

# BI 213—PRINCIPLES OF BIOLOGY

## LBCC, Fall 2019

**Instructor:** Warren Coffeen, Ph.D.  
Office: WOH 221  
Email: coffeew@linnbenton.edu

**Office Hours: Tuesday 10-11, Wednesday 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	WOH 212	<b>MWF</b>	9-9:50 AM
Lab	WOH 214	<b>Wednesday</b>	2-4:50 PM

**Corequisite:** The corequisite for BI 213 is a term of college chemistry (CH 112, 121, 150, or 221).

**Required textbooks:**

- \* [OpenStax Biology](#) Free Online book. Or any majors biology book would work (such as Campbell Biology or Raven Biology)
- \* Weekly Homework in Moodle
- \* *BI 213 Course Packet* by Warren Coffeen, available from the LBCC Bookstore.

**Assessments:** (subject to change)

Labs (9@8 pts/lab)	=	72 points
Online Homework	=	40 points
7 Quizzes@ 10 points each	=	70 points
3 exams @ 50 points each	=	150 points
Final Comprehensive exam	=	100 points
<b>Total</b>	=	<b>432 points</b>

**Course Learning Outcomes:**

- Compare and contrast the two types of cell division.
- Describe the patterns of inheritance.
- Identify the steps and end-products in DNA replication and protein synthesis.
- Explain how natural selection drives evolution.
- Discuss biological community interactions.

**Grading Scheme:**

90 - 100%	A
80 - 89%	B
70 - 79%	C
60 - 69%	D
59.9 % and below	F

**Quizzes and Exams**

There will be seven quizzes and three exams throughout the term. Quizzes and exams will cover material from lecture and from assigned reading in the book. Quizzes will be given at the beginning

of class (check schedule for days). If you are late to class or miss class you must contact me immediately in order to make up a quiz or exam.

**Labs:** All labs are three hours long and you are expected to be on time and remain in lab the entire time until all your work is done. You must attend and participate in the lab to receive credit for the lab. There are **NO** make ups for missed labs. Labs will be due either the same day or the next class meeting. There will be a lab-makeup assignment at the end of the term.

**Missing Lab: You must attend and complete 7 of the 9 labs in order to pass the class.**

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

**Late Work:** Homework and lab reports are to be turned in at the beginning of class on their due date. Late work or lab reports will be accepted but with a substantial point reduction. If they are turned in late on the day they are due (i.e. during or after class), they will be reduced by 25%; if they are turned in the next day, 50% of the point value will be removed; two days late 75% removed.

### **Pre-Lab Assignment**

Each Monday I will give you *four* questions that pertain to that weeks lab. At the beginning of each lab, the questions will be graded in class, and then turned in. In order to receive credit you will need to be present and on time. Each pre-lab assignment will be worth two points. **Pre-lab assignments will not be accepted if you are late.**

**Extra Credit:** On a few occasions such as on the exams there may be extra credit, which will be high-challenge questions that can aid your score. This credit will generally not influence a grade more than 2-4% for the overall grade, but it could make a big difference in borderline grade situations. Extra Credit will NOT be issued or allowed for missed work – there are no exceptions to this rule. My general policy for all students is that “I cannot do for one student what I cannot do for all.” Please do not ask for exceptions due to poor performance, no extra credit work will be granted.

### **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. **Text messaging** is not allowed! I can tell when you are doing it and I will ask you to stop during class, possibly calling unwanted attention to you. Do not leave the class to use your cell phone; class is only 50 minutes long so you can check your messages after class.

**Attendance:** You are expected to attend all lectures. No grade will be assigned for attendance but to do well in this course it is expected that you will attend ALL lectures and labs. If a situation arises that makes it necessary to miss a class it is the student's responsibility to obtain notes from a peer. Please read the attendance policy in the college catalog for details.

**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.

# BI 213 Lecture Schedule and Readings Assignments

Fall 2019 (Subject to change)

Warren Coffeen, [coffeew@linnbenton.edu](mailto:coffeew@linnbenton.edu), WOH 221

Week	Monday	Wednesday	Wed (LAB)	Friday
1 9/30-10/4	<b>Course Introduction</b> <b>Topic 1: Cell Division</b> Ch 10: 10.1-10.2	<b>Chromosomes and Mitosis</b>	<u>Lab 1: Mitosis and Meiosis</u>	<b>Sex and Meiosis.</b> Ch 11 <b>QUIZ 1</b>
2 10/7-10/11	<b>Meiosis Con't</b>	<b>Topic 2: Genetic Inheritance - Mendel</b> Ch 12	<u>Lab 2: Genetic Analysis</u>	<b>Unique Inheritance Patterns</b> <b>QUIZ 2</b>
3 10/14-10/18	<b>Topic 3: Linkage and Chromosomes</b> Ch 13	<b>Linkage Analysis</b>	<u>Lab 3a: Plasmid Mapping part 1</u>	<b>EXAM #1</b>
4 10/21-10/25	<b>Topic 4: DNA Structure and Replication</b> Ch 14	<b>DNA Structure and Replication</b>	<u>Lab 3b: Plasmid Mapping part 2</u>	<b>Topic 5: Genetic Code and Transcription</b> Ch 15 <b>QUIZ 3</b>
5 10/28-11/1	<b>Transcription and Translation</b>	<b>Topic 6: Recombinant DNA Technology</b> Ch 17 (17.1 only)	<u>Lab 4a: DNA Fingerprinting part 1</u>	<b>Stem Cells and Biotechnology</b> <b>QUIZ 4</b>
6 11/4-11/8	<b>Topic 7: Darwin and Evolution</b> Ch 18: 18.1	<b>Darwin and Evolution</b>	<u>Lab 4b: DNA Fingerprinting part 2</u>	<b>EXAM #2</b>
7 11/11-11/15	<b>Veterans Day</b>	<b>Topic 8: Population Genetics</b> Ch 19	<u>Lab 5: Natural Selection</u>	<b>Microevolution</b> <b>QUIZ 5</b>
8 11/18-11/22	<b>Topic 9: Speciation and Reproductive Barriers</b> Ch 18: 18.2	<b>Topic 10: Population Ecology</b> Ch 45: 45.1-45.4	<u>Lab: Hominid Fossils (handout)</u>	<b>Human Population</b> Ch 45.5 <b>QUIZ 6</b>
9 11/25-11/29	<b>Topic 11: Community Ecology</b> Ch 45.6	<b>EXAM #3</b>	<b>Thanksgiving</b>	<b>Thanksgiving</b>
10 12/2-12/6	<b>Community Structure and Succession</b>	<b>Topic 12: Ecosystems and Energy Transfer</b> Ch 46: 46.1-46.2	<u>Lab: Ecosystems (handout)</u>	<b>Topic 13: Human Impact on Biogeochemical Cyc</b> Ch 46.3 <b>QUIZ 7</b>
11 12/4-12/8	<b>FINAL EXAM</b> <b>Wednesday, Dec 11<sup>th</sup> 10 – 11:50 AM</b> Rm: WOH 212 Comprehensive Final			