

# BIO 101

## General Biology

### Spring 2022

CRN 40836-BI101:

Lecture: Tuesday, 10:00 – 10:50 on Zoom & Lab: Wednesday, 10:00 – 11:50 BC 207

Online lectures on Zoom and face to face labs

Instructor: Greg Coleman

Office: BC-201

Office hours: Zoom open meeting Tuesday 12:00 (noon). Also available for zoom appointments, email, or phone.

Office phone: (Cell) 541-760-5664

e-mail: greg.coleman@linnbenton.edu

#### **Required Text and Packets (From the Bookstore):**

- Textbook: go to <https://openstax.org/>. Click on Science, then Concepts of Biology, and select the method of dissemination. – **Openstax is a product of** © 2013 by Rice University
- Lab Packet BI 101 General Biology Laboratory Course Packet: LBCC Biology Department -

**LBCC prohibits unlawful discrimination based on race, color, religion, ethnicity, use of native language, national origin, sex, sexual orientation, marital status, disability, veteran status, age, or any other status protected under applicable federal, state, or local laws.**

#### **Course Overview**

Biology 101 is an introduction to ecology, diversity of life, and environmental problems. This course is intended for **NON-Science majors**. If you plan on majoring in a field of science this is probably not the class for you. Check with your intended transfer school and program for their specific degree requirements. Biology 101 is the first course in a three-term sequence of general biology (101, 102, and 103). 100 level general biology courses are structured to be taken **in any** order. There are no prerequisites for this class.

#### **Request for Special Needs or Accommodations**

Direct questions about or requests for special needs or accommodations to the LBCC Disability Coordinator, RCH-105, 6500 Pacific Blvd. SW, Albany, Oregon 97321, Phone 541-917-4789 or via Oregon Telecommunications Relay TTD at 1-800-735-2900 or 1-800-735-1232. Make sign language interpreting or real-time transcribing requests 2-4 weeks in advance. Make all other requests at least 72 hours prior to the event. LBCC will make every effort to honor requests. LBCC is an equal opportunity educator and employer.

Bio 101 Spring 2022

### Important Dates:

1st Lecture Exam: Tuesday, April 19th on Zoom  
2nd Lecture Exam: Tuesday, May 10th on Zoom  
**Final Exam** Tuesday, June 7th, 10:00 – 11:50 am (2 hours on Zoom)

### Grading:

All grading is based upon mastery of the subject matter of this course. Points towards your final grade will be awarded as follows:

First hour exam	100	Grade cut-offs.
Second hour exam	100	A 90%
Final exam	200	B 80 - 90%
Pre-lab exercises 9 @ 5	45	C 70 - 80%
Labs 10@_10	100	D 60 - 70%
<b>ONLINE HOMEWORK</b>	<b>60</b>	<b>F &lt; 60%</b>

Total 605 (actual total may be different)

### Additional Grading Options:

Two additional grade assignments are possible: incomplete and Y. An incomplete will only be assigned when all course material except the final exam has been completed. The Y, which indicates insufficient basis for a grade, will only be assigned to students that completed less than 50% of the course and neglected to drop from the course.

### Student Behavior

Collaboration and participation are essential components of this class. Learning is best accomplished through collaboration among students. College classes and life in general works best when the focus is on people's strength rather than their weakness. As such, **derogatory or condescending behavior or remarks towards other students will not be tolerated.**

Although collaboration and group activities are a central part of this course, each student is ultimately responsible to demonstrate their mastery of the subject matter. Assignments and activities submitted for credit, including exams and quizzes, must be completed individually unless otherwise stated by the instructor.

If a student falls behind on class work, it is that student's responsibility to determine material missed, obtain handouts, make-up assignments (when possible), and to keep track of upcoming assignments and due dates.

### **Late Assignment Policy:**

Lecture and lab assignments are due on the due date of the assignment unless otherwise indicated. The due date will be printed on the assignment or announced on Moodle. Any late assignment will be penalized at the rate of one letter grade (10%) per class period.

**YOU MUST EARN AT least 60% on your lab assignments to pass this course. Any student failing to turn in more than 2 labs during the term will fail the course.**

### **Exams:**

Two one-hour midterm exams will be given during regularly scheduled class times. These exams will consist of approximately 50 multiple choice questions. There will also 2 -10-point short essay questions. The first exam will cover material from the text readings, lecture slides, labs, and assignments for weeks one through three. The second exam will cover material from the text readings, lecture slides, labs, and assignments from week four through seven. The final exam will be cumulative covering all material throughout the term and your score will represent your mastery of the subject matter. All exams will be completed online on MOODLE and Zoom. The final exam will be worth twice the midterms. Lab quizzes are all short answer or fill in the blank questions drawn from the previous weeks lab assignment. Quizzes will be posted on Moodle.

### **Lab Assignments**

Lab assignments are due on the day of lab unless otherwise stated by the instructor. Exam and quiz questions will be formulated using material from the labs and students need to understand the material from any labs that were missed. Students may only miss two unexcused labs, or they will automatically receive an "F" for this course. There are nine pre-labs due at the beginning of the lab period for which they are written (see schedule and lab packet)

These pre-labs are graded and are worth 5 points each. It is imperative that you come to lab prepared for that day's activity to do well in the lab. Time constraints dictate that every student is prepared before lab starts otherwise, there would not be enough time to finish that lab assignment.

**To pass this course, you must earn at least 60% of the lab points possible**

### **Moodle Homework**

Moodle homework is required. Every week there will be mandatory Moodle Homework quizzes covering materials over that week's lectures. Moodle homework will be worth 10% of the final grade.

## **Obtaining Assistance:**

Students may contact the instructor at any time through email or phone. Students may also arrange an appointment that best fits their schedule.

## **Disability Services:**

**Students who may need accommodations** due to documented disabilities, who have medical information which the instructor should know, or who need special arrangements in an emergency, should **speak with the instructor** during the **first week of class**. If you have not accessed services and think you may need them, please contact Disability Services, 541-917-4789.

## **Plagiarism Policy**

Plagiarism will result in an F for the assignment and, in serious cases, an F for the course. Plagiarism is turning in someone else's work as if it were your own. This includes copying from sources (or making only slight changes), including ideas, words, or facts, without giving credit to your source; copying papers from the internet; cutting and pasting large blocks of information; having someone else write your paper for you. You will receive no credit for something you did not write.

## **Cheating Policy**

We will be performing much collaborative work in this course, and you are encouraged to form study groups prior to exams. However, each student is responsible for demonstrating individual mastery of the subject matter. Cheating on exams and verbatim copying of homework or lab activities will result in a zero grade for that assignment. Continued cheating may result in a failing grade for this course.

## **Homework Assignments**

During the term you will be required to complete a variety of homework assignments. Homework will be due on their due date. If you are unable to turn in the homework on the due date you can e-mail the homework to your instructor, turn it in early or ask for an extension.

Covid information: If you have questions regarding Covid policies for spring term, the link is here. [COVID-19 and LBCC Information | LBCC \(linnbenton.edu\)](https://www.linnbenton.edu/covid-19)

Bio 101 Spring 2022  
**Student Learning Expectations**

Students completing biology 101 should be able to apply their biology skills to their own life, as well as display a fundamental grasp of the following concepts:

1. Apply the species concept to common organisms, and describe biodiversity in terms of number of species, the criteria by which a species might be classified (from domain to species), and how classification reflects phylogeny.
2. Describe where common organisms fit in the species-domain taxonomic scheme, and key features that differentiate these organisms from organisms in other taxa
3. Given a common organism, be able to identify where the organism might live, key adaptations related to the organism's environment and way of life, and why these adaptations may have evolved.
4. List key biotic and abiotic factors that influence the ecosystem. Describe why a particular ecosystem might occur in a particular place and explain how one might go about studying the ecosystem and the factors shaping it.
5. Given a population of organisms, identify key population parameters (density, dispersion, birth rate, death rate, growth rate, etc.), how the factors interact, and how the population might be affected by biotic and abiotic factors.
6. Through observing an ecological community and the relationships among populations in the community, describe how interactions among populations (competition, predation, mutualism, etc.) might shape community structure and change (how might an introduced insect change the ecosystem?).
7. Through observation of an ecosystem, be able to list and describe the overall trophic structure (producers, consumers, decomposers) of that ecosystem, and how energy and nutrients flow and cycle through the system.
8. Describe and list how humans depend on the environment, major impacts of human population and technology on the environment, ways in which these impacts affect ecosystems, and possible ways to minimize human impacts.

**The LBCC community is enriched by diversity. Everyone has the right to think, learn, and work together in an environment of respect, tolerance, and goodwill. I actively support this right regardless of race, creed, color, personal opinion, gender, sexual orientation, or any of the countless other ways in which we are diverse. (related to Board Policy #1015)**

Bio 101 Spring 2022  
**BI 101 Spring 2022 Schedule**

CRN 40836-BI101:

Lecture: Tuesday, 10:00 – 10:50, Online zoom and Moodle  
 & LAB Wednesday, 10:00 – 11:50, BC 207

Instructor: Greg Coleman

Week/Date	Tuesday Lecture	Wednesday Lab	Readings
1 Mar. 28 – Apr. 2	Introduction, expectations, Introduction to life on Earth	Lab 1: Greenhouse effect and biodiversity	Ch. 1
2 Apr. 4 - 9	Population and community ecology	<b>Prelab Due</b> Lab 2: Populations: Survivorship and Dispersion	Ch. 19
<b>LAST DAY TO DROP WITH REFUND IS April 4th</b>			
3 Apr. 11 – 16	Population and community ecology	<b>Prelab Due</b> Lab 3: Allelopathy	Ch. 19

**1st Midterm Exam on zoom Tuesday April 19th (Chapters. 1 & 19)**

Week/Date	Tuesday Lecture	Wednesday Lab	Readings
4 Apr. 18 – 23	<b>1<sup>st</sup> Midterm Exam – Chapters. 1 &amp; 19</b> Ecosystems and the biosphere	<b>Prelab Due</b> Lab 4: Nutrient Pollution Read Allelopathy data	Ch. 20
5 Apr. 25 – 30	Conservation and Biodiversity Diversity of Life	<b>Prelab Due</b> Lab 5: Microorganisms and Water Quality	Ch. 21 & 12
6 May 2 – 7	Diversity of microbes, Fungi, and Protists	<b>Prelab Due</b> Lab 6: Fungi, Lichen, and Succession	Ch. 13

**2nd Midterm Exam on zoom Tuesday, May 10th (Chapters. 12, 13, 20, & 21)**

7 May 9 - 14	<b>2nd Midterm Chapters. 12, 13, 20, &amp; 21</b> Diversity of Plants	<b>Prelab Due</b> Lab 7: Plants	Ch. 14
-----------------	--	------------------------------------	--------

**LAST DAY TO WITHDRAW WITHOUT GRADE IS May 15th**

Week/Date	Tuesday Lecture	Wednesday Lab	Readings
8 May 16 - 21	Diversity of animals 1 – The invertebrates	<b>Prelab Due</b> Lab 8: Invertebrate Diversity	Ch. 15
9 May 23 -28	Diversity of animals 2 – The vertebrates	<b>Prelab Due</b> Lab 9: Arthropod Morphology	Ch. 15
10 May 30 - June 4	Diversity of animals 2 – The vertebrates	<b>Prelab Due</b> Lab 10: Vertebrate diversity	Ch.15
11 June 6 - 11	<b>" Final exam"</b> Available Tuesday June 7th covers everything from term	<b>" Final exam"</b> Available Tuesday June 7th covers everything from term	

	"Cumulative	"Cumulative	
--	-------------	-------------	--

**Final Exam (Tuesday Mar. 16th, Zoom ONLINE from 10:00 – 11:50 am (once started two hours to complete))**  
(All times and schedules are tentative and can be changed by the instructor at any time without notification)

**Bio 101 Spring 2022**