# General Biology (BI102) Syllabus

### **General Information**

### **Instructor Information and Availability**

Instructor name: Pamela Beilby

E-mail address: beilbyp@linnbenton.edu

Office hours: Monday/Wednesday 4:30 – 5:30 pm, or by appointment

Office number: BC 201

#### **Course Information**

CRN: 30678

Scheduled time/days: 5:30 – 7:50 pm Monday/Wednesday

Number of credits: 4 Classroom(s): BC 207

#### **Course Materials**

#### Required:

- Textbook: Concepts of Biology (https://openstax.org/details/books/concepts-biology) This is an open educational resource and is available for free online.
- BI102 Lab Packet available for purchase at the bookstore
- Access to Moodle
- 3 scantron forms

# **Course Description**

This is an introductory biology course aimed at teaching and increasing student awareness and understanding of major biological topics: molecular and cellular biology, classical genetics, mutations, and the evolutionary process. The course is an opportunity to explore and learn how these processes are part of our daily lives. The number of topics and chapters covered will depend on how quickly we are able to move through the material throughout the term.

## **Student Learning Outcomes**

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

- 1. Distinguish between the groups of biomolecules.
- 2. Describe selected key cell processes.
- 3. Describe 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 Policies

### **Behavior and Expectations**

You are held accountable to the <u>Students' Rights</u>, <u>Responsibilities</u>, <u>and Conduct</u> (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.

### **Grading**

- Homework Assignments = 100 points (10 points each)
- Labs = 80 points (10 points each)
- Quizzes = 70 points (10 points each)
- Exams = 200 points (100 points each)
- Comprehensive Final Exam = 150 points

Total = 600 points

#### **Final Grade Calculation:**

- $A = 90-100\% (\geq 540/600 \text{ points})$
- B = 80-89% (480-539/600 points)
- C = 70-79% (420-479/600 points)
- D = 60-69% (360-419/600 points)
- F = 0-59% (< 360/600 points)

**NOTE:** Distribution of points is subject to minor changes.

**YOU** are responsible for the grade you earn in this course. Your final grade is based on the points you earn, not how close you came to the points needed for your hoped-for grade. For example, if you earn 419 points for the term, you have earned a D.

**Weekly homework assignments:** Weekly online homework assignments through Moodle are always due Sunday evening before 11:55 pm. Questions/activities are designed to help you in your studying and preparation for quizzes and exams. **Late work will not be accepted.** 

**Labs:** Labs are a critical component for the learning process in any science class. They provide hands-on experience requiring students to make critical thinking decisions that may influence the outcome of the lab. This is a lab course and you must attend 70% (6) of the labs to pass the course. Pre-lab assignments are to be turned in at the beginning of each lab. Labs are on Wednesdays and you must bring your lab manual with you. Each lab is worth 10 points and will be graded using the following rubric:

- Pre-lab: 2 points
- Lab: 4 points Understanding the objective and completing the lab. This will be done in class and be completed before the class is over.
- Lab Report: 4 points These questions will demonstrate your understanding of the lab. I will be looking for well-thought-out answers that show you understand the purpose of the lab. You may only turn this in if you have attended and completed the lab. It is due in class before you leave the lab.

**Quizzes:** Quizzes will be given throughout the term to assess how you are doing before we get to an exam. Quizzes will be given at the beginning of the class, so if you arrive late you have less time to complete them.

**Exams:** There will be two exams during the course of the term and one comprehensive final exam. Exam dates are listed in the class schedule. If I am notified in advance that you cannot make it to an exam due to an unforeseen emergency, you will be given a makeup exam, administered through the Learning and Career Center in BC 222. Note, however, that a makeup exam cannot be given once exams have been handed back. All exams are closed book and notes.

**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.

**Attendance:** I do not require attendance. However, 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 classroom discussions and activities is a good way to get thinking about the material and is part of your grade as well.

**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. Labs cannot be made up.

**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.

# **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 <a href="https://www.linnbenton.edu/cfar">www.linnbenton.edu/cfar</a> or 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.

# **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 BC 222. 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**

Weekly online homework assignment due Sunday at 11:55 pm!

Week	Readings	Monday	Wednesday
1	1.1-1.2	Introduction, scientific method	Quiz 1
	2.1-2.3	Chemistry, water,	Lab: Scientific Method and
	3.1-3.3	biomolecules, cells	Cells
2	3.4-3.6	Quiz 2 Cell membranes Diffusion/osmosis	Lab: Osmosis/Enzymes
		Enzymes	Lab. Osinosis/Litzymes
3	4.1-4.4	NO CLASS	Cellular energy
	5	LBCC closed	Lab: Photosynthesis
4	6.1-6.3	EXAM 1	Sexual reproduction
	7.1-7.3	Cell cycle and cell division	Lab: Mitosis and meiosis
5	8.1-8.3	Quiz 3	Genetics
		Patterns of inheritance	Lab: Plant Genetics
6	9.1-9.2	Quiz 4	DNA replication
		Genetics	Lab: Human Genetics
7	9.3-9.4	NO CLASS	EXAM 2
		LBCC closed	Making proteins -
			transcription/translation
8	10.1-10.3	Quiz 5	
	11.1	Biotechnology, Darwin	Lab: Electrophoresis
9	11.2	Quiz 6	
		Natural selection	Lab: Natural Selection
10	11.3-11.4	Quiz 7	Review
		Speciation	
Final		FINAL EXAM (16 Mar 2020)	
		5:30-7:20 pm	
		BC 207	