

Cell Biology for Health Occupations (BI 112) Syllabus

General Information

Instructor Information and Availability

Instructor name: Dr. Pamela Beilby
E-mail address: beilbyp@linnbenton.edu
Office hours: T/Th, 12-4 p.m., by appointment only
Office number: Zoom

Course Information

CRN: 41251
Scheduled time/days: online
Number of credits: 4
Classroom(s): the Internet

Course Materials

Required:

- BI 112 Cell Biology for Health Occupations Study Packet
- Access to Moodle

Course Description

Cell Biology for Health Occupations introduces the Health Occupations student to the generalized human cell, including its structure, function, basic genetics and reproduction. The chemical and physical processes that affect the cell and its components will be examined throughout the course. This course covers the basic principles and vocabulary to prepare students for the study of human organ systems that occurs in Human Anatomy and Physiology BI 231, BI 232, and BI 233.

Student Learning Outcomes

Upon successful completion of the course, students will be able to:

1. Describe homeostasis, and the importance and function of homeostatic mechanisms in the body.
2. Relate the chemical basis of cell function to life processes.
3. Express how changes in the genome can affect the phenotype or traits within a population.
4. Explain the patterns of inheritance.
5. Explain selected key cell processes.
6. Distinguish between the groups of biomolecules.

Class Policies

Behavior and Expectations

You are held accountable to the [Students' Rights, Responsibilities, and Conduct](https://www.linnbenton.edu/current-students/administration-information/policies/students-rights-responsibilities-and-conduct.php) (<https://www.linnbenton.edu/current-students/administration-information/policies/students-rights-responsibilities-and-conduct.php>), which outlines expectations pertaining to academic honesty (including cheating and plagiarism), classroom conduct, and general conduct.

Use of cell phones

Phones are expected to be silenced and put away during class. Ringers should be off at all times, unless you have instructor permission. Text messaging and using your cell phone as a calculator is not permitted. Calculators will be provided by instructor if needed.

Grading

Assignments	90 points
Exams	160 points (40 points per exam)
Final Exam	100 points
TOTAL	350 points

Final Grade Calculation:

- A = 90-100% ($\geq 315/350$ points)
- B = 80-89% (280-314)
- C = 70-79% (245-279)
- D = 60-69% (210-244)
- F = 0-59% ($< 210/350$)

NOTE: The above distribution of points is an approximate and as with the course schedule may be subject to minor adjustment. However, even in the event of minor adjustment, grades will be determined as a weight that will remain consistent with the above agreement. Meaning that examinations will be ~75% of your grade & other work will comprise ~25% of your ultimate grade to be consistent with department standard.

YOU are responsible for the grade you earn in this course. Your final grade is based on the points you earn throughout the course, not how close you came to the points needed for your hoped-for grade. For example, if you earn 244 points for the term, you have earned a D. For weekly assignments, quizzes, labs, etc., please do **NOT** wait until the last minute to complete them. Issues with your computer or your internet connection are not acceptable excuses for lack of completion. Any timed activities such as quizzes and exams, once begun, must be completed in the time allotted. With the exception of Week 1, most assignments for the following week will be available starting Sunday.

Late work will not be accepted.

Weekly homework assignments: Weekly homework assignments are due **every Friday by 11:55 p.m.**, unless stated otherwise in lecture. Questions/activities are designed to help you in your studying and preparation for exams. Late work will not be accepted. Homework assignments will either come from your course packet, or be posted on Moodle – check the start of each lecture to see what assignments are due. They should be completed and emailed to me at the email address listed above – NOT submitted through Moodle. When you email an assignment to me, I will respond to your email that I received the assignment and could open it. If I **DO NOT** respond to your email, it means that I **DID NOT** receive your assignment and **it is your responsibility** to send it again or find another means of turning the assignment in on time.

Exams: There will be four exams during the course of the term and one comprehensive final exam. Exam dates are listed in the class schedule (last page of the syllabus). If I am notified in advance that you cannot make it to an exam due to an unforeseen emergency, you will be permitted to take the exam later that week. Exams will be administered on Moodle and will be timed. They will be open the entire day of the exam; however, once you begin the exam, you must complete it in the time allotted. You may NOT stop and start the exam. Please note that this term is on a compressed schedule and the final exam will take place during Week 10 as shown in the syllabus.

Study skills: You should be reading, practicing, critically thinking about what you learn, discussing the information with your classmates and friends, exploring the material with outside sources, and maybe even drawing, writing, singing, acting out, dancing, or any other means of helping yourself understand and remember the material. Not every study method works for everyone. If you need help with study methods, please come speak with me. I strongly encourage students to form **study groups (online)**. Almost all students who participate in study groups find the experience beneficial. Use your group to evaluate your learning prior to an exam. It is important for you to find out what you are clear on and what you don't understand before a quiz or exam: the study group allows you to do this in a non-threatening environment. If you are able to distribute your effort out over the entire term, rather than having to "cram" for exams you will learn better. You will find that every topic is connected to those that precede and follow. If you study and understand each topic as you go, you will have a firmer foundation for learning what comes next. More importantly, studying regularly helps you learn better.

Attendance: As a student it is your responsibility to keep up with assignments and the lectures. I will not chase after each individual student to remind them to turn in assignments or study for exams. I will however provide students with ample and repeated warning regarding upcoming due dates and exam dates. Make sure you listen to the lectures and take good notes. It is your responsibility to keep track of the schedule and to stay up to date with assignments and reading. To facilitate this goal a tentative schedule of topics, reading material and exam dates has been included on the last page of this syllabus. We move very quickly through material and it is critical that you keep up.

Incomplete grades (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

grades are assigned only if the student has 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.

Late Assignments are not accepted. Please turn in assignments on time and complete. No work may be made up after it is returned to the class.

Academic dishonesty: Please note that I take issues of academic and personal honesty very seriously. Any discovery of academic dishonesty will result in a grade of zero for the assignment and possible recommendation to the administration for further consequences

Moodle: Moodle will be used extensively in this course as a means for communication and facilitation of success in this course. Throughout the term lecture materials, supplemental materials and assignments will be posted to the Moodle site. As such, it is the responsibility of the student to establish their access to the Moodle site and update their email address on the site to ensure they receive any correspondence from me or other students.

College Policies

LBCC Email and Course Communications

You are responsible for all communications sent via Moodle and to your LBCC email account. You are required to use your LBCC provided email account for all email communications at the College. You may access your LBCC student email account through Student Email and your Moodle account through Moodle.

Disability and Access Statement

LBCC is committed to inclusiveness and equal access to higher education. If you have approved accommodations through the Center for Accessibility Resources (CFAR) and would like to use your accommodations in this class, please talk to your instructor as soon as possible to discuss your needs. If you believe you may need accommodation but are not yet registered with CFAR, please visit the CFAR website at www.linnbenton.edu/cfar or steps on how to apply for services or call 541-917-4789.

Basic Needs Statement

Any student who has difficulty affording groceries or accessing sufficient food to eat every day, or who lacks a safe and stable place to live, and believes this may affect their performance in the course, is urged to contact the Roadrunner Resource Center for support (resources@linnbenton.edu , or visit us on the web www.linnbenton.edu/RRC under Student Support for Current Students). Our office can help students get connected to resources to help.

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.

Title IX Reporting Policy

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 (https://linnbenton-advocate.symplicity.com/public_report/index.php/pid115807?) 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, or you may make an appointment to speak confidentially to our Advising and Career Center by calling 541-917-4780.

Public Safety/Campus Security/Emergency Resources:

In an emergency, call 911. Also, call LBCC Campus Security/Public Safety at 541-926-6855 and 541-917-4440.

From any LBCC phone, you may alternatively dial extension 411 or 4440. LBCC has a public safety app (<http://lbccpublicsafety.mobapp.at/landing/Desktop#.XJvjVC3MzOQ>) available for free. We encourage people to download it to their cell phones. Public Safety also is the home for LBCC's Lost & Found. They provide escorts for safety when needed. Visit them to learn more.

Campus Resources

Learning and Career Center

The Learning Center provides academic support and a comfortable place to study, with access to computers and printer. It is located on the second floor in Willamette Hall. It also provides free tutoring services for all classes.

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.

Class Schedule

Week	Tuesday	Thursday	Friday
1	Introduction Organizing principles Homeostasis	Matter, elements, atoms Energy levels Chemical bonding	HW 1
2	Units of measurement Chemical reactions Balancing equations	Chemical reactions Types of energy	HW 2
3	EXAM 1 21 April 2020 Properties of water	Solutes, pH, and buffers	HW 3
4	Biomolecules – an introduction	Carbohydrates	HW 4
5	EXAM 2 5 May 2020 Lipids	Nucleic acids Proteins	HW 5
6	Proteins Enzymes	Cell theory, structure, and membranes	HW 6
7	EXAM 3 19 May 2020 Organelles	Membrane transport Transport mechanisms	HW 7
8	Membrane potential Nucleotide, DNA, RNA review	DNA to protein	HW 8
9	EXAM 4 2 June 2020 Cell cycle Cellular reproduction	Genetics	HW 9
10	Inheritance	FINAL EXAM 11 June 2020	