General Biology: BI 102

LBCC, Winter 2020 (CRN 30671)

Instructor: Trish Khuu
Office: WOH 220
Email: khuut@linnbenton.edu

Office Hours:

Mondays and Wednesdays (1:20-1:50pm) or upon request (Class or WOH 220)
You may also contact me via email to schedule an appointment

Schedule:

Lecture:	M: WOH 205 ……. 12:00 – 1:20 pm
Lecture:	W: WOH 205 …….. 12:00 – 1:20 pm
Lab:	F: WOH 205…….. 12:00 –1:50 pm

Introduction:

General Biology 102 is a course designed to help the learner discover the workings of the scientific process from a biological perspective. This course is designed for students at Linn-Benton Community College who are non-science majors. Students typically have little to no science background, yet are enrolled in this course to fulfill requirements needed for a degree and who desire to expand their knowledge and appreciation of the biological sciences. This course will fulfill your laboratory science distribution requirements at LBCC. This course focuses on processes of biology including understanding the importance of DNA, synthesis of other biological molecules, cell division, genetics, adaptation and evolution. Along with acquiring working knowledge of biological systems, a major goal of this course is for students to complete the course with an appreciation for, and enjoyment of, the day-to-day integration of biology into all aspects of their lives.

Recommended Prerequisite: MTH 060
BI 102 is taught as a discrete and separate course in biology. It is not necessary to have any other biology courses (BI 101 or BI 103) before taking this course.

Texts: (all Required)

- OpenStaxfreetextbook: Concepts of Biology, https://openstaxcollege.org/books

- LabPacketBI102 General Biology Laboratory Course Packet: LBCC Biology Department

Course Learning Outcomes:

- Distinguish between the groups of biomolecules
- Be able describe selected key cell processes
- Be able to describe the patterns of inheritance
- Express how changes in the genome can affect the phenotype or traits within a population
- Explain how natural selection drives evolution

Grading (subject to change):

Homework	= 40 (7.3%)
Class participation	= 60 (10.9%)
6 Quizzes@ 20 points each	= 120 (21.8%)
9 Labs @ 10 pts each	= 90 (14.5%)
3 exams @ 50 points each	= 150 (27.2%)
Final Comprehensive exam	= 100 (18.2%)
Total	= 560 points

Class participation:

Active student participation at all levels is strongly encouraged as it facilitates the learning process, which is both an individual and a collaborative effort. Participation includes reading the material prior to class and in-class discussions. Questions throughout class foster independent thinking, address ambiguities and provide insights to help with student comprehension and retention. You will be given 5 minutes at the beginning of the lecture day for questions about the previous lectures and reading material relevant to that day.

Quizzes:

As noted on the syllabus there will be 6 quizzes over reading and lecture material. It should be presumed unless your instructor tells you otherwise that the quiz will be over the reading, lecture and lab material covered in the previous class(es). The quizzes will be closed book and closed note. You will be given 10 minutes at the beginning of the lecture day for taking the quiz.

Labs:

Labs are a critical component for the learning processes in any science class. They provide hands-on experience requiring students to make critical thinking decisions that may influence the outcome of the lab. Students are also required to analyze and interpret data. Therefore, because it is imperative for students to come prepared each lab period, pre-laboratory assignments are to be turned in at the beginning of each lab. The pre-labs are usually the first one or two pages of each lab in the lab packet. ***Additionally you are required to attend at least 6 (60%) of lab sessions in order to pass the class.*** Each lab is worth 10 points. There are ten (10) labs in the term but you will only be graded on your 9 highest point total labs. You will be responsible for the material from all ten (10) labs on the exams.

CLASS POLICIES

Missed and late work: Late work (assignments and labs) will be accepted with a 20% point reduction for each day late. Missed assignments or labs cannot be made up. If you miss an exam or quiz you need to contact me as soon as possible to schedule a makeup time. No make-ups will be given after the quiz or exam is handed back. Only ONE missed test (quiz or exam) can be made up, though exceptions with proper documentation.

Cell Phones: CELL PHONES AND LAPTOPS 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***

Academic Misconduct: This will not be tolerated and includes any form of cheating. The student is encouraged to read the college catalog for further details. If a student is found to have cheated on an exam, after due process the resulting grade may be a zero on the exam or quiz. All group work should still be written in the student's own handwriting and language. You must turn in your own interpretation and work even if doing team work projects. Repeat violations of this policy will be referred to the Dean of Science, Engineering and Technology Division. Violations of academic honesty will be met with severe measures that may include failing the assessment, the course or expulsion from the college. Academic misconduct includes using ANY electronic devise during exams, quizzes or to answer in lab summary questions.

Incomplete Policy: An incomplete (IN) will only be issued when a student is unable to complete the last exam by the end of the term, and each incomplete grade will be accompanied by a signed contract specifying the conditions necessary to complete the course.

Withdrawing from Classes (Dropping a Class After the Refund Deadline): ***January 13, 2020 (in person).*** To drop a class or withdraw from school, you may turn in a Schedule Change form at the Registration Counter or at an 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 last day of week 7.

Special Accommodations and Disability Services: 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 the instructor during the first week of class. If you have not accessed services and think you may need them, please contact Disability Services, 917-4789.

Linn-Benton Community College is an equal opportunity educator and employer.

TENTATIVE SCHEDULE

WOH 205, Mon/Wed. 12:00-1:20pm; Fri. 12-1:50pm

Trish Khuu, Office: WOH 220

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	Monday and Wednesday (Lecture)	Friday (LAB)
Week 1	Course Introduction & Macromolecules Ch 1.2; Ch (2.2), 2.3	Lab 1 (1/10): Cells & Osmosis *Lab report due on the following Monday*
Week 2	Cells and Cell Membranes: Ch 3.2 – 3.6 *Quiz 1 (Wed., Jan. 15)*	Lab 2 (1/17): Enzymes *Prelab due on day of lab* *Lab report due on the following Monday*
Week 3	Enzymes, Photosynthesis & Cell Respiration Ch 4.1 – 4.2, Ch 5.1 *Quiz 2 (Wed., Jan. 22)*	**Jan 20: No Class MLK Day** Lab 3 (1/24): Photosynthesis *Prelab due on day of lab* *Lab report due on the following Monday*
Week 4	**Exam 1 (Wednesday, January 29)** Cell Division & Genetics Ch 6.2, Ch 7.1, 7.2	Lab 4 (1/31): Cell Division *Prelab due on day of lab* *Lab report due on the following Monday*
Week 5	Genetics Con't Ch 8.1 – 8.3, Ch 7.3 *Quiz 3 (Wed., Feb. 5)*	Lab 5 (2/7): Genetics *Prelab due on day of lab* *Lab report due on the following Monday*
Week 6	DNA, Genetic Code, & Making Proteins Ch 9.1, 9.4 *Quiz 4 (Wed., Feb. 12)*	Lab 6 (2/14): Inheritance of Height *Prelab due on day of lab* *Lab report due on the following Wednesday*
Week 7	**Exam 2 (Wednesday, February 19)** Darwin & Evolution Ch 11.1, 11.2 11.3	**Feb. 17: No Class President's Day** Lab 7 (2/21): DNA Gel Electrophoresis *Prelab due on day of lab* *Lab report due on the following Monday*
Week 8	Evolution of New Species Ch 11.4 *Quiz 5 (Wed., Feb. 26)*	Lab 8 (2/28): Natural Selection *Prelab due on day of lab* *Lab report due on the following Monday*
Week 9	**Exam 3 (Wednesday, March 4)** How Populations Evolve Ch 11.4	Lab 9 (3/6): TBD *Prelab due on day of lab* *Lab report due on day of Final exam*
Week 10	Biotechnology Ch 10.1 – 10.3 Review for Final *Quiz 6 (Wed., Mar. 11)*	Lab 9 (3/13): TBD *Prelab due on day of lab* *Lab report due on day of Final exam*
Week 11	Final Exam: Comprehensive WEDNESDAY, March 18, 1:00 - 2:50 PM, WOH 205	