



**SEMESTER**  
**Life and Natural Sciences Department**  
**School of Science, Technology, Engineering, and Mathematics**

**Program Name:** Biology  
**Course Name:** General Biology 1 - Laboratory  
**Course Number:** BIO 101      **Section:** BXX

**Credits:** 4

**Text:** *Biology 101 Laboratory Manual, 3rd Edition; Connour, et. al., Van-Griner Publishing, 2019.*

**Instructor Name:**

**Office Hours & Location:**

**Owens CC Email\*\*:**

**Phone:**

**Additional Contact:**

\*\*Please use only Owens email for course communications

**CATALOG DESCRIPTION:** The student will study integration of structure, function, and diversity among the levels of biological organization, as well as discuss and apply principles of evolution, genetics, physiology, and ecology. Included also is the nature of living systems and the process of science. This course is intended for students not majoring in Biology, and will satisfy part of the science requirement for an AA or AS General Degree.

**COREQUISITES:** None

**PREREQUISITES:** None

## TEXTBOOKS AND MATERIALS

*Biology 101 Laboratory Manual, 3<sup>rd</sup> Edition*; Connour, et. al., Van-Griner Publishing, 2019.

*Campbell's Essential Biology with Mastering Biology, 7<sup>th</sup> Edition*; Simon, Eric J., et. al., Pearson Education Publishing, 2019.

## Course Objectives

- To examine the scientific study of life.
- To discuss the concepts of population, community, and natural selection.
- To recognize the importance of biochemistry and energy use.
- To recognize the structures of cells and the types of tissues.
- To understand the role of genetics and cell division in the cell life cycle.
- To identify the diversity of plants, animals, and microorganisms.

## Grading

Your final grade will be calculated using the lecture average as 70% of your final grade and your laboratory grade for 30% of your final grade.

The laboratory grade will be based on assignments and exams.

|                                                               |            |
|---------------------------------------------------------------|------------|
| 2 Reports (30 points each)                                    | 60 points  |
| Field Guide                                                   | 15 points  |
| 10 Question Sets (15 points each)                             | 135 points |
| <b><i>Lowest question set (15 points) will be dropped</i></b> |            |
| Exam 1                                                        | 40 points  |
| Exam 2                                                        | 40 points  |
| <hr/>                                                         |            |
| Total                                                         | 290 points |

**IMPORTANT: You must earn no less than 174 points (60%) out of the 290 total possible laboratory points to pass the entire course. If you do not earn at least 174 laboratory points, you will receive an (F) letter grade for the entire course.**

**There is NO provision for EXTRA CREDIT to be given beyond the designated points for each laboratory exam and activity.**

Students retaking the course must repeat both the lecture and the laboratory portion.

## Assignments – Reports and Question Sets

A report or question set will be assigned for each activity performed. See the weekly schedule.

- Each report will be graded on a 30-point scale.
- Each question set will be graded on a 15-point scale.

Reports and question sets are due at the beginning of the next laboratory session.

All assignments are due at the beginning of laboratory period following the lab in which the assignment was given. Late assignments will receive a 20% deduction from the grade earned for each day late. Any assignment over 1 week late will receive a zero (0%) grade. Laboratory assignments will not be accepted at the Life and Natural Sciences Department offices.

**You will not be permitted to submit a laboratory assignment for a class in which you have been counted absent.**

### **Exams**

The exam questions will be comprised from material covered in the laboratory manual, experiments, and laboratory lectures. Exams could include the following types of questions: multiple-choice, fill-in the blank, short essay and will primarily be practical in format.

- Exam 1 will cover Activities 1 through 6.
- Exam 2 will cover Activities 7 through 12.
- Exams are NOT comprehensive.

**Open book and open notes are not permitted for an exam.**

**Each exam can only be taken once.**

**Contact your instructor immediately if you miss a scheduled exam.**

The student **MUST** contact the laboratory instructor within 1 week of missing Exam 1 in order to make arrangements for a make-up exam.

A student missing Exam 2 **MUST** contact the instructor on the day of the missed exam.

A student who misses an exam may choose one of the following options:

- Take an essay exam by the date and time as assigned by the instructor.  
**All make-up exams will be in an essay format.**
- Not take the exam and receive 0 points.

### **Course Information**

#### **Devices**

Phones and other electronic communicating devices must be in silent mode during class. Unauthorized use of a phone, e-watch or tablet is not permitted during an exam. Use of these devices could result in forfeiture of exam points. Phones cannot be substituted for calculators.

#### **Attendance**

Attendance is taken at each laboratory session. If you are more than 30 minutes late for a laboratory you will not be permitted to attend that session. During the first 30 minutes your instructor covers the basic information necessary to successfully complete the laboratory,

mandatory safety issues, precautions and location of needed materials. After the session has begun, for safety purposes, your instructor needs to be working with all students, not covering the information for those students who are late. Therefore, if you are more than 30 minutes late, you will not be permitted to attend the laboratory and will be counted absent. You are encouraged to obtain missed information from other students in the laboratory.

**THERE are no make-up laboratory sessions.**

**You must ONLY attend the laboratory section in which you are registered.**

### **Safety**

- **Eating, drinking and smoking are not permitted in the laboratory.**
- You must be registered for the laboratory section which you are attending. Non-registered persons are not permitted in the laboratory.
- Appropriate apparel is required in the laboratory at all times, including; cotton shirts, jeans, proper foot covering, proper shoes, etc.
- Loose clothing, shorts, sandals, open-toed shoes are not permitted.
- Full covering laboratory aprons are available as needed.
- More about apparel will be discussed at the first laboratory meeting.
- **Safety goggles MUST BE WORN while experiments are being conducted. The laboratory instructor will announce when goggles may be removed. The appropriate eyewear must be splash goggles, which are provided to each student. NO impact glasses are to be worn at any time.**

### **Student Responsibilities**

- To discuss immediately with the instructor any questions regarding class procedure, assignments, or grades.
- To attend class regularly. A student who does not attend regularly may experience considerable difficulty. Regular attendance is essential in this class. If there is a need for you to be absent, it is your responsibility to learn of any announcements concerning assignments or changes from the syllabus from a classmate. Get the name and phone number of a “buddy” now, so that you can keep one another informed.
- No eating or drinking permitted in the classroom, as per the policy stated in the college catalogue.
- You are expected to follow all instructions given with respect to the care and operations of the equipment in the classroom.
- Please turn cellular phones off during class time so as not to interrupt the lecture or lab and consequently interfere with your classmates’ concentration. If you need to be contacted immediately due to an emergency, please have your family member contact Security at 567-661-7575 and pass a message to you. We ask consideration and cooperation in this matter.

## Activities

Activity 1: Measurement and the Scientific Method – *Question Set (15 points)*

Activity 2: Microscopy – *Question Set (15 points)*

Activity 3: Cell Structure and Function – *Question Set (15 points)*

Activity 4: Photosynthesis and Respiration – *Report (Title Page, Introduction, Procedure ONLY) (30 points)*

Activity 5: Mitosis and Meiosis – *Question Set (15 points)*

Activity 6: Genetics – *Question Set (15 points)*

Activity 7: **Exam 1 (40 points)**, Biotechnology – *Question Set (15 points)*

Activity 8: Microorganisms and Disease – *Report (Full Report) (30 points)*

Activity 9: Protista – Algae and Protozoans – *Question Set (15 points)*

Activity 10: Plant Diversity – *Field Guide (15 points), Question Set (15 points)*

Activity 11: Animal Diversity; Part 1 – *Question Set (15 points)*

Activity 12: Animal Diversity; Part 2 – *Question Set (15 points)*

Activity 13: **Exam 2 (40 points)**

## Policy for Acquisition and Care of Animals and Preserved Specimens

The Owens Community College Science Department recognizes that one of the major goals of life science education is to instill respect and appreciation for all living organisms and their environment. We believe you have a right to expect and we assure you that all preserved animals and specimens used are legally and properly obtained as required by applicable government regulations. All animals were euthanized humanely, under the guidance of consulting veterinarians.

## GENERAL COLLEGE INFORMATION

### Academic Support

**Disability Services Resource Center:** If you have a disability or acquire one, you may be entitled to receive reasonable accommodations intended to assure you an equal opportunity to participate in and benefit from the program. To receive more information or to register for accommodations, please contact the Disability Resource Center at 567-661-7007, email [disability@owens.edu](mailto:disability@owens.edu), visit <https://www.owens.edu/disability/>, or stop by College Hall 124.

**Tutoring Services:** Owens Community College offers academic tutoring and assistance in a variety of subjects including: accounting, computing, economics, mathematics, science, and writing. For more information go to: <https://www.owens.edu/successcenters/>.

**Counseling Services:** Counseling Services provides assistance to students experiencing personal, educational, interpersonal/relationship, family, social, or psychological difficulties. If you feel you may benefit from this service, please contact them at [counselingservices@owens.edu](mailto:counselingservices@owens.edu). More information is at <https://www.owens.edu/counseling/>.

**Campus and Community Connections:** The Center for Campus and Community Connections (College Hall 151) is a walk-in office created to provide retention support through resource stability initiatives and community connections. Go here for more information: <https://www.owens.edu/connection/> or contact [connections@owens.edu](mailto:connections@owens.edu)

**Owens Library:** The Owens Library offers two locations (Toledo and Findlay) as well as online resources. For more information visit <https://www.owens.edu/library/>.

\*\*\*Students can find more information on campus resources, student support, student life and security at this [link](#).\*\*\*

## General Information

**Student Code of Conduct:** All students are expected to follow Owens Community College's [Student Code of Conduct](#), which includes academic honesty, encompassing plagiarism. See the [Board Policy](#) for more information.

**Anti-Discrimination and Harassment & Title IX/Sexual Misconduct:** All students, faculty, and staff are expected to follow Owens Community College's [Anti-Discrimination and Harassment Policy](#) and the College's [Title IX Policy](#)/Sexual Misconduct Procedures and Guidelines. The College strictly prohibits and will not tolerate harassment, discrimination, intimidation, or hostile/offensive working or learning environments.

**Religious Accommodations:** A student seeking an accommodation for an absence permitted under Ohio's Testing Your Faith Act must provide the instructor with a written email notice with the specific dates for an absence, and must do so not later than fourteen (14) days after the first day of instruction. Alternative accommodations are not retroactive, and no academic penalty will be imposed for an absence under the policy\*. The request for an alternative accommodation will be kept confidential. Students with questions about a religious accommodation under Ohio's Testing your Faith Act may contact the College's Office of Academic Affairs: [provost@owens.edu](mailto:provost@owens.edu)  
The policy may be found on the Owens website: [3358:11-2-63 Accommodation](#) for a Student Absence for the Observance of Religious Beliefs and Practices Policy

**Document Collection:** Throughout the semester, your instructors may ask for a variety of assignments including tests and/or quizzes for student learning of institutional general education competencies or program assessment. Please save all your class materials until the end of the semester.

**Classroom Admittance:** OCC classes shall only be attended by the officially registered OCC students or perspective students, instructor of record, guest lecturer, or substitute. Visitors are not permitted to be in the classroom and should not be invited to attend or participate in the class. See [FERPA](#) regulations for more information.

**Use of AI Tools:** This course permits you to use artificial intelligence (AI) tools, such as chatbots, text generators, paraphrasers, summarizers, or solvers, to get guidance on

assignments, as long as you do so in an ethical and responsible manner. Essentially, you can think of these tools as ways to help you learn but not to entirely create work for assignments like discussion board posts, essays, presentation slides, and so on. AI is more like your tutor or TA, not a replacement for your independent thinking.

This means that you must:

- Not use AI tools to replace your own thinking or analysis or to avoid engaging with the course content.
- Cite or explain any AI tools you use. Provide the name of the AI tool, the date of access, the URL of the interface, and the specific prompt or query you used to generate the output.
- Be transparent and honest about how you used the AI tool and how it contributed to your assignment. Explain what you learned from the AI tool, how you verified its accuracy and reliability, how you integrated its output with your own work, and how you acknowledged its limitations and biases.

You are accountable for any mistakes or errors made by the AI tool. Always check and edit the output before submitting your work. If you discover any inaccuracies or inconsistencies in the output after submission, notify the instructor immediately and correct them as soon as possible.

Using AI tools in an unethical or irresponsible manner, such as copying or paraphrasing the output without citation or transparency, using the output as your own work without verification or integration, or using the output to misrepresent your knowledge or skills, is considered a form of academic dishonesty and will result in a zero grade for the assignment and possible disciplinary action. If you have any questions about what constitutes ethical and responsible use of AI tools, please consult with the instructor **before** submitting your work.

NOTE: Some instructors will also list specific acceptable and unacceptable uses or include a statement like “All written assignments, projects, and exams must be completed independently.”

Laboratory Schedule Monday – Saturday\*

| Laboratory Section DAY | Laboratory Section DAY | Laboratory Section DAY |
|------------------------|------------------------|------------------------|
| Activity 1 - DATE      | Activity 1 - DATE      | Activity 1 - DATE      |
| Activity 2- DATE       | Activity 2- DATE       | Activity 2- DATE       |
| Activity 3- DATE       | Activity 3- DATE       | Activity 3- DATE       |
| Activity 4- DATE       | Activity 4- DATE       | Activity 4- DATE       |
| Activity 5- DATE       | Activity 5- DATE       | Activity 5- DATE       |
| Activity 6- DATE       | Activity 6- DATE       | Activity 6- DATE       |
| Activity 7- DATE       | Activity 7- DATE       | Activity 7- DATE       |
| Activity 8- DATE       | Activity 8- DATE       | Activity 8- DATE       |
| Activity 9- DATE       | Activity 9- DATE       | Activity 9- DATE       |
| Activity 10- DATE      | Activity 10- DATE      | Activity 10- DATE      |
| Activity 11- DATE      | Activity 11- DATE      | Activity 11- DATE      |
| Activity 12- DATE      | Activity 12- DATE      | Activity 12- DATE      |
| Activity 13- DATE      | Activity 13- DATE      | Activity 13- DATE      |
| Laboratory Section DAY | Laboratory Section DAY | Laboratory Section DAY |
| Activity 1 - DATE      | Activity 1 - DATE      | Activity 1 - DATE      |
| Activity 2- DATE       | Activity 2- DATE       | Activity 2- DATE       |
| Activity 3- DATE       | Activity 3- DATE       | Activity 3- DATE       |
| Activity 4- DATE       | Activity 4- DATE       | Activity 4- DATE       |
| Activity 5- DATE       | Activity 5- DATE       | Activity 5- DATE       |
| Activity 6- DATE       | Activity 6- DATE       | Activity 6- DATE       |
| Activity 7- DATE       | Activity 7- DATE       | Activity 7- DATE       |
| Activity 8- DATE       | Activity 8- DATE       | Activity 8- DATE       |
| Activity 9- DATE       | Activity 9- DATE       | Activity 9- DATE       |
| Activity 10- DATE      | Activity 10- DATE      | Activity 10- DATE      |
| Activity 11- DATE      | Activity 11- DATE      | Activity 11- DATE      |
| Activity 12- DATE      | Activity 12- DATE      | Activity 12- DATE      |
| Activity 13- DATE      | Activity 13- DATE      | Activity 13- DATE      |

*\*This is the master schedule for all Life and Natural Sciences Department laboratory sections.*

*The instructor reserves the right to amend this syllabus as necessary and will communicate amendments to students in the course.*