

BIO 121S INTRO TO BIOLOGY: CELLS, GENETICS, AND EVOLUTION

4 CREDIT HOURS

Section/Term: BIO-121S-801US
Class Meeting Time: Online
Location: Online
Faculty: Rachael Detraz
M.S. in Biology, Central Michigan University, 2006-2008
M.S. coursework in Geology, Wright State University, 2016-2019
E-mail: rdetrax@edisonohio.edu
Phone: 937-778-7882
Online Office Hours: by appointment- email me!

Required Materials:

- OpenStax Biology 2nd Edition (ISBN 9781947172517)
 - This is a free online textbook. Go to [Openstax Biology 2e](https://openstax.org/books/biology-2e) to view and read the book online at any time. You can also download the PDF version of the textbook to your computer for free (and print it if you wish). If you prefer a traditional printed and bound version, you can either 1) order a copy through this link, 2) purchase it used from Ebay or Amazon or a similar website, or 3) purchase a copy from the eCampus bookstore.
 - NOTE: If you are a CC+ student, you MUST use one of the free options. You will not be allowed to purchase a bound book from eCampus.
- Modified MasteringBiology Access, Pearson
 - Pearson access can be purchased online through the eCampus bookstore. Alternatively, you can purchase access with a credit or debit card via Blackboard. To register, go to Blackboard, click Assignments, click Week 1, and click the Week 1 Pearson homework. You will be prompted to register and either enter a code from eCampus, purchase access, or sign up for a free trial.
 1. You may purchase access through Edison's online bookstore eCampus. If you do, you will find a code on your digital bookshelf on the eCampus website. This code will be entered during Pearson registration on Blackboard. If you purchase through eCampus, you MUST create your account using the first Pearson Week 1 Homework link in Blackboard.
 - NOTE: If you are a CC+ student, you MUST purchase access from eCampus.
 2. You may purchase access through Blackboard rather than eCampus for cheaper. If you purchase access through Blackboard, you do NOT need to pay extra for the ebook since we will be using the free OpenStax book for this course.
 3. Sign up for the free trial if your financial aid is delayed so that you can complete the assignments on time.
- Connect Access, McGraw Hill
 - Connect access can be purchased online through the eCampus bookstore. Alternatively, you can purchase access with a credit or debit card via Blackboard. To register, go to Blackboard, click Assignments, click Week 1, and click the assignment called Laboratory Tour. You will be prompted to register and either enter a code from eCampus, purchase access, or sign up for a free trial.

1. You may purchase access through Edison's online bookstore eCampus. If you do, you will find a code on your digital bookshelf on the eCampus website. This code will be entered during Connect registration on Blackboard.
 - NOTE: If you are a CC+ student, you MUST purchase access from eCampus.
2. You may purchase access through Blackboard rather than eCampus.
3. Sign up for the free trial if your financial aid is delayed so that you can complete the assignments on time.

Prerequisites

This course covers 23 chapters in 8 weeks, so the material moves quickly. The recommended prerequisites are high school biology and chemistry, so you are expected to be familiar with basic concepts in both areas. You can still succeed if you haven't taken high school chemistry and biology, but you will need to invest more hours into reading and reviewing the chapters.

Schedule

EACH WEEK IN SUMMER IS EQUIVALENT TO 2 WEEKS OF FALL/SPRING!!!

Week 1: Chapter 1, 2, and 3

Week 1 Homework, Syllabus Quiz, Lab Tour, Lab Safety Lab, Metric Measurements Lab, Chemical Composition of Cells Lab, Study Strategies Quiz, and Exam 1 (Chapters 1-3) due by 11:59 pm on Sunday, June 14th

PLEASE NOTE: You CANNOT click on Assignments in Blackboard until you have achieved 100% on the Syllabus Quiz and Study Strategies Quiz. You will retake the quizzes as many times as needed to earn 100%.

Week 2: Chapter 4, 5, and 9

Week 2 Homework, Diffusion Lab, Microscopy Lab, and Exam 2 (Chapters 4, 5, and 9) due by 11:59 pm on Sunday, June 21st

Week 3: Chapter 6, 7, and 8

Week 3 Homework, Enzymes Lab, Respiration Lab, Photosynthesis Lab, Study Strategies Reflection Quiz, and Exam 3 (Chapters 6-8) due by 11:59 pm on Sunday, June 28th

Week 4: Chapter 10, 11, and 12

Week 4 Homework, Genetics Lab, and Exam 4 (Chapters 10-12) due by 11:59 pm on Sunday, July 5th

Week 5: Chapter 13, 14, and 15

Week 5 Homework, Central Dogma Lab, and Exam 5 (Chapters 13-15) by 11:59 pm on Sunday, July 12th

Week 6: Chapter 16 and 17

Week 6 Homework, Transformation Lab, Biotechnology Lab, You Are What You Eat Quiz and Discussion post, and Exam 6 (Chapters 16-17) due by 11:59 pm on Sunday, July 19th

Week 7: Chapter 18, 19, and 20

Week 7 Homework, Evolution Lab, HWE Homework, Phylogeny Lab, You Are What You Eat Discussion comments, and Exam 7 (Chapters 18-20) due by 11:59 pm on Sunday, July 26th

Week 8: Chapter 22, 23, and 27

Week 8 Homework, Bacterial Identification Lab, Antibiotic Resistance Lab, Antibiotic Apocalypse Quiz, Protist Lab, You Are What You Eat Discussion replies, and Exam 8 (Chapters 22, 23, and 27) due by 11:59 pm on Sunday, August 2nd

Make-Up Work

If you do not submit your assignment by the due date (regardless of the reason), you may turn it in late for a maximum of 50% credit. **No late work may be submitted after Sunday, August 2nd, 2026.**

Communication

With Your Instructor:

The best way to communicate with me is via email. Except on weekends, I will respond within 48 hours. The best way for ME to communicate with YOU is also via email. Check your Edison email every day. You are also expected to check Blackboard at least once per day. Class announcements are posted on Blackboard at least once per week, so regularly check the Announcements link on Blackboard. You are also expected to monitor your grades. If you find a mistake, let me know immediately via email. You may, however, also call me! Please leave me a voicemail with your phone number, and I will call you back! Please remember that that I can't read your mind! I don't know you have a question or are struggling with an assignment if you don't tell me!

With Your Classmates:

If you would like to pose a question to your classmates, click the Discussions tab in Blackboard, and then click New Discussion to add your post. Check the Discussions tab regularly and respond to any questions by clicking the title of the post and then typing your response in the box. I will monitor the discussions as well.

Online Office Hours

Regular interaction with your instructor is extremely important in online classes since we never see each other face to face. Therefore, I would like to encourage everyone to check in with me each week. I have weekly office hours by appointment. Email me to set up a day and time. To attend, log on to Blackboard and click the link in the course menu called Online Office Hours. If you log in, you need a working audio connection, so you need either a microphone on your computer OR a phone to be able to call in to the session.

Time Commitment

You can expect to spend approximately 5 hours per week in a fall or spring semester and 10 hours per week during a summer semester (since each week of a summer semester represents 2 normal weeks of work) completing your Pearson homework and McGraw Hill labs. This is the same amount of time you would spend on campus if you were to take the course face to face. However, this time does NOT include the time you spend reading the book, studying for your exams, and taking your exams. Face-to-face students have to do this at home outside of normal class time, and online students do too.

You should create a weekly class schedule at the beginning of the semester that at minimum sets aside the time for homework and labs. Exams take about 2 hours on average, so you should add that time to your schedule during the weeks you have an exam. Additional time, anywhere from 2-4 hours (or 4-8 hours in summer), should be planned weekly for reading the book and studying for the exams.

Assessment

Modified Mastering Biology (732 points):

You are required to purchase access for Pearson's Modified Mastering Biology. Each week you will complete a homework assignment. You are expected to read the chapter(s) in the Openstax book first to familiarize yourself with the content, and you may then proceed to the Pearson homework. Access your Pearson assignments by clicking the title of the assignment in Blackboard.

McGraw Hill Connect (650 points):

Labs will be completed using a virtual lab platform called Connect (McGraw-Hill). Generally, you should complete the labs after the Pearson homework. To access labs, click the title of the lab on Blackboard.

Miscellaneous Quizzes (123.5 points):

Several quizzes will be completed on various topics using Blackboard.

Exams (800 points):

Exams consist of 70-130 multiple choice questions randomly drawn from a pool of questions. In this way, every student's exam will be different. Exams will require you to APPLY concepts as I already know you are capable of memorization of facts. Tests will be administered via the Respondus LockDown Browser. This browser is installed in the library and Internet Café of the Piqua campus. If you plan to take the exams at home, the link to download the web browser can be found under the Getting Started module on Blackboard. The Syllabus Quiz will help you make sure that the web browser is working correctly. Should you have any problems accessing an exam, email me immediately.

NOTE: If you don't have the authority to download the web browser onto your device, leave enough time to take your device to the appropriate person for them to install it.

A password is NOT required. You must take the test within the time specified, and you must finish it once it is started since you only get one attempt. Save your test after each question. These are NOT group exams, and you are NOT allowed to use the Internet to find answers. Should you have any problems accessing an exam, email me immediately. Exam questions will be answered one at a time and you may skip questions and come back to them (although this will take longer and you are only allowed 2 hours).

If you get a red bar across the test part-way through, do NOT hit "okay". Hit the back button first. Try that several times to see if it fixes the problem. If it doesn't, try refreshing the browser. If it still doesn't work, hit "OK", and then start the exam process over to finish the test. If you get a message saying "test already submitted", email me immediately as I will need to wipe your test so that you can start over. If your Internet window goes white, you can try refreshing the browser or closing the window and going back into the test, BUT if a box appears warning you that the exam will be submitted, do NOT hit OK. Just shut down your computer without closing the window, and then restart your computer and go right back in to the exam.

Extra Credit:

Limited extra credit is available and will be found in the appropriate week's assignment folder on Blackboard. If you do not submit the extra credit by 11:59 pm on Sunday of that week, it may not be made up for partial credit.

AI Policy

For this course, you are NOT allowed to use artificial intelligence (AI) programs to complete your assignments. You are welcome to use AI to study for your exams. You also may use AI to format any literature citation sections that are required for an assignment. However, all writing and analysis MUST be original without the assistance of AI.

Grading Policy

Grades will be posted on Blackboard as I finish them. Check often in case I make an error. Your final grade will be a weighted grade. Lab points on McGraw Hill will account for 40% of your final grade, and lecture (all other assignments) will account for 60% of your final grade. Letter grades will be recorded as follows:

GRADE PERCENTAGE*

A 90.0 and above

B 80.0 – 89.9

C 70.0 – 79.9

D 60.0 – 69.9

F 0 – 59.9

*I do not round above the 10ths place, ie. a 89.78% = 89.8% which is a B

Reminders

- Think before you write. Even if you are sending an email to only one person that person can forward it to anyone.
- **Proofread and use the spell check feature because grammar and spelling count.** Online classes are no different than traditional courses and the same academic standards will be used.
- Respond promptly to email messages sent to you! Check every day!
- Check your Blackboard Announcements every day. If you log in less frequently you may fall behind and have a hard time catching back up with the assignments.
- Participate! Contribute your ideas, thoughts, and comments regarding the subject you are studying with your instructor. Your instructor should not be your only resource for learning in your online class...explore the subject on your own by searching for videos and news articles.
- Take the class seriously. There will be times that everyone around you is having fun or will want you to play hooky from your class work. Your online course work is just as important as a traditional class so make sure you explain to your family and friends how important it is for you to do well in your studies.
- Budget your time. Online is not easier than the traditional educational process. In fact, many students will say it requires much more time and commitment. Be aware of and keep up with the course schedule. Although these are online courses, they are designed to provide you with a semester schedule of course units, assignments, conferences, etc. These online courses require that you adhere to the course schedule, for you to benefit from the course material.
- Having problems... **Your instructor is limited to what you communicate to her.** You need to be very specific when you have problems or do not understand something about the materials you are covering. If you are having technical difficulties, or problems understanding something about the course, you MUST speak up otherwise there is no way that anyone will know that something is wrong. Also, if you don't understand something, chances are several people have the same question.

ACADEMIC HONESTY

Plagiarism is the act of using someone else's words, sentences, or ideas and passing them off as your own without giving credit by citing the original source. If you plagiarize in this course, you will receive a score of zero for that assignment and you will be reported to the dean.

You might be plagiarizing if you:

- Submit someone else's work as your own.
- Buy a paper from a papermill, website or other source.
- Copy and paste lab answers from a papermill, website, or other source.
- Copy sentences, phrases, paragraphs, or ideas from someone else's work, published or unpublished, without giving the original author credit.
- Replace select words from a passage without giving the original author credit.
- Copy any type of multimedia (graphics, audio, video, internet streams), computer programs, music compositions, graphs, or charts from someone else's work without giving the original author credit.
- Piece together phrases, ideas, and sentences from a variety of sources to write an essay.
- Build on someone else's idea or phrase to write your paper without giving the original author credit.
- Submit your own paper in more than one course.

TECHNICAL SUPPORT SERVICES

For Blackboard Assignment issues, the Instructor should be the first point of contact

For Log-in or other technology issues:

There are several steps you can follow if you have issues logging in to Blackboard or Office.

During business hours:

- Password reset: Log onto office.com with your Edison email and follow the “forgot password” prompts.
- Reach out for help during regular business hours (9-5 Monday-Thursday, 9-4 Friday)
 - email [Support](#)
 - call 937-778-8600 and ask for IT Help Desk

After hours:

- Password reset: Log onto office.com with your Edison email and follow the “forgot password” prompts
- Go to [Edison State Community College](#) into the Resources tab and click "IT Help Desk" then click "Chat".
- Call 937-778-7957 and talk to the off-campus Blackboard company to get help

TESTING YOUR FAITH ACT POLICY

Edison State Community College is committed to providing an environment respectful of students' beliefs. Students are permitted to be absent for up to 3 days each semester based on their faith, religion, or spiritual belief system with no academic penalty.

Students must complete the [Testing Your Faith Act Accommodations Form](#) and provide a copy to their individual faculty within 14 days from the start of the course. The entire policy can be found in the [Student Handbook](#).

ACCOMMODATIONS /ACCESSIBILITY AND DISABILITY SUPPORT SERVICES POLICY

Edison State Community College will make reasonable accommodations for students with documented disabilities. If you believe you may need an accommodation based on the impact of a disability, contact the instructor privately with your self-identification letter. If you do not have a self-identification letter, contact Accessibility and Disability Support Services by emailing [Disabilities Services](#) or by calling 937.778.7850. Accessibility and Disability Support Services is located on the Piqua Campus in Room 160.