Biology 102 Syllabus (CRN 34374)

Instructor Information and Availability

Instructor: Erin Chamberlain
Email: chambee@linnbenton.edu I will respond within 24 hours- on the weekends it may take longer.
Class Time: Thursdays 12:00-1:50 on Zoom (link will be posted on class Moodle site)
Office Hours: Tuesdays: 2:30-3:30 and Thursdays 10:00-11:00 See Moodle for Office Hours Zoom link

- If these times do not work for you please email and I am happy to work with you to find a time to meet.

A note about COVID-19 and this term:

- I understand that taking courses online is challenging for many of you especially during a worldwide health crisis. I will be extremely flexible and willing to help you in any way I can. I want ALL students to succeed in this course!
- The college has an amazing Covid 19 page with Covid information, updates, answers to all of your FAQs and links to resources (such as how to access basic needs resources, such as childcare, food and rent if you need them).
- If you do not have access to a computer or internet access there are options: See Student FAQs under Staying Successful in your Classes.
- We will have one required meeting each week and course materials and assignment submission will be through Moodle.

Course Materials

Required:

- ***Concepts of Biology***- OpenStax textbook. Available free online at: Concepts of Biology Textbook or for purchase at the bookstore.
- **Moodle.** This is our online class hub: you will find everything you need here: grades, assignments, zoom links etc.
- **Access to Google Suite** (docs, slides, and sheets—available with LBCC email)
- **Zoom accoun**t through LBCC. Register at https://linnbenton.zoom.us/ using your LBCC email and password.

Recommended:

- **Moodle app** for your phone.

Course Description

This course is an introductory course to Biology with emphasis on cell processes, genetics and evolution. It is designed for non-science majors or undecided majors. It is an opportunity to begin to explore, learn about and appreciate our diverse and beautiful living world and how these processes are a part of our day to day lives.

Student Learning 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

Class Goals

1. Practice thinking like a scientist: asking questions and using evidence based reasoning

2. Build confidence in ability to learn and do science
3. Connect learning in biology to life outside of the classroom
4. Create a sense of belonging for all students

Class Policies

Behavior and Expectations

Students are most successful when they ask questions, actively participate in class, and complete assignments. The more effort that you as the student puts in the more that you will get out of this class- Biology is a wonderfully interesting subject and I hope you can leave here with the knowledge and critical thinking skills to look at the world around you a bit differently. As an instructor I am here to support you so please contact me or come to office hours with any questions/concerns you may have.

Academic Integrity

Make sure the work you turn in is your work- though you certainly can work with other students it is expected that you turn in your own work. Any cheating, plagiarism, etc., may result in a zero and possible recommendation to the administration for further consequences. You are held accountable to the Student Code of Conduct, which outlines expectations pertaining to academic honesty (including cheating and plagiarism), classroom conduct, and general conduct.

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 discussion be permitted.

Grading (subject to change):

Module Guides:	50 pts	Post Quizzes	100 pts
Pre-Quizzes	50 pts	Application Questions	100 pts
Road Checks	50 pts	Final Exam:	50 pts
Labs:	100 pts	**Total Points:**	**500 pts**

Final Grade Breakdown

Letter Grade	Percentage
A	90-100%
B	80-89%
C	70-79%
D	60-69%
F	0-59%

Class Organization:

The class will be organized into modules based on the concepts presented each week. These will be highly structured to provide the opportunity to actively think and practice the topics. A list of learning objectives will be provided for each module in the module guide and each week will follow a regular routine with consistent due dates. Expect this class to take up to 10 hours a week to be successful. Below is a brief description of

each part of the class- a more complete description with learning outcomes, expectations (rubrics), points, and due dates will be posted on Moodle for each assignment

Module Topics List

Week	Module
1	What does it mean to be alive? Intro to Cells and Biomolecules
2	Transport Across a Cell Membrane
3	Biochemical reactions Enzymes
4	Cell Energy: Photosynthesis and Cellular Respiration
5	Intro to the Human Genome Cell Division
6	Genetics: Patterns of Inheritance
7	DNA Structure and Replication
8	Protein Synthesis: From a Gene to a Trait
9	How do Species Change Over TIme?: Intro to Natural Selection
10	How are New Species? Formed: Speciation
Finals Week	Final

Module Guides:

Each week you will watch short videos and/or complete a reading assignment. **Take notes while you watch or read, just like you would during an in-class lecture using the provided module guide.** There will be opportunities to practice and think about the concepts embedded in the videos. Please pause the video and take the time to actively write or draw and engage with the material at these times. These Module Guides will be due each week prior to our class meetings.

Pre-Quiz and Post Quiz questions:

Pre-Quiz: Each week after you complete the module guide you will take the pre-quiz based on the learning objectives for the current module. They are assigned to help practice new topics and help you check in with

what you understand and what topics you need to work on filling gaps in understanding. The pre-quiz will have unlimited time, be graded by completion and will need to be completed prior to the scheduled class time.

Post Quiz: At the end of each module you will take the post-quiz. Assessments are important opportunities to practice and assess skills and knowledge about the module learning objectives you are expected to understand. Each assessment will be 80% material from the current week and 20% review from previous weeks. These post quizzes will be made up of multiple choice questions and will be timed.

Road Checks:

After each class meeting there will be an assigned road check to help reflect on the material covered during that week. These reflections are important in the learning process by checking in on what you have learned and what you still have questions about. The link to this form will be shared and completed during the last 5-10 minutes of our class meeting.

Module Activities (aka Labs):

These online module activities are a critical component for the learning processes in any science class. They provide an active learning experience requiring students to participate in thinking like a scientist . This is a lab class and you must complete 60% of the module activities to pass this class. Each module activity will be graded using the rubric described in Moodle.

Class Zoom Session

We will have one required class meeting each week on Zoom. You will be expected to have already gone over the videos/reading and completed the module guide and pre-quiz before class. During class we will actively practice the material, going over the module guide, answering questions, completing activities in small groups, and working on your weekly application question. At the end of class you will be given the link to your road check form to complete.

Application Questions

Each week an application question will be introduced during the class meeting. These questions will be higher level thinking questions allowing you to go beyond memorization and move towards a deeper understanding of the material. Examples of question types might include: contrasting and comparing important concepts, analyzing and explaining topics, and applying concepts to new scenarios. During the class meeting you will have the opportunity to discuss these questions in breakout groups and then you will submit your answer individually through Moodle. You will get a score of either 10, 6, or 3 points to start and can revise your answers directly on Moodle for up to 8 points. The revision due date will be posted one week after it is graded. This gives each of you the opportunity to *make mistakes* and *confront confusions,* an important part of learning. You can directly address misconceptions and get points for learning.

Final Exam

The final exam will be comprehensive. Your learning objectives, module guides, post quizzes, and application questions will be excellent resources for studying for these exams. The final will be composed of multiple choice questions and timed.

Late Work

Week 1 will have some flexibility to allow you to have time to learn the technology and the consistent weekly due dates. Starting Week 2 the assignments will have due dates on Moodle. Late assignments may be accepted if I am contacted in advance of the due date and we will work together to create a new due date. Due dates are important in helping students be successful and not fall behind.

Incomplete Grades

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 the minority of coursework to complete, and has scored a C or better on work that has been submitted.

College Policies

Disability and Access Statement

You should meet with your instructor during the first week of class if:
1. You have a documented disability and need accommodations.
2. Your instructor needs to know medical information about you.
3. You need special arrangements in the event of an emergency.

If you have documented your disability, remember that you must make your request for accommodations through the Center for Accessibility Resources Online Services web page every term in order to receive accommodations. If you believe you may need accommodations but are not yet registered with CFAR, please visit the CFAR website at www.linnbenton.edu/cfar for steps on how to apply for services or call 541-917-4789.

Statement of Inclusion

To promote academic excellence and learning environments that encourage multiple perspectives and the free exchange of ideas, all courses at LBCC will provide students the opportunity to interact with values, opinions, and/or beliefs different than their own in safe, positive and nurturing learning environments. LBCC is committed to producing culturally literate individuals capable of interacting, collaborating and problem-solving in an ever-changing community and diverse workforce.

Changes to the Syllabus

I reserve the right to change the contents of this syllabus due to unforeseen circumstances. You will be given notice of relevant changes in class, through a Moodle Announcement, or through LBCC e-mail.

Weekly Schedule:

This is an example of how you can manage your time for this online class. Keep in mind that to be successful you will need to spend up to 10 hours a week completing each module. I didn't fill in the weekend but of course you can use this time to finish up the previous module and begin the next module. I highly recommend you use this template to create your own schedule that works best for you and stick to it each week!

	Task to be completed	Weekly Due Dates/Times

Monday	● Read/watch videos ● Actively take notes using the module guide	
Tuesday	● Finish and submit out the module guide on videos/reading ● Complete the Pre Quiz ● Attend Class Session ● Complete Road Check	
Wednesday	● Complete Module Activity Assignment	
Thursday	● Work on Application questions (current week and previous week if needed) ● Study for Post- Quiz	12:00 pm ● Module Guide ● Pre Quiz Completed during Class ● Road Check
Friday	● Take Post Quiz ● Submit Application Question	
Saturday		
Sunday		11:59 pm ● Module Activity ● Application Question ● Post Quiz ● Resubmit Application question (if applicable)