

# General Biology: BI 102

## Fall 2019, CRN: 20663

**Instructor:** Warren Coffeen, Ph.D.

Office: WOH 221

Email: [coffeew@linnbenton.edu](mailto:coffeew@linnbenton.edu)

### **Office Hours: Tue 10-11, Wed 12:30-1:30**

You may also contact me via phone or email to schedule an appointment, or you can schedule an appointment through my instructor website:

[http://cf.linnbenton.edu/artcom/find\\_instr.cfm](http://cf.linnbenton.edu/artcom/find_instr.cfm)

### **Schedule:**

Lecture: **M:** WOH 205 ..... 10:30 – 11:50 am

Lecture: **W:** WOH 205..... 10:30 – 11:50 am

Lab: **F:** WOH 205 ..... 10:00 – 11:50 am

### **Grading (subject to change):**

8 Labs @ 6 pts each	= 48 points
Online Homework (~10%)	= 40 points
In class activities	= ~12 points
5 Quizzes@ 10 points each	= 50 points
3 exams @ 50 points each	= 150 points
Final Comprehensive exam	= 100 points
<b>Total</b>	<b>= ~400 points</b>

### **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.

### **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

**Quizzes:**

As noted on the schedule there will be 5 quizzes over reading and lecture material. It should be presumed unless your instructor tells you otherwise that the quiz will be over the reading and lecture material covered in the prior class(es). The quizzes will be closed book and closed notes. 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. Each lab is worth 6 points. There are nine (9) labs in the term but you will **only be graded on your 8** highest point total labs. You will be responsible for the material from all nine (9) labs on the exams.

**Recommended Prerequisite:** MTH 060

BI102 is taught as a discrete and separate course in biology. It is not necessary to have any other biology courses (BI101 or BI103) before taking this course.

**Texts: (all Required)**

- OpenStax free textbook: Concepts of Biology, <https://openstaxcollege.org/books>
- Weekly Homework in Moodle
- Lab Packet BI 102 General Biology Laboratory Course Packet: LBCC Biology Department

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

**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. **Please no text messaging in class!**

**Laptops:** Laptops are allowed in class but must be used only for class-related activities, such as taking notes or accessing online assignments (when instructor is not talking).

**Missed and late work:** Late work (assignments and labs) will be accepted one day late (next class period), with a 20% point reduction. 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. **The online homework will be automatically submitted on the due date.**

**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. Starting this term student evaluations of teaching (SET) will be done electronically. It 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 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 teamwork 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 device during exams, quizzes or to answer in lab summary questions.

**Basic Needs Syllabus 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](mailto:resources@linnbenton.edu) , or visit us on the web [www.linnbenton.edu/RRC](http://www.linnbenton.edu/RRC) under Student Support for Current Students). Our office can help students get connected to resources to help. Furthermore, please notify the professor if you are comfortable in doing so. This will enable them to provide any resources that they may possess.

**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 2<sup>nd</sup> week. The last day to withdraw (no refund) is the last day of week 7.

**Special Accommodations and Disability Services:** 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 the class, please talk to your instructor as soon as possible to discuss your needs. If you believe you may need accommodations but are not yet registered with CFAR, please visit the CFAR Website for steps on how to apply for services or call (541) 917-4789.

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

# Tentative Schedule, BI 102

WOH 205, Mon/Wed 10:30-11:50; Fri 10-11:50

Warren Coffeen, Office: WOH 221

[coffeew@linnbenton.edu](mailto:coffeew@linnbenton.edu)

	Monday and Wednesday	Friday (LAB)
Week 1	<u>Sept 30 &amp; Oct 2</u> Introduction, & Macromolecules (topics 1 & 2) Ch 1.2; Ch 2.2, 2.3	<u>Oct 4</u> <b>Lab 1:</b> Cells & Osmosis
Week 2	<u>Oct 7 &amp; 9</u> Cells and Cell Membranes (topics 3 & 4) Ch 3.2 – 3.6 <b>Quiz 1 (Monday)</b>	<u>Oct 11</u> <b>Lab 2:</b> Enzymes
Week 3	<u>Oct 14 &amp; 16</u> <b>Exam 1 (Monday)</b> Enzymes, Photosynthesis & Cell Respiration (topics 5 & 6) Ch 4.1 – 4.2, Ch 5.1	<u>Oct 18</u> <b>Lab 3:</b> Photosynthesis
Week 4	<u>Oct 21 &amp; 23</u> Cancer & Sex (topic 7) Ch 6.2, 6.3, Ch 7.1, 7.2 <b>Quiz 2 (Wednesday)</b>	<u>Oct 25</u> <b>Lab 4:</b> Cell Division
Week 5	<u>Oct 28 &amp; 30</u> Genetics & Chromosomes (topic 8 & 9) Ch 8.1 – 8.3, Ch 7.3 <b>Quiz 3 (Wednesday)</b>	<u>Nov 1</u> <b>Lab 5:</b> Genetics
Week 6	<u>Nov 4 &amp; 6</u> <b>Exam 2 (Monday)</b> DNA, Genetic Code, & Making Proteins (topic 10) Ch 9.1, 9.4	<u>Nov 8</u> <b>Lab 6:</b> Human Genetics - Height
Week 7	<u>Nov 11 &amp; 13 (Veterans Day, no school)</u> Biotechnology (topic 11) Ch 10.1 – 10.3	<u>Nov 15</u> <b>Lab 7:</b> DNA Gel Electrophoresis
Week 8	<u>Nov 18 &amp; 20</u> Darwin & Evolution Ch 11.1, 11.3 <b>Quiz 4 (Monday)</b>	<u>Nov 22</u> <b>Lab 8:</b> Natural Selection
Week 9	<u>Nov 25 &amp; 27</u> <b>Exam 3 (Monday)</b> How Populations Evolve Ch 11.2	<u>Nov 29</u> <b>Holiday: Thanksgiving</b>
Week 10	<u>Dec 2 &amp; 4</u> Evolution of New Species Ch 11.4 Review for Final <b>Quiz 5 (Wednesday)</b>	<u>Dec 6</u> <b>Lab:</b> Fossils
Week 11	<b>Final Exam</b> <b>Monday Dec 9<sup>th</sup> , 10:00 - 11:50 AM</b> <b>50% new material, 50% old material</b>	