**BI 102: General Biology (Cellular Processes and Evolution); CRN: 30678 Winter 2019**

**Instructor:** Misty Donaghy Cannon, Ph.D. **Email:** donaghm@linnbenton.edu

**Class meeting times and places:** Monday and Wednesday 5:30 – 7:50 pm Benton Center (BC) Room 207

**Class Website:** <https://elearning.linnbenton.edu/course/view.php?id=4054>

**Office Location and Hours:** MW 5:00-5:25 pm and by appointment. I will be in the science faculty office (BC 201A) or the classroom during this time.

BI 102 is a biological sciences perspectives course intended for non-majors and can be used to fulfill the general education requirements of your degree. More importantly, this class will help you create a broader understanding of, and appreciation for, the natural world and your place in it that will benefit you throughout life.

In this class I will help you to increase your understanding of the building blocks of life and evolution, and your level of scientific literacy. In addition, you will use the scientific method and hands-on experiments to support your understanding of the biological concepts we discuss in lecture.

**My commitment to you:** I will do everything I can to facilitate your learning by:

1. Welcoming questions, comments and feedback

2. Being available during scheduled times

3. Testing fairly on information and concepts from the book, class discussion, and handouts

**My expectation of you:**

1. Take responsibility for your own learning and ask questions
2. Do not use your phone in class and do not leave the class to use your phone.
3. Come to class on time and be prepared to learn (e.g., eat before coming to class, complete assigned readings, and check Moodle regularly for class-related information and study guides).

**BI 102 Learning Outcomes**: General Biology is to introduce you to cellular biology and processes and evolution. After completing this class, you will be able to do the following:

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.

**Required Class Materials:**

1. Textbook: Concepts of Biology. This book is available at http://openstax.org/details/concepts-biology I recommend that if you choose only to have an onscreen version of this book that you download a free PDF version so that you do not need to have the Internet to access it. If you would like to have a print version of this book, you can purchase it at the LBCC bookstore for $29. It doesn’t get more reasonable for a textbook than this, so if you prefer reading a hardcopy of the textbook, I urge you to purchase the book.
2. Biology 102 General Biology Lab Packet (available at the LBCC bookstore).
3. Three scantrons, form No. 882-E to use on exams in the class (available at the LBCC bookstore).

**Attendance:** First, this class is 2 hours and 20 minutes long and it will last that long on most days. Plan on being present for the entire class or you will be counted absent. Lecture is always held after quizzes and exams. Lab attendance is mandatory and cannot be made up. Labs generally are due the following lab period. Because this is a science lab class, if you miss 4 lab days, you automatically will receive an F in the class, regardless of your standing in the class. Be aware that we may start or complete labs on Monday as well as Wednesday and that any day in which we conduct lab activities falls under this policy.

I will not accept in-class assignments or lab work if you were not in attendance when the work was performed. I also will provide time during class to work on lecture activities. This a participation score and you must be present in class to receive credit.

**Assessment:** This course includes both lecture and laboratory components and is worth 425 points. Approximately **65%** your grade will come from two midterms (60 pts each), the final exam (115 pts), and 5 weekly quizzes (8 pts each) covering lab and lecture material from the previous week. Midterms and quizzes are not comprehensive; the final exam is comprehensive. The lowest weekly quiz will be dropped in the Moodle gradebook. Exams and quizzes **cannot** be made up unless you have a documented and compelling reason for missing the exam/quiz and you have told me **before** the scheduled time. Being late for class is **not** an acceptable reason.

The remaining 35% of the points in this class will be comprised of laboratory (25%), homework assignments (7%) and in-class activities (3%).

**Labs:** Each lab is worth 12 points and is comprised of three parts. The prelab is worth 2 points and is due at the beginning of each lab period unless otherwise stated. The lab activity is worth 4 points and must be completed during lab, unless otherwise stated. The lab report is worth 6 points, completed outside of class, and is due the following class period. I provide a rubric on Moodle for how each part is graded. All lab reports must be **typed or** **handwritten and legible** on paper that is attached to the report questions. You do not need to rewrite the questions on this sheet, but you must provide complete answers.

**I will not accept lab assignments if you were not in attendance when the work was performed.** Even if you miss a lab you will be responsible for the associated terms and concepts on exams and quizzes.

**Late Work Policy:** Assignments will be due at the beginning of class on the due date stated. If you know that you cannot attend a class when an assignment is due you have three options:

* email me your homework with the understanding that I must be able to access attachments
* turn it in early
* give it to an attendant in the Benton Learning and Career Center located on the second floor

Regardless of how you turn in assignments, **I must receive it by the start of class on the due date to qualify for full credit**. Assignments received after that time will automatically receive a 20%-point deduction. For assignments received each day after the due date, I will deduct an additional 20% until I post the key on Moodle, return the assignment to other students, or the assignment is no longer worth any points, whichever comes first. The 20% rule applies to each day an assignment is late, **not** each class period. An assignment due on Monday and received Wednesday will receive a 40% penalty. Assignments due on Wednesday will be worth 0 points on the following Monday. I do not accept late assignments without deductions except under very limited conditions that involve a documented and compelling reason that you have informed me about before the assignment is due. If an assignment must be completed by the due date because we will discuss the answers that class period, I will not accept it late.

**In-class Participation:** Throughout the term I will provide in-class opportunities to reflect on class material. This will help you gain practice working through the skills and knowledge outlined in the course learning outcomes, well as help you identify topics that require more study. You will write provided worksheets or notepaper and these activities will count towards your participation grade in the class. These in-class assignments cannot be made up and will not be announced prior to class.

**Class Website:** Supplementary lecture material, reading assignments and study guides will be posted on my Moodle website, <https://elearning.linnbenton.edu/course/view.php?id=4054> **Note:** I assign reading based on chapter sections (e.g., 30.1 refers to Chapter 30, Section 1). Use these chapters when completing the Sapling homework. All exam and lab scores will be available on Moodle as they become available.

**Grading Scheme**

A 90 – 100% Only if your final percentage is < 0.5% of the next letter grade category,

B 80 – 89% will I round up to the next letter grade (e.g., 89.7 = 90). LBCC currently

C 70 - 79% does not use a + system.

D 60 - 69

F <60%

**Extra Credit Opportunities.**  I will give a few opportunities for extra credit assignments in this class. Please note that extra credit points cannot exceed 2-3% of the points available in the class. Once all of the points have been assigned in this class, I cannot offer any more extra credit points to create a passing grade.

**IMPORTANT:** The last day to drop a class and receive a tuition refund is the Monday of the 2nd week of class. This class **cannot** be taken for credit/no credit. If you feel that you cannot achieve the grade that you want in this class, you must drop the class by the end of **Week 7**. To drop a class or withdraw from school, you may turn in a Schedule Change form at the Registrar’s office 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 be financially responsible for any tuition and fees, and you forfeit all claims to refunds. If you are still registered in the class in Week 2 and do not drop the class by Week 7, you will receive an F. For more information, please see http://www.linnbenton.edu/admissions/withdraw-deadlines.

**Appropriate Technology:** This is a professional environment. Therefore, cell phones and computers are not allowed to be used in class except for the purpose of accessing class-related materials at specified times. Leaving during class time to use your phone also is distracting and unprofessional. If you need access to your phone for justifiable reasons (such as contact from a childcare provider) let me know.

**Incomplete Policy:** An incomplete (IN) will only be issued if you are unable to complete the last exam by the end of the term and have a >70% on completed work. An incomplete grade must be accompanied by a signed contract specifying the conditions necessary to complete the course.

**Accessibility Resources:** Students who may need accommodations due to documented disabilities, or who have medical information that I should know about, or who need special arrangements in an emergency, should speak with me 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](https://www.linnbenton.edu/cfar) for steps on how to apply for services or call 541-917-4789.

**Academic Dishonesty and Misconduct:**  LBCC Student Code of Conduct will be enforced; violations of academic honesty (including cheating and plagiarism) will meet with severe measures that may include failing the course or expulsion from the college. I am obligated to report academic dishonesty and will do so. See the document entitled, Student Rights and Responsibilities and Conduct at http://www.linnbenton.edu/go/about-lbcc/policies for more information.

**LBCC Comprehensive Statement of Nondiscrimination:** LBCC prohibits unlawful discrimination based on race, color, religion, ethnicity, use of native language, national origin, sex, sexual orientation, gender, gender identity, marital status, disability, veteran status, age, or any other status protected under applicable federal, state, or local laws. For further information see [Board Policy BP-1015](https://www.linnbenton.edu/faculty-and-staff/administrative-information/policies/board-policies-and-administrative-rules/1000-series-the-college/board-policy-series-number-1050-equal-opportunity-statement.php). Title II, IX, & Section 504: Scott Rolen, CC-108, 541-917-4425; Lynne Cox, T-107B, 541-917-4806, LBCC, Albany, Oregon. To report: [linnbenton-advocate.symplicity.com/public\_report](http://linnbenton-advocate.symplicity.com/public_report)

**Course Evaluations:** Your feedback is important to improve this course. Student evaluations of teaching (SET) will be done electronically. It will activate after Week 5 and is due no later than week 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 – it takes approximately 10 minutes per each class and is a valued resource for guiding the progress and evolution of the course. I value your input so please participate in this process.

**Inclement Weather Policy:** If the campus is open, I will hold class, including any scheduled exams. Only if the campus is closed will an exam be postponed, and the exam will occur on the next scheduled class date following the closure. If a late start is announced, classes will resume at their usual scheduled times; early labs will resume and be held if the college opens during the scheduled lab period. Please listen to local media coverage for notice of closures such as the official Linn Benton website, T.V. & radio stations. Most importantly, contact me ASAP when you cannot attend class because of inclement weather.

**Tentative Topics Covered and Timeline.** Homework due dates are provided on the Moodle website each week. All reading and assignment due dates will be provided in class and on Moodle. Pre-lab page and/or hypotheses for labs will be due at the beginning of class on Wednesday of each week unless otherwise noted on Moodle. **Given that we are losing two Monday lecture periods, there may be adjustments to this schedule that I will post on Moodle.**

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| **Dates** | **Lecture (MW)** | **Lab (W)2** |
| 1. 1/7 – 1/9 | Scientific Method, Intro to cells and osmosis | 1. Understanding Cells |
| 1. 1/14 –1/16 | **Quiz 1**  Biomolecules and cell processes | 2. Enzymes and biomolecules |
| 3. 1/21 – 1/23 | **No Class on Monday** (lecture notes online) | 1. Photosynthesis   **Quiz 2** |
| 4. 1/28 – 1/30 | **Midterm 1 (60 pts)**  Cellular processes and cell cycle | 4. Mitosis and Meiosis |
| 5. 2/4 – 2/6 | **Quiz 3**  Inheritance | 5. Plant Genetics |
| 6. 2/11 – 2/13 | **Quiz 4**  Inheritance | 6. Animal Genetics (not in lab manual) |
| 7. 2/18 – 2/20 | **No Class on Monday** (lecture notes online) **No quiz this week** | 7. DNA electrophoresis |
| 8. 2/25 – 2/27 | **Midterm 2 (60 pts)**  Natural Selection and Evolution | 8. Natural Selection |
| 9. 3/4 – 3/6 | **Quiz 5**  Evolution and Unnatural Selection | 9. Population Genetics (not in lab manual) |
| 10. 3/11 – 3/13 | GMOs: Reading and Discussion | Complete GMOs  **Quiz 6** Class Review |
| 11. 3/18 | **Monday, Mar 18th, 5:30 – 7:20** | **Comprehensive Final Exam** |

**1** Lecture quizzes and examswill at the beginning of class. You will not be given extra time to complete these if you are late to class.

**2** Numbers of lab correspond to numbers in the lab manual. Labs may be completed on Monday of the following week as needed.