Biology 102 Syllabus (CRN 40596 and 40206)

## Instructor Information and Availability

Instructor: Erin Chamberlain

Email: [chambee@linnbenton.edu](mailto:chambee@linnbenton.edu) I will respond within 24 hour- on the weekends it may take longer..

Zoom Study Sessions/Office Hours: Tuesdays 10-11 pm or Thursdays 2:00-3:00 (Live study sessions/help on Zoom- link will be posted in Moodle)

## A note about COVID-19, the Coronavirus and this term:

* I understand that many of you have not taken an online course. 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 [FAQ](https://www.linnbenton.edu/faculty-and-staff/college-services/public-safety-emergency-planning-ehs/covid19/faq-students.php) page about how the term will work (and how to access basic needs resources, such as food and rent if you need them).
* If you do not have access to a computer, call the LBCC library at 541-917-4630. If you do not have internet access there are lots of [options](https://www.linnbenton.edu/faculty-and-staff/college-services/public-safety-emergency-planning-ehs/covid19/faq-students.php).
* The course will be conducted through Moodle, but there will be options to study and work together with myself and other students online.
* All of my course materials will be posted on Moodle, and you will turn in assignments through Moodle.
* While the course will mainly be taught through Moodle, you will have the option to use Zoom to connect with me and other students. I will host at least two OPTIONAL Zoom sessions a week where we can discuss topics, ask and answer each others' questions, work on class and lab activities, and just generally check in on each other's well-being. I know not everyone will be able to participate, but I hope many of you will (parents--OK if you have kids at home, I do, too)!

## Course Materials

Required:

* ***Concepts of Biology***- OpenStax textbook. Available free online at: [Concepts of Biology Textbook](https://openstax.org/details/books/concepts-biology) or for purchase at the bookstore.
* **Moodle.** This is our online class hub: you will check grades, review syllabus and powerpoints, carry on discussions with your instructor and classmates, take quizzes and submit assignments.
* **Access to Google Suite** (docs, slides, and sheets—available with LBCC email)

Recommended:

* **Zoom accoun**t through LBCC. Register at <https://linnbenton.zoom.us/> using your LBCC email and password.
* **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

**Classroom Goals**

1. Practice thinking like a scientist: asking questions, 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 study sessions 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](https://www.linnbenton.edu/current-students/administration-information/policies/students-rights-responsibilities-and-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):

*Forum Posts/Responses:* 72 pts

Practice Questions: 45 pts

*Module Assessments:* 225 pts

*Final Exam:* 100 pts

*Labs:* 108pts

**Total Points: 550 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 each week. A task checklist and list of learning objectives will be provided for each module 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.

### Recorded Lectures,Videos, and Readings

Each week you will watch short videos, view a narrated powerpoint, and/or complete a reading assignment. **Take notes while you watch or read, just like you would during an in-class lecture.** There will be opportunities to practice and think about the concepts embedded in the videos and powerpoints. Please pause the video and take the time to actively write or draw and engage with the material at these times.

### Practice Questions:

Each week you will be assigned a reading, video or combination of both to introduce the new topic followed by recorded lectures. Practice questions are designed to be answered after completing these introductions to new concepts. 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. These will have unlimited time to complete with 2 attempts..

### Discussion Posts

A forum post and 2 responses will be assigned each week and is due on Moodle. It will be an opportunity to practice and explore concepts and think about them at higher levels of thinking. This will be posted to your assigned group so will also provide the opportunity to interact and discuss with other students during the response portion of the assignment.

### Module Assessments

Assessments are important opportunities to practice and assess skills and knowledge you are expected to understand for this class. Each assessment will be 80% new material and 20% review from previous weeks. The learning objectives you will be quizzed on will be posted on each module checklist and will include assessment of the lab. These will be a combination of multiple choice and short answers and will have a time limit with only one attempt.

### Final

The final exam is comprehensive and will be taken in the last week of class.

### Labs

Labs 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 labs to pass this class. Each lab is worth 12 points and will be graded using the rubric described on Moodle. I will then post a short video going over the lab so you can check in and make sure you are on the right track before taking the module assessment.

### Study Sessions (optional)

Two live study sessions will be available for drop in help and group work. The zoom link will be provided on Moodle and you are welcome to join at any time during the posted times. The Tuesday session will be more focused on the reading and lecture- we can go over any questions you have. The Thursday session will be more focused on the lab but you can still come with questions about the reading or lecture. You are welcome to Zoom in with questions or to work with other students on the lab in breakout groups.

### Late Work

Discussion Posts: Have strict due dates and will not be accepted late. This is important because these posts must be available for others to respond to.

Practice Questions, Labs, Module Assessments: Week 1 will have some flexibility to allow you to have time to learn the technology and figure out your schedules. Starting Week 2 the assignments will have strict due dates on Moodle. Late assignments may be accepted if I am contacted in advance of the due date (not after it is due!). 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.

### Module Topics List

|  |  |
| --- | --- |
| Week | Module |
| 1 | What does it mean to be alive?  Intro to Cells and Biomolecules |
| 2 | Biochemical reactions  Enzymes |
| 3 | Photosynthesis  Cellular Respiration |
| 4 | Intro to the Human Genome  Mitosis and Meiosis |
| 5 | Genetics: Patterns of Inheritance |
| 6 | DNA Structure and Replication |
| 7 | Protein Synthesis |
| 8 | CRISPR  Intro to Natural Selection |
| 9 | Natural Selection and Speciation |
| 10 | Final |

**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 create your own schedule that works best for you and stick to it each week!

|  |  |  |
| --- | --- | --- |
|  | Task to be completed | Due by 11:59 pm |
| Monday | **Prepare:**   * Read/watch videos * Actively take notes |  |
| Tuesday | **Prepare:**   * Finish taking notes on videos/reading * Answer Practice Questions on Moodle * Attend Study Session on Zoom (Optional) |  |
| Wednesday | **Engage:**   * Begin Lab Assignment * Post on the Discussion Board |  |
| Thursday | **Engage:**   * Finish Lab Assignment * Attend Study Session on Zoom (Optional) | * Practice Questions * Lab * Initial Discussion Board Post |
| Friday | **Engage:**   * Watch Lab Review Video * Study For Module Assessment (Ideas on how to study posted on Moodle) * Respond to Forum Posts | Module Assessment will open Friday morning and be available through Sunday at midnight. |
| Saturday |  |  |
| Sunday |  | * 2 Responses on the Discussion Board * Module Assessment |