pencils for written exams. This includes all exam and Respondus rules and guidelines. These methods are entirely at the discretion of your professor and may change during the semester.

Late Work and Make Up Work Policies:

The student is responsible for all material assigned for this class and their due dates whether they are present or absent from class.

Assignments, Mastery Quizzes, Discussions, Projects, or Labs may not be completed after the due date. Those not completed by the due date will become a “0”.

*No Labs, Assignments, Discussion Boards, Quizzes, or Exams will be reopened, so students must start the assignment or exam before due date to ensure completion.

*Exceptions may be made to due to documented COVID-19 disease or non-elective hospitalization. Uncompleted work will be recorded as “0”.

In-person assignments due are “late” after the roll check. Anything after that point is (-20 points). This especially affects required lab materials.

Exams:

Lecture: If students miss a lecture exam, their comprehensive final exam score will take the place of **one missed exam**. Any other missed exams will become a “0” unless there are documented extenuating circumstances, such as emergency hospitalization. Exams may not be taken after the due date unless there is **documentation** for extenuating circumstances, such as non-elective hospitalization.

****See me to schedule an early exam if you must be gone the day of the exam.**

It is the students’ responsibility to make ADA testing arrangements with their Professor (if needed) one week before each exam.

Lab Exams: There are **no make-ups for lab exams** unless the students has documented COVID disease, quarantine, or essential emergency hospitalization

Student Behavioral Expectations or Conduct Policy:

All correspondence and submissions must reflect boundaries and guidelines of science; be professionally and scientifically written and edited; and must be governed by rules of civility – follow the etiquette accepted by polite society. If we go online and have Zoom meetings, students should join with video on, be early, and be fully clothed!

Any student engaging in any activity which interferes with the learning environment or professional decorum of the classroom or professional setting may be asked to leave the classroom, lab, office, Zoom meeting, or professor’s presence. If a student is asked to leave, they must schedule an appointment with the instructor before returning to class or further Zoom meetings. If necessary, the student will be referred to the Student Discipline Department. If a student is asked to leave a second time they may be dropped from the course.

All cheating, plagiarism, and other forms of academic dishonesty will result in a grade of “0” and a report of the incident filed with appropriate campus authorities for record keeping and tracking.

Some examples of cheating: Plagiarism: **copying** of **any** work (**even if cited; even if a few words are changed!**), research or scientific work, or not citing re-worded work, using prohibited material for assignments (internet, A.I., etc.); copying or recording of exam questions; sharing exam questions with anyone; having unapproved biology book, papers, or notes present while taking exam; your computer goes offline during an exam; your webcam goes off during exam;

your face is not in the center of the monitor throughout the exam; you have something at your desk or on your person which is not acceptable for use during the exam – notes, textbook, cell phone, earbuds, smart watch, papers, etc; you do not complete a slow, 360° webcam scan of exam room, etc. Also, if you leave the room after the environmental scan and before the exam starts or you don't scan both sides of allowed papers during the scan.

[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.

10/09/2023



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. Claudette Jackson, (Accommodations/Title IX) at (254) 299-8465. MCC employees are mandatory reporters and must report incidents immediately to the Title IX Coordinator. Individuals may also contact the MCC Police Department at (254) 299-8911 or the MCC Student Counseling Center at (254) 299-8210. The MCC Student Counseling Center is a confidential resource for students. Any student may report sexual harassment anonymously by visiting <http://www.lighthouse-services.com/mclennan/>

Additionally, Title IX provides rights and protections for pregnant and newly parenting students. 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/>

Academic Support and Tutoring is here to help students with all their course-related needs. Specializing in one-on-one tutoring, developing study skills, and effectively writing essays. Academic Support and Tutoring can be found in the Library and main floor of the Learning Commons. This service is available to students in person or through Zoom. You can contact the Academic Support and Tutoring team via Zoom or email (ast@mclennan.edu) by going to our website (<https://www.mclennan.edu/academic-support-and-tutoring/>)

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 either MCC CREW – Campus Resources Education Web by calling (254) 299-8561 or by emailing crew@mclennan.edu or a Success Coach by calling (254) 299-8226 or emailing success@mclennan.edu.

Paulanne's Pantry (MCC's food pantry) provides free food by appointment to students, faculty and staff. To schedule an appointment, go to <https://calendly.com/paulannespantry-mcc/15min>.

The CREW, Success Coaches, and Paulanne's Pantry are all located on the second floor of the Student Services building in Success Coaching Services.

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:

Please view our [Academic integrity statement](#) for more information about academic integrity, dishonesty, and cheating. The unauthorized use of artificial intelligence (AI) for classwork can be a violation of the College's General Conduct Policy. Whether AI is authorized in a course and the parameters in which AI can be used in a course will be outlined by each instructor.

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. For more information about your student email account, go to www.mclennan.edu/studentemail.

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.

You can find help on the McLennan website about connecting your McLennan email account to your mobile device:

- [Email Setup for iPhones and iPads](#)
- [Email Setup for Androids](#)

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.

For more helpful information about technology at MCC, go to [MCC's Tech Support](#) or email helpdesk@mclennan.edu.

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.