BI 221—PRINCIPLES OF BIOLOGY I
LBCC, Winter 2020

Instructor: Gail Miriam Moraru, Ph.D.
Office: WOH 219
Email: morarug@linnbenton.edu

Office Hours: Mondays and Thursdays 11 a.m.-12 p.m.
Zoom link for office hours (same all term), passcode: biology
You may also contact me via email to schedule an appointment

Schedule:
Lecture: lectures will be recorded and can be found on our Moodle page

Labs: Your lab time will be based on your CRN:
CRN 34744: Tue 10:30am-12:20pm
CRN 34745: Tue 1:00-2:50pm
CRN 34784: Fri 10:30am-12:20pm
CRN 34785: Fri 1:00-2:50pm
each CRN will have 12 registered students, 6 will have lab in WOH 205 and 6 in WOH 218

Prerequisite: The prerequisite for BI 221 is a term of college chemistry (CH 112, 121, 150, or 221). Classes may be taken concurrently.

Required materials:
*access to Moodle (recorded lectures, weekly homeworks, quizzes, exams, and labs)
**OpenStax Biology* Free Online book. Or any majors biology book would work (such as Campbell Biology or Raven Biology)

Assessments: (subject to change)

Labs (9@8 pts/lab)	=	72 points
Online Homework (6 pts/week)	=	60 points
Weekly Forum	=	10 points
6 Quizzes@ 10 points each	=	60 points
2 Exams @ 75 points each	=	150 points
Final Comprehensive exam	=	100 points
Total	**=**	**452 points**

Course Learning Outcomes:
- Describe the building blocks and synthesis of the major classes of biomolecules and the contribution of their three-dimensional structure to their functions

- ➢ Describe and relate anabolic (photosynthesis) and catabolic (respiration and fermentation) pathways emphasizing the transformation of energy and matter..
- ➢ Describe how cells store, use, and transmit genomic information.
- ➢ Differentiate the various cellular processes that can affect gene expression.

Grading Scheme:

90 - 100%	A
80 – 89%	B
70 – 79%	C
60 – 69%	D
59.9 % and below	F

Policies

Attendance: You are college students, and a part of your college experience is determining how you learn best. This course will cover a lot of ground very quickly and the exams will draw from all class material: readings, lectures, and classroom discussion. Participating in forum discussions is a good way to get thinking about the material and is part of your grade as well.
Labs: All labs are two hours long and you are expected to be on time and remain in lab the entire time until all your work is done. You must attend and participate in the lab to receive credit for the lab. There are **NO** make ups for missed labs. Lab documents will be available in Moodle and will be filled out digitally during lab or after lab, and submitted via Moodle.
Missing Lab: You must attend and complete 7 of the 10 labs in order to pass the class.

Quizzes
There will be six 10 point quizzes given throughout the term. All quizzes will be administered through Moodle.

Exams
There are two exams and one final cumulative exam. The exams will be on Friday 10/23/20 and 11/20/20 and the final on Monday 12/7/20. All exams will be taken remotely, on zoom with the video camera on. During the term you will sign up for a timeslot in which you will take the exam.

Online Homework: This class has an online homework requirement. You will be able to access the assignments through the course Moodle site.

Pre-Lab Assignment
Each Monday I will give you *four* questions that pertain to that week's lab. At the beginning of each lab, the questions will be graded in class, and then turned in. In order to receive credit you will need to be present and on time. Each pre-lab assignment will be worth two points.
Pre-lab assignments will not be accepted if you are late.

Cell Phones

Cell phones are NOT allowed in class. Please turn off your phone before class so it will not ring and disrupt the class. **Text messaging** is not allowed! I can tell when you are doing it and I will ask you to stop during class, possibly calling unwanted attention to you. Do not leave the class to use your cell phone; class is only 50 minutes long so you can check your messages after class. **Classroom etiquette**: Act like adults. Do not disrupt class. Respect others' desire to learn. I reserve the right to ask you to leave the classroom.

Late assignments/quizzes/labs are not accepted. Please turn in assignments and labs on time and fully complete. This means that your assignment needs to be ready on the due date.

Accommodations: 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 their instructor during the first week of class. If you believe you may need accommodations but are not yet registered with the Center for Accessibility Resources (CFAR), please visit the **CFAR Website** 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.

To that end, if a pattern of disrespect develops, I reserve 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.

Course Evaluations: Student feedback is important to improve this course and to help the instructor know how to change teaching methods. Changes will and have actually occurred as a result of student feedback. Student evaluations of teaching (SET) will be done electronically and will be active weeks 5 - 9 of the term. The system is anonymous, and can be done from any electronic device. You will receive email notifications for each of your classes, please fill these surveys out in a timely manner – it takes approximately 10 minutes per each class and is a highly valued resource for guiding the progress and evolution of the course. Thank you in advance for your input!

Academic dishonesty: Please note that I take issues of academic and personal honesty very seriously. You are to treat assessments (quizzes and exams) like you would in an in-person class: *no notes*. Academic misconduct includes using ANY electronic device during exams, quizzes or to answer in lab summary questions. Study as you would for an assessment in-person. **Any discovery of academic dishonesty will result in a grade of zero for the assessment and notification to the Dean** of our Division for further consequences.

"Today I am going to give you two examinations: one in trigonometry and one in honesty. I hope you will pass them both, but if you must fail one, let it be trigonometry."

-- Madison Sarratt (Vanderbilt University)

Withdrawing from Classes (Dropping a Class After the Refund Deadline)
To drop a class or withdraw from school, you may turn in a Schedule Change form at the Registration Counter or at a community center 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 the last day of week 7.

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

Title IX: If you or another student are the victim of any form of sexual misconduct (including dating/domestic violence, stalking, sexual harassment) or any form of gender discrimination, LBCC can assist you. You can report a violation of our sexual misconduct policy directly to our Title IX Coordinator. You may also report the issue to a faculty member who is required to notify the Coordinator. You may additionally (or instead) make an appointment to speak confidentially to our Advising and Career Center by calling 541-917-4780.

Campus Police/Emergency Resources: You may review emergency services and resources at the LBCC Public Safety website. Campus Safety can be reached using the “code 2” button on any campus phone or by dialing x411 on campus or 541-917-4440 off campus. Dial 911 for off campus emergencies.

Basic Needs: Any student who has difficulty affording groceries or food, or who lacks a safe and stable place to live, is urged to contact a Student Resource Navigator in the Single Stop Office (T-112): Amanda Stanley, stanlea@linnbenton.edu, 541-917-4877. The navigator can connect students to resources.

I reserve the right to change the contents of this syllabus and schedule due to unforeseen circumstances. You will be given notice of relevant changes in class, on your online syllabus, or via email.

BI 221 Lecture Schedule and Readings Assignments

winter 2020 (Subject to change)

Gail Miriam Moraru, morarug@linnbenton.edu

Week	Monday	Tue or Fri (LAB)	Wednesday	Friday
1 1/4-1/10	**Topic 1: Introduction, Scientific Method** Ch 1	Lab 1: **Atoms and Water**	**Topic 2: Atoms, Chemical Bonds, Water** Ch 2	**Topic 3: Macromolecules** Ch 3
2 1/11-1/17	**Topic 3 cont.**	Lab 2: **Macromolecules** **QUIZ 1**	**Topic 3 cont.**	**Topic 4: Cell Structure and Function** Ch 4
3 1/18-1/24	**no class** **Martin Luther King Jr. day**	Lab 3: **Exploring Cells** **QUIZ 2**	**Topic 5: Cell Membranes and Transport** Ch 5	**Topic 5 cont.**
4 1/25-1/31	**Topic 6: Energy** **Topic 7: Cellular Respiration** Ch 6 and Ch 7	Lab 4: **Cellular Respiration**	**Topic 7 cont.**	**EXAM #1** **due Monday night**
5 2/1-2/7	**Topic 8: Photosynthesis** Ch 8	Lab 5: **Molecular Cloning part 1**	**Topic 8 cont.**	**Topic 8 cont.**
6 2/8-2/14	**Topic 9: Cell Division - Mitosis** Ch 10	Lab 6: **Molecular Cloning part 2** **QUIZ 3**	**Topic 10: Meiosis** Ch 11	**Topic 10 cont.**
7 2/15-2/21	**no class** **Presidents day**	Lab 7: **DNA Fingerprinting & PCR part 1** **QUIZ 4**	**Topic 11: Genetic Inheritance** Ch 12	**Topic 11 cont.**
8 2/22-2/28	**Topic 12: Chromosomes and Linkage** Ch 13	Lab 8: **DNA Fingerprinting & PCR part 2** **QUIZ 5**	**Topic 12 cont.**	**EXAM #2** **due Monday night**
9 3/1-3/7	**Topic 13: DNA Structure & Function** Ch 14	Lab 9: **Bioinformatics (remote only)**	**Topic 14: Making Proteins** Ch 15	
10 3/8-3/14	**Topic 14 cont.**	**QUIZ 6**	**Topic 15: Biotechnology** Ch 17	**Topic 15 cont.**
11 finals	**FINAL EXAM** **Monday, March 15 time TBA** Comprehensive final			