

SYLLABUS PART I
BIO 121S INTRO TO BIOLOGY: CELLS, GENETICS, AND EVOLUTION
4 CREDIT HOURS

COURSE DESCRIPTION:

Introduction to the basic concepts of biology with emphasis on molecular biology, cells, genetics and evolution. Three hours of lecture integrated with two hours of lab activities each week. Recommended preparation: One-year of high school biology and one year of high school chemistry.

COURSE GOALS:

Upon successful completion of this course the student should be able to:

1. Recognize the organization of the living world.
2. Analyze the importance of homeostasis in living systems.
3. Explain the chemistry of life and relate it to cell structure.
4. Interpret the flow of energy in cells and living systems.
5. Recognize the importance of DNA, chromosomes, cell division, and genetic recombination as it relates to biological fitness.
6. Identify the concepts and components of biological evolution.
7. Explain the role that the environment plays with respect to biological evolution.
8. Propose concepts which examine the unity and diversity of life with respect to biological evolution.
9. Evaluate the relationships of science, critical thinking, and social responsibility.

TOPIC OUTLINE:

1. Introduction to Biology and Scientific Method
2. Biological Chemistry
3. Cell Structure and Function
4. Energy and Cellular Respiration
5. Cell Division
6. DNA and Genetic Code
7. Genetics
8. Evolution and Natural Selection: Microbial Life
9. Diversity of Lower Plants
10. Invertebrates
11. Vertebrates

SYLLABUS PART II
BIO-121S-402FS
INTRO TO BIOLOGY Web flex: CELLS, GENETICS, AND EVOLUTION
4 CREDIT HOURS
Instructor: Erin Reese
Master of Science, Wright State University, 2010

E-mail: ereese@edisonohio.edu
Office Phone: 937.778.7922
Office location: Piqua Campus: Room 121A
Office hours: Monday: 2-3PM online & in-person
Tuesday/Thursday: 11:30AM-1:30PM online & in-person
Wednesday: 4-5:00PM in-person
Also, by appointment- email me!!
Class Time: Monday @ 9AM
Class Location: DCC, Room 142

COMPUTER REQUIREMENTS

Ability to navigate the Internet, Java, Flash Player, Adobe Shockwave Player, Edison Community College email and Blackboard access*, reliable access to high-speed Internet (strongly recommended as some assignments include audio/video), proficiency with Microsoft Word and PowerPoint

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) o email to support@edisonohio.edu
- o 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 www.edisonohio.edu 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

TECHNICAL SUPPORT SERVICES

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2. For Log-in or other technology issues:
3. There are several steps you can follow if you have issues logging in to Blackboard

* *Contact the Edison IT Helpdesk with issues:*

- Phone: 937-778-7957 or 800-922-3722 ext. 7957
- E-mail: helpdesk@edisonohio.edu (include me in the email)
- Stop at the Helpdesk located in the Library

TEXTBOOKS

- Biology 2e OpenStax (OER) All materials are online through Blackboard (free resource)
- Required: An access code to the website (www.masteringbiology.com). We use a Modified version, and it is located each week's assignments in Blackboard—you CANNOT go straight to the above address and gain access to your classroom.
- Required: An access code to the lab simulations. We use McGraw-Hill and it is located on the left-hand side of the tabs in Blackboard also under each week's assignments.
- **NOT REQUIRED:** Biology: Concepts & Connections, 7th Edition, Campbell, Reece, Taylor, Simon, Dickey. Pearson/Benjamin Cummings. (a helpful source of material)

COMMUNICATION

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. Here you can find grading rubrics, assignments, your grades, and an extra calendar and syllabus (just in case you lose this one!). You will be expected to monitor your grades. If you find a mistake, let me know immediately via email.

SCHEDULE

Schedule is subject to change based on weather and student involvement.

Week 1:

Pearson chapters 1 & 2

Pearson online homework

Syllabus Quiz

Go over schedule and calendar

Most work is due by Sunday, August 30th at 10PM

Week 2:

Pearson chapters 3 & 4

Pearson online homework

Videos on chemical reactions, signaling, electron transport chain

In-class labs

Most work is due by Sunday, Septem 6th at 10PM

Week 3:

Pearson chapters 5 & 6

Pearson online homework

In-class labs

Test due by THURSDAY at 10PM

Most work is due by Sunday, September 13th at 10PM

Week 4:

Pearson chapter 7

Pearson online homework

In-class lab

Most work is due by Sunday, September 20th at 10PM

Week 5:

Pearson chapters 8 & 9

Pearson online homework

In-class labs

Photosynthesis virtual lab

Test due by THURSDAY at 10PM

Most work is due by Sunday, September 27th at 10PM

Week 6:

Pearson chapter 10

Pearson online homework

In-class labs

Mitosis worksheet

Test due by THURSDAY at 10PM

Most work is due by Sunday, October 4th at 10PM

Week 7:

Pearson chapters 11 & 12

Pearson online homework

In-class labs

Dihybrid, monohybrid, X-linked genetics in-class & homework

Most work is due by Sunday, October 11th at 10PM

Week 8:

Pearson chapters 13 & 14

Pearson online homework

In-class labs

Bacteria online lab

Test due by Thursday at 10PM

Most work is due by Sunday, October 18th at 10PM

Week 9:

Pearson chapters 15 & 16

Pearson online homework

In-class lab

Transgenic Fly Lab

Test due by THURSDAY at 10PM

Overview of presentations

Most work is due by Sunday, October 25th at 10PM

Week 10:

Pearson chapter 17

Pearson online homework

In-class labs

Videos on gene expression and operons

Misdiagnosis of breast cancer

Most work is due by Sunday, November 1st at 10PM

Week 11:

Pearson chapter 19

Pearson online homework

In-class lab

Test due by THURSDAY at 10PM

Most work is due by Sunday, November 8th at 10PM

Week 12:

Pearson chapter 20

Pearson online homework

In-class labs

Extra credit online

Most work is due by Sunday, November 15th at 10PM

Week 13:

Pearson chapter 21

Pearson online homework

Hardy-Weinberg worksheets and lab

In-class lab

Most work is due by Sunday, November 22nd at 10PM

Week 14:

Pearson chapters 22, 23 & 27

Pearson online homework

Dichotomous keys in-class

Lizard Evolution Lab

Molecular Evidence in-class

Test due by THURSDAY at 10PM

Most work is due by Sunday, November 29th at 10PM

Week 15:

Pearson online homework

Presentations in-class only

Stickleback Evolution lab

Tests and work are due by Sunday, December 6th at 10PM

Week 16:

Any makeup work that needs completed and that can be accessed

ATTENDANCE (for face-to-face classes)

Attendance is always important. You learn from both hearing and seeing the material as well as discussing it with your fellow students and you will receive important updates during class. Plus, the **extra credit for this course can only be completed in class**, and you have homework and lab assignments due at the start of class. If you miss class, the assignments due that day will be considered late and will be subject to the late work policy below. Any labs you miss will earn a grade of zero. Any homework or lab due that day must be turned in at the start of the next class period. I will NOT accept labs that you may have missed. If you miss 8 absences, you have essentially missed half of the course, and you will receive a failing grade. **NOTE: I take attendance at the start of class.**

Also, in the event that you miss class. Informing me that you will be missing class does not automatically grant you the opportunity to make-up a test, quiz or anything else missed from that class.

This course counts towards graduation as lab credit; if you do not attend lab, you should not still receive credit for a lab course.

LECTURE NOTES

All PowerPoint/OpenStax slides are found in the left-hand side of Blackboard, labeled POWERPOINTS. Add to them! The objectives at the end of each PowerPoint are excellent tools to focus your studying. These PowerPoints are in Resources in Blackboard.

Lecture Grade.....appr. 1200 pts.

Chapter Homework:

This course will be taught in a discussion-based format, so you **MUST** come to class prepared! Therefore, a question set for each chapter must be finished before class begins. These are located in MasteringBiology online course work. Each chapter is due before I lecture on the material. Each chapter's **homework is due by the start of class as listed in the calendar**. It will be your responsibility to make sure the answers are correct by (a) comparing answers with fellow students or (b) initiating a discussion of the question in class.

MasteringBiology

(~450pts.)

Your textbook contains a tutorial and skills exercise for each chapter. These exercises must be completed using Microsoft Word and Excel (or similar programs) and will be due each Sunday. The grades for MasteringBiology automatically download to the gradebook in Blackboard (though not instantly). You will need to use the modified code for this course to complete the online homework. Go into Blackboard, on the left-hand side you should see a link for MasteringBiology, click on this and complete the prompt to enter my course. www.masteringbiology.com **WILL NOT** work! We use a Modified Version of the program, so you **HAVE** to enter it through Blackboard in the weekly folder.

Library Films on Demand (~50pts.)

There are two videos for this course that will be watched online through the library's Films on Demand Collection. You must have an Edison library barcode to access Films on Demand if you plan to watch the videos at home, so contact the library to get a barcode (they are free) assigned to you early in the semester if you do not already have one. **The library can set you up with a code without coming to campus!**

Exams: (720pts.)

Exams consist of 50-100 multiple choice questions randomly drawn from a pool of questions. Seated classes will have their tests given to them in-class. Web flex classes will have their exams in MasteringBiology. Online students will have tests online. You should not be needed to come to class for anything for an online class! 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. **You will not have time to look up every answer! These tests are timed for that reason!**

I will not re-open the test because you didn't have time to complete. Tests are open for a week at a time. Also, just because you tell me you are going to miss a test does not mean you will get an opportunity to take it later!

Group Project: (only if you are a face-to-face class)

This will be an in-class presentation on any topic. These topics will be asked about finding your topic approximately half-way through the semester. Presentations must be 15-17 minutes, and every member of the group must present. Presentation order will be determined by topic. Grading will follow the guidelines posted on Blackboard. If your group would like to communicate via tools such as instant chat in Blackboard, please let me know, and I will set them up for you. I do not recommend putting this off as you have many other assignments due the last week of the semester. A group member must email me the PowerPoint as an attachment at least 24 hours prior to the due date. Prezi may also be used; in which case you do not need to email me the presentation.

Individual Project:

This will be a via TEAMS online presentation on any topic if you are an online student. If you are seeing me sometime through the week, you will present your topic face-to-face to the whole class at the end of the semester. See Resources in Blackboard for ideas. You will be asked to tell me your topic approximately half-way through the semester. Presentations must 5-7 minutes. Presentation order will be determined by topic. Grading will follow the guidelines posted on Blackboard (see the Resources folder). **I do not recommend putting this off as you have many other assignments due the last week of the semester!**

**Your lecture grade is calculated as the percentage of points earned from all of these assignments. **

Lab Grade.....200-250 pts.

Most labs will have questions to be completed in class. Some labs may require work outside of class. Each lab is worth 20 pts. You must come to class to participate in labs; there will be no make-ups! Labs not completed in class will be due the following class period. **For online classes**, your labs are through McGraw-Hill and you have a week to complete them. You will need to purchase the access code to gain access to your online labs. You can get to these labs by clicking on each week's assignments. Since they are open for a week, **I DO NOT accept late work for labs in this class!**

MAKE-UP WORK

If you do not have your assignment by the due date, (regardless of the reason), you may turn it in late for a maximum of 50% credit. Missed labs cannot be made up and will incur automatic zeroes. Make-up of exams is under the discretion of the Professor. Informing me of a class that you are going to miss doesn't automatically give you the right to make-up an exam/test.

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 calculated as the AVERAGE percentage of your lecture grade, lab grade, and online grade. Letter grades will be given as follows:

<u>GRADE</u>	<u>PERCENTAGE***</u>
A	90 and above
B	80 – 89.9
C	70 – 79.9
D	60 – 69.9
F	0 – 59.9

*****I do not round above the 10th place, i.e. an 89.78% = 89.8% which is a B**

LEARNING ASSISTANCE

All students enrolled at Edison are eligible to receive learning assistance services. To schedule an appointment with an academic counselor or to receive more information on available services, students should visit Room 443, call 937-778-8600, or www.edisonohio.edu/learningcenter. The Writing Center, also located in Room 443, is staffed with trained readers who will respond to student writing and offer help with the paper's organization, expression, and mechanics. More information can be found in the Academic Catalog.

LIBRARY

The library exists primarily to function as a full partner in the teaching and learning process and as the major information resource on campus. The library is open Monday through Saturday. You can contact the library at

937-778-7950 or visit the website at www.edisonohio.edu/library. You can gain an access code without coming to campus.

STUDENT WELLNESS CENTER

College is stressful! Feeling burnt out, anxious, frustrated? When challenges arise, it's helpful to have someone to talk to. We have partnerships established with many local mental health providers and can connect you with area resources.

The Student Wellness Center helps students navigate obstacles which might cause issues or create a sense of distress during your school year. Edison State has built a network of health professionals to support students. With these partnerships, the Student Wellness Center can assist students who need support in areas such as:

- Recovery and Counseling referral
- Housing
- Food
- Physical well-being

Information and education are also provided on the topics of:

- Alcohol and drug abuse and prevention
- Sexual assault prevention and awareness
- Building healthy relationships
- Inclusion and belonging
- Survivor support
- Self-care
- Anti-Hazing

If this is a medical emergency, please call 911. If this is a mental health emergency, please call 988. Please note that the Charger Station Food Pantry has been relocated to Room 060 (next to the cafeteria).

LIBRARY SERVICES

The Edison State library is not only a comfortable place to study, but we also have an expansive collection of online resources available to help you with your research. Check out the library webpage here: <https://www.edisonohio.edu/Library/>. Libguides and short instructional videos are available to help you use these resources and can be found at: <https://libguides.edisonohio.edu/>. Please contact the library staff with any library questions you may have at library@edisonohio.edu, 937-778-7950, or stop in!

MENTAL HEALTH SERVICES

College is stressful! Feeling burned out, anxious, frustrated? When challenges arise that you need help dealing with, it's helpful to have someone to talk to. We have established partnerships with many local mental health providers. If you are struggling and need to speak with someone in person, please reach out to the Edison State Care Team, <https://www.edisonohio.edu/CARE-Team/>. If you are concerned about a student or colleague, please file a CARE Team form <https://www.edisonohio.edu/CARE-Team-Referral-Form/> so that immediate assistance can be given. This link and the CARE Team website can be found under Campus Services on our home page.

STUDENT RESOURCE CENTER AND CHARGER STATION FOOD PANTRIES

Edison State Community College is proud to assist students needing help to obtain basic necessities. The Student Resource Center and Food Pantry is stocked with all kinds of grab-and-go snacks, meal supplies, toiletries, household needs, and community resources. Stop by and check out our Charger Stations in Room 163

at Piqua, in the student lounge at Troy, in the Brooke-Gould Learning Resource Center at Eaton, and in Room 121 (for personal care items) and pantry items in the student lounge at Greenville. If you need additional assistance, please reach out at ResourceCenter@edisonohio.edu.

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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, <https://www.edisonohio.edu/services-support/registration-records>, located in “Forms” 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 at <https://www.edisonohio.edu/services-support/student-resources>.

ACADEMIC HONESTY

It is the College’s policy that students exhibit academic honesty and respect ethical standards in carrying out their academic assignments. Dishonest actions include but are not limited to cheating on an exam or quiz, plagiarizing, and unauthorized collaboration with another in preparing outside work. Academic work submitted by students shall be the result of their thought, research or self-expression. Academic work is defined as, but not limited to, tests, quizzes, whether taken electronically or on paper; projects, either individual or group; classroom presentations, and homework. Further information with respect to conduct during in-class evaluations, written assignments, or other academic activities, is available in the Student Handbook, online at www.edisonohio.edu/handbook or in the Student Development office.

TECHNOLOGY

An issue you may have with technology is no excuse for late work. It is your responsibility to protect yourself by managing your time and backing up your work.

CLASSROOM BEHAVIOR (For In-Class)

Each Edison student is encouraged to help create an environment during class that promotes learning, dignity, and mutual respect for others. Students who speak at inappropriate times, sleep in class, display inattention, take frequent breaks, interrupt the class by coming to class late, engage in loud or distractive behaviors, use cell phones or pagers in class, use inappropriate language, are verbally abusive, display defiance or disrespect to others, or behave aggressively toward others will be asked to leave the classroom. **We all carry and use cell phones, as a courtesy to you and others I will not be on mine. I expect the same courtesy from YOU. Please refrain from texting and playing on your phone while I’m lecturing or you are in lab.** It’s VERY

DISTRACTING! **You may bring a snack to class, but you may NOT bring an entire meal.**

CAREER DEVELOPMENT

Student interest in clarifying career goals, exploring educational options, and/or acquiring job search skills can be addressed by going to www.edisonohio.edu/handbook.

ADDITIONAL SUPPORT SERVICES

For additional help, please click the ASSIST tab on Blackboard or the Edison State Student

COURSE NETIQUETTE

In our virtual classroom, you will communicate with your participants and facilitator using synchronous and asynchronous tools (i.e. chat, e-mail, discussion board, and messages). Your online conduct is generally referred to as “netiquette”. A good rule of thumb, your conduct in the virtual classroom should mirror your conduct in a face-to-face class. In this class please adhere to the following guidelines:

- Do not write messages in all capital letters as this is considered SHOUTING.
- Think before you write. Even if you are sending an email to only one person that person can forward it to anyone. Everyone in our course has access to the threads you post in the discussion board and the chat room conversations.
- 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.
- Do NOT use profanity in any area of our course. As stated previously a transcript of all chats is recorded and students do not have the ability to delete messages from the discussion board.
- Be polite to your participants. Do not criticize your fellow participants as this is considered “flaming”.
- Unlike a traditional class where we can see and speak to each other, an online course does not allow us the traditional nonverbal cues (i.e. facial expressions, voice tone). Please be cautious of what you say so it is not misinterpreted.
- Humor can be difficult in an online course, but you can use Emoticons to help.
- Use your participant’s first name when responding to them.
- Respond promptly to messages sent to you.
- Use reinforcement phrases (i.e., Thank you, Good job, Great Suggestion)

TIPS FOR SUCCESS

1. **Participate!** Contribute your ideas, thoughts, and comments regarding the subject you are studying with your participants, teammates, and facilitator. Your facilitator will not be your only resource for learning in your online class...you can learn from your participants as well as they will learn when you share your ideas.
2. Get to know your online participants. Introduce yourself to the class by writing an introductory message; read your participants’ messages to get a sense of who they are. I encourage you to send them emails, ask about an interesting hobby someone mentions, or make contact with someone whose interests are the same as yours. Once you have started an online conversation, it quickly becomes an easy and natural way to communicate.
3. 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.
4. Log into your course site as often as possible. You should log into your class at least 4 or 5 times per week. You will want to see what your participants are saying and read the feedback from your facilitator. If you log in less frequently you may fall behind and have a hard time catching back up with the discussion board postings, chats, or assignments.
5. **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 and discussions.

6. Online advantage. One of the biggest advantages of an online course is your anonymity. No one will be able to see you and affect how you feel about the thoughts and ideas you wish to share regarding the subject matter of your course. You can take as much time as you need to compose your thoughts before responding to your participants or facilitator.
7. Be courteous of your participants. Use proper Netiquette and remember just because you are online and do not meet your fellow participant's in-person they are real people with real feelings.
8. Having problems... Your facilitator is limited to what you communicate to him/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. If another student is able to help you, he/she probably will, and if you are able to explain something to your participants in need, you will not only help them out, but you will also reinforce your own knowledge about the subject.