

BIO 102 General Biology

Fall 2021, CRN: 20662

Instructor: Dr. James Looney

Email: looneyj@linnbenton.edu

Class time: Online Mondays 10:00 - 11:50 am **Lab:** Wed. 10:00 - 11:50 at LBCC WOH Room 205

Office Hours: Times to be arranged. **See the Last page of this syllabus for a summary!**

Class Description: Welcome to Biology 102! This class is a 4-credit, introductory-level course with no prerequisites. This class is intended for non-majors and those students who are undecided about continuing onto higher-level biology series. This course will fulfill your laboratory science distribution requirements at LBCC. Through online lecture activities and in-class labs, we will learn about the function and importance of DNA, synthesis of other biological molecules, cell division, genetics, adaptation and evolution. Along with acquiring working knowledge of biological systems, a major goal of this course is for students to think critically about current issues in biotechnology, health and medicine. Please recognize that in a learning environment we will have differing opinions, perspectives, and experiences. For meaningful dialogue to happen, we agree to respect and honor each other, and at times, agree to disagree in a respectful manner.

Course Outcomes: Upon successful completion of this course, students will be able to:

1. Distinguish between the groups of biomolecules
2. Be able to describe selected key cell processes
3. Be able to describe the patterns of inheritance
4. Express how changes in the genome can affect the phenotype or traits within a population
5. Explain how natural selection drives evolution

Required Materials and Resources:

1) *Concepts of Biology*- OpenStax textbook.

Available FREE online at: <https://openstax.org/details/books/concepts-biology>
or for purchase online or at the bookstore.

2. Access to Moodle and Zoom. **All assignments, with due dates, recordings, and powerpoint presentations will be posted on Moodle. See Moodle for Zoom links.**

Grading: (600 pts total; approximate grade distribution is given below; all points are of equal value)

<i>Homework:</i>	100 pts	A	90-100%
<i>Other Activities:</i>	50 pts	B	80-89.9%
<i>Lab activities:</i>	100 pts	C	70-79.9%
<i>Exams and quizzes:</i>	350 pts	D	60-69.9%
		F	< 60%

Homework: One homework or lab assignment will usually be given each week. Due dates will be posted on Moodle when homework is assigned. There will also be a quiz each week (also posted on Moodle).

Class material: Class material will be available on Moodle. Please check this on a regular basis.

Labs: In-class labs, held in room 205 at LBCC, will be held on Wednesdays from 10:00 to 11:50.

Exams: Test 1 covers weeks 1-3 (100 pts). Test 2 covers week 4-7 (100 pts). The final exam is comprehensive (125 pts) and will include all course material. In class exams include multiple choice, fill in the blank, matching, and short answer questions and are based on lectures, readings, and labs. This exam format may have to be changed due to the nature of this online course.

Class Policies and Expectations for Bio 102:

Expectations: Students are most successful when they ask questions, actively participate in class, and complete assignments. The more effort that you put in, the more you will get out of this class. As an instructor, I believe that science should be accessible for all learners. While I understand that many people may not love science or seek to pursue it as a career, I aim to make the subject matter understandable, relevant, and useful for any student in my class. With this in mind I encourage students to be inquisitive and actively participate in the learning process. I am here to support you so please contact me or see me during office hours with any questions/concerns you may have.

Class Participation/Attendance: Please silence your cell phone and refrain from texting during class. Missing class will greatly decrease your chances for success. If you are absent, it is your responsibility to get copies of any handouts from another student or from me. Please do not schedule routine doctor or dental appointments during class time. You are expected to be on time for the start of lectures and labs, as I will begin classes promptly at the designated time. As a courtesy to the instructor and other students, all cellular phones, pagers, watch alarms and other noise making devices must be turned off or silenced during class. Attendance during lab is required and students must follow proper safety protocols. Students not present during their first scheduled class meeting will be dropped from the course to make room for other students trying to enroll.

Make Ups/Late Assignments: Pre-Labs are due at the beginning of the lab class and **cannot be turned in late**. The rest of the lab assignment may be turned in up to one week late with a point deduction. Missed in-class assignments, quizzes, and labs cannot be made up. **Your lowest lab score will be dropped.** If you miss an exam you need to contact me as soon as possible to schedule a makeup time. No make-ups will be given after the exam is handed back.

Grade Dispute Policy: To dispute an assignment grade, submit the following **in writing** (a hard copy) **no later than one week** after receiving your grade: 1) the requested correction, 2) a valid reason for that correction, 3) and a copy of the disputed material. After one week has passed, requests will not be accepted. Requests either by email or verbally will not receive a reply. I will promptly address all written requests within a week.

Course Withdrawal Policy: To drop a class or withdraw from school, you may turn in a Schedule Change form at the Registration Counter or use the Webrunner system. If you withdraw from a course after the refund deadline, you will receive a "W" grade in the class, you will forfeit all claims to refunds, and you will be financially responsible for any tuition and fees. The last day to drop a class and receive a tuition refund is the Monday of the 2nd week. The last day to withdraw (no refund) is last day of week 7. Please be aware of important academic dates and deadlines for this term: (<https://www.linnbenton.edu/academiccalendar>).

Incomplete Grade: Incomplete grade (IN) will only be considered if a student has talked to me in advance, and a signed agreement between the student and myself is completed. IN grade are assigned only if the student has a good reason for making the request, has only a minor portion of coursework to complete, and has scored a C or better on work that has been submitted.

Academic Integrity: This class is highly collaborative; however, there are expectations for individual work. If it is ever unclear when you are allowed to collaborate, please ask. Any cheating, plagiarism, etc., may result in a zero for the assignment, failing grade, and possible recommendation to the administration for further consequences.

Special accommodations: Students who may need accommodations due to documented disabilities, have medical information which I should know, or need special arrangements in an emergency, should speak with me during the first week of class. If you have not accessed services and think you may need them, please contact Center for

Accessibility Resources (RCH room 105), 541-917-4789, cfar@linnbenton.edu, or online at <https://www.linnbenton.edu/cfar>

Statement of Non-discrimination: LBCC prohibits unlawful discrimination based on race, color, religion, ethnicity, use of native language, national origin, sex, gender, sexual orientation, marital status, disability, veteran status, age, or any other status protected under applicable federal, state, or local laws. For further information: <http://po.linnbenton.edu/BPsandARs/>

Statement of Respect: Your instructor will make every attempt to create an environment free of distraction and one open to free discourse. The college environment is one of exploring ideas, but also in a context of mutual respect for your peers and instructors. If a pattern of disrespect develops the instructor reserves the right to discuss appropriate behavioral expectations with individuals who may not fully understand this responsibility. At no time will a hostile or condescending classroom environment or discussion be permitted.

HELPFUL HINTS FOR SUCCESS:

1. If you are having trouble, and you fear you will not achieve an adequate grade, Email me EARLY, get help, and do so regularly throughout the term. That will give you time to learn in an authentic way (which is the goal of a college education). I will gladly help in any way that I am able. If you need additional assistance, set up a meeting or send your questions to me via email.
2. Keep up-to-date with all reading and other assignments.
3. Keep a schedule of when assignments are due and do not put off getting them done.
4. Keep up with the reading assignments. Studying is not the same as reading. Read course materials. Don't put studying off to the night before an exam. Your brain needs time to absorb and retain the abundance of information presented in this class.
5. Learn how you learn. Every person learns in different ways. Find out what works best for you and use the method to your advantage. I highly recommend forming study groups!!! Also, create mock test questions, use concept maps, make note outlines, and rewrite your notes to organize complex information and learn new terminology.

Library: The LBCC Library is the main library on campus and offers students many helpful resources. Please see <http://library.linnbenton.edu/home> for more information.

Tutoring / Writing Center: LBCC has free tutoring services for a variety of academic disciplines in the Learning Center (2nd floor of Willamette Hall, <https://www.linnbenton.edu/learning-center>). You can find information about tutoring services at <https://www.linnbenton.edu/tutoring-center>.

Security and Emergency Awareness: Campus security can be reached at 541-917-4440. For more information and for what to do in the event of an emergency at LBCC please see <https://www.linnbenton.edu/public-safety>.

Tentative Schedule, BI 102 CRN 20662

Dr. James Looney
looneyj@linnbenton.edu

	Topic, Reading References are from the online openstax resource	Lab Topic
Week 1 Sept. 27 - Oct. 3	Course Introduction & Cells and Cell Membranes Chapter (Ch) 1 Ch 3	Lab 1: Cells & Osmosis
Week 2 Oct. 4 - Oct. 10	Macromolecules; Enzymes Ch 2	Lab 2: Enzymes - Catalase
Week 3 Oct. 11- Oct. 17	Photosynthesis & Cell Respiration Ch 5 Ch 4.1-4.5	Lab 3: Photosynthesis
Week 4 Oct. 18 - Oct. 24	Exam 1 (date to be determined) Cell Division & Genetics Ch 6.1 – 6.3, Ch 7.2 – 7.3	Lab 4: Mitosis and Meiosis
Week 5 Oct. 25 - Oct. 31	Genetics and Inheritance Ch 8.1 – 8.3, Ch 7.3	Lab 5: Plant Genetics
Week 6 Nov. 1 - Nov. 7	DNA, Genetic Code, & Making Proteins Ch 9.1, 9.3 – 9.5	Lab 6: Human Genetics
Week 7 Nov. 8 - Nov. 14	Biotechnology Ch 10.1 – 10.3	Lab 7: DNA Gel Electrophoresis
Week 8 Nov. 15- Nov. 21	Exam 2 (date to be determined) Darwin & Evolution Ch 11.1, 11.3	Lab 8 DNA technology
Week 9 Nov. 22 - Nov. 28	How Populations Evolve Ch 11.2	Lab 9: Population Genetics
Week 10 Nov. 29- Dec. 5	Evolution of New Species Ch 11.4	Lab 10: Natural Selection
Week 11 Dec. 6- Dec. 10 Finals	Final Exam Time to be determined	

1. View Moodle on a regular basis. Zoom links will be posted on Moodle.
2. Virtual class will be held on Monday at 10:00-11:50 am beginning on Sept. 27. All class power points and class recordings will be posted on Moodle.
3. Grading: All points earned on assignments, quizzes, and tests are of equal value.
4. There will be weekly quizzes (posted on Moodle), two Tests and a Final Exam which covers the whole term. Quizzes cover the material we cover each week.
5. Labs:

Labs will be on Wednesday at 10:00 am at LBCC Room WOH 205.

You will need to purchase the **General Biology 102 Course Packet** from the LBCC bookstore, which contains the lab protocols, prelabs, and the lab assignments.

Each lab has a **Prelab** which is due the beginning of the lab.

You must attend 7 out of 10 labs and complete the lab assignments in order to get credit for the course. At this time, all labs will be at LBCC. If this changes, and if you have extenuating circumstances for missing labs, I will try to work out appropriate accommodations for you.