

Instructor: Misty Donaghy Cannon, Ph.D.

Class meeting times and places: 10 – 10:50 am MWF (WOH 212), 8 – 10:50 am R (WOH 214)

Office: White Oak Hall (WOH) 220

Email: donaghm@linnbenton.edu

Class Website: <http://elearning.linnbenton.edu/course/view.php?id=293>

Office Hours: MWF 9:00-9:30 am and by appointment

Required textbooks:

* *Biology*, by Raven, Johnson, Mason, Losos, Singer (10th edition). McGraw Hill Publishing Co., 2014.

* Connect access code (included with book from bookstore or e-book)

* *BI 213 Course Packet* by Richard Liebaert and Warren Coffeen, available from the LBCC Bookstore.

Corequisite/prerequisite: One term of college chemistry (CH 112, 121, 150, or 221).

BI 213 Learning Outcomes. After completing this course you will be able to do the following:

1. Analyze and interpret different patterns of theoretical genetic crosses in humans, plants, and fruit fly as model organism.
2. Use sampling methods for collection of molecular and population genetics data.
3. Recognize the tenants of evolutionary theory and cite the supporting evidence.
4. Describe the various ecological relationships present in an ecosystem and decipher models depicting different ecological interactions.

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. Be on time for class and bring your lab manual and a scientific calculator to class each day
3. Do not use your phone in class and do not leave the class to use your phone.
4. Come to class prepared to learn (e.g., complete assigned readings before class and check Moodle regularly for class-related information)

Homework, Exams and Grading:

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). **I will drop your lowest quiz score.** If you are late to class or miss class you must contact me immediately in order to make up a quiz or exam. The final exam for this class is comprehensive.

Lab Attendance: All labs are on Thursday and are three hours long. 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.

Pre-Lab and Post-Lab Assignment: Each Wednesday I will give you *four* questions that pertain to the next day's lab. These will be due at the beginning of each lab. 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 to lab.**

Post-Lab assignments will be due at the beginning of class on the due date stated (generally on the Friday or Monday following lab). If you cannot attend a class when an assignment is due, you have two options:

- email me your assignment with the understanding that I must be able to access attachments
- turn it in early in person

Regardless of how you turn in labs, **I must receive it by the start of class on the due date.** I do not accept late assignment except under very limited conditions that involve a documented and compelling reason that you have informed me about before the assignment is due.

Online Homework: This class has an online homework requirement. When you purchase the textbook, it will come with an access code that will give you access to the Connect website through McGraw Hill. You can access the class page at <http://connect.mheducation.com/class/m-donaghy-bi-213-lbcc-fall-15> or go to Moodle for the link. Each week you will have a LearnSmart (LS) component and an activities component. Both will be due either Sunday night at the end of the week in non-exam weeks and on Thursdays of exam weeks (see calendar on the Connect website).

I recommend that you complete the LearnSmart assignment before that material is covered in class (as a preview), and the activities done after the material is covered in class (as a review). I also will not accept online homework late so please do not wait to complete the assignments until the evening they are due.

Note: The point totals for these assignments are not important as the overall percentage correct, which I will use to calculate your actual point score in Moodle. For example, if you receive $180/200 = 90\%$ of the points on the online homework, you will receive $45/50$ points = 90% in the Moodle gradebook at the end of the term.

Assessments: (subject to change)

9 Labs (8 pts / lab, 16%)	=	72 points
Online Homework (11%)	=	50 points
In-class Activities (3%)	=	13 points
6 Quizzes (10 pts/quiz, (13.5%)	=	60 points
3 Exams (50 pts/exam, 34%)	=	150 points
Final exam (22.5%)	=	100 points
Total	=	445 points

I will post supplementary lecture materials and class information on my Moodle website that you can access at <http://elearning.linnbenton.edu/course/view.php?id=293>. I will not post in-class activities because you must attend class to receive these materials and receive credit for participation.

Grading Scheme

90 – 100%	A
80 – 89%	B
70 - 79%	C
60 - 69%	D
<60%	F

Only if your final percentage is $< 0.5\%$ of the next letter grade category, will I round up to the next letter grade (e.g., $89.7 = 90$). LBCC currently does not use a \pm system.

IMPORTANT: 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 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. 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. *Please* do not stop coming to class without formally withdrawing. The last day to drop a class and receive a tuition refund is the Monday of the 2nd week. For more information, please see <http://www.linnbenton.edu/admissions/withdraw-deadlines>.

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 $\geq 70\%$ on completed work. An incomplete grade must be accompanied by a signed contract specifying the conditions necessary to complete the course.

Extra Credit Opportunities. I will give a few opportunities for extra credit assignments in this class. Please note that extra credit points cannot exceed ~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.

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 think you may need accommodation services, please contact the Center for Accessibility Resources at 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.

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 on 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.

Comprehensive nondiscrimination policy: LBCC prohibits unlawful discrimination based on race, color, religion, ethnicity, use of native language, national origin, sex, sexual orientation, marital status, disability, veteran status, age, or any other status protected under applicable federal, state, or local laws. For further information see Policy 1015 <http://po.linnbenton.edu/BPsandARs/>.

Course Evaluations: Student 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 highly valued resource for guiding the progress and evolution of the course. I value your input so please participate in this process.

Lecture Schedule and Readings Assignments
BI 213, Misty Donaghy Cannon
donaghm@linnbenton.edu

Week	Date	Readings	Topics
1	M: Sept 28	Ch 10: 187-197	Course Introduction, Topic 1: Cell Division
	W: Sept 30		Topic 1: Chromosomes and Mitosis
	R: Oct 1	Ch 11: 207-218	LAB 1: Observing Mitosis
	F: Oct 2		Topic 1: Sex and Meiosis QUIZ 1
2	M: Oct 5	Ch 12: 221-236	Topic 2: Genetic Inheritance - Mendel
	W: Oct 7		Topic 2: Multiple gene inheritance
	R: Oct 8		LAB 2: Genetic Analysis
	F: Oct 9		Topic 2: Unique Inheritance Patterns QUIZ 2
3	M: Oct 12	Ch 13: 239-253	Topic 3: Sex Linkage and Chromosomes
	W: Oct 14		Topic 3: Linkage Analysis
	R: Oct 15		LAB 3a: Plasmid Mapping part 1
	F: Oct 16		EXAM 1
4	M: Oct 19		Topic 3: Human Genetic Disorders
	W: Oct 21	Ch 14: 256-273	Topic 4: DNA Structure and Replication
	R: Oct 22		LAB 3b: Plasmid Mapping part 2
	F: Oct 23		Topic 4: DNA Structure and Replication QUIZ 3
5	M: Oct 26	Ch 15: 278-301	Topic 5: Genetic Code and Transcription
	W: Oct 28		Topic 5: Transcription and Translation
	R: Oct 29		LAB 4a: DNA Fingerprinting part 1
	F: Oct 30	Ch 17: 327-345	Topic 6: Recombinant DNA Technology QUIZ 4
6	M: Nov 2		Topic 6: Stem Cells and Biotechnology
	W: Nov 4	Ch 20: 396-210	Topic 7: Population Genetics and Microevolution
	R: Nov 5		LAB 4b: DNA Fingerprinting part 2
	F: Nov 6		EXAM 2
7	M: Nov 9		Topic 7: Microevolution
	W: Nov 11	Ch 21: 417-432	No class - Veteran's Day
	R: Nov 12		LAB 5: Natural Selection
	F: Nov 13		Topic 8: Evidence for Evolution QUIZ 5
8	M: Nov 16	CH 22: 436-452	Topic 9: Speciation and Reproductive Barriers
	W: Nov 18	Ch 55: 1162-1182	Topic 10: Population Ecology
	W: Nov 19		LAB 7: Population Ecology
	F: Nov 20		Topic 10: Human Population QUIZ 6
9	M: Nov 23		Topic 11: Community Ecology and Competition
	W: Nov 25	Ch 56; 1185-1204	EXAM 3
	R: Nov 26		No Class – Thanksgiving holiday
	F: Nov 27		No Class – Thanksgiving holiday
10	M: Nov 30		Topic 11: Community Structure and Succession
	W: Dec 2	Ch 57: 1208-1222	Topic 12: Ecosystems and Energy Transfer
	W: Dec 3		LAB 8: Lichens and Succession
	F: Dec 4	Ch 58: 1245-1253	Topic 13: Human Impact on Biosphere QUIZ 7
11	M: Dec 7	Final Exam	8 – 9:50 AM, Monday, 12/7, WOH 212