# **Principles of Biology BI 223**

LBCC Spring 2021

Instructor: Diana Wheat Contact: wheatd@linnbenton.edu

Office hours: Mondays & Fridays 11 am (via Zoom only)

No on-campus office hours or after lab hours permitted.

Zoom links for office hours (M) & (F) found in Moodle course entry block (same all term)

### Passcode Spring\_Bio

→You may also contact me via email to schedule an appointment other than posted office hours if the drop in office hours do not work for your schedule. Allow 24 hr notification to arrange.

#### Schedule:

All sections are cross-listed with combined CRNs in the Moodle section 20200444561.

**Lectures**: will be recorded and will be found on the Moodle page. One will be placed on Monday 9 am and a second one on Tuesday by 9 am. These are asynchronous i.e. you view on your own time and both should **both be viewed prior to the lab day. No specific lecture time slot to allow flexibility.** 

**Labs**: On campus as shown on the class schedule this is linked to your CRN.

Location of labs: White Oak Hall 205 or 218

### On lab day, look for your name on the classroom and your seat assignment.

Prerequisite: BI 221 AND a term of college chemistry completed (CH 112, 121, 150 or

221) with a grade of C or better.

**Course Description:** This course covers fundamental biological concepts and theories about diversity, evolution, and ecology; specifically, evolutionary relationships,transformation of energy and matter, information flow and systems at a population level or above.. More specifically, we answer questions including: How does natural selection result in adaptation? How did Eukaryotes emerge? How do we determine if populations are evolving? How do we represent relatedness between species? What roles do species play within an ecological community? How are ecosystems altered by climate change?

Course Format: All documents and graded items (including tests) delivered in Moodle.

## **Learning Outcomes:**

- 1. Articulate how the process of natural selection leads to evolution and helps to explain the reason for biodiversity and adaptations that influence biological fitness.
- 2. Explain the relationships between population/species abundance and distribution in relation to biotic and abiotic factors in the environment.
- 3. Interpret phylogenetic models correctly to represent relatedness between taxonomic groups using morphological, molecular and developmental evidence.
- 4. Demonstrate competency using dichotomous keys to identify unknown organisms.
- 5. Provide examples of human impacts on ecosystems.

### **Required Materials:**

Waymaker: Principles of Biology- LBCC from Lumen Learning.

In this course you will use Waymaker instead of a traditional textbook. Waymaker provides your course materials digitally inside Moodle..

You can access all readings, videos, a study plan, quizzes and other activities through Moodle. A **note about Waymaker Quizzes:** they help you learn! After your first quiz attempt you'll receive feedback and opportunity to learn and practice the content before your 2nd or final quiz attempt.

# **Purchasing Options**

- 1. **Online:** You can purchase Waymaker with a credit card for **\$25** when you access your first quiz in this course.
- 2. **Bookstore:** You can purchase a Waymaker access code from the school bookstore. Note that the bookstore price may be slightly higher than if you purchase online.

**Biology Labs** – nothing to purchase, these will be delivered entirely within Moodle, your lab reports (answering a series of questions) will also be available as a separate document that is uploaded into Moodle by the deadline for lab reports.

#### Resources needed:

It is recommended to bring a **laptop or tablet** to lab if you have one – labs will not be printed, they are available via Moodle file only. We do have computers in the lab, but be aware they must be sanitized between users and cannot be checked out.

You will also need: a method of image capture e.g. a camera phone, pdf CAM scanner on your phone and colored pencils to capture info on items seen in lab.

### **Graded components**

2 Exams at 50 pts each = 100 ptsLumen Quizzes\* 10 pts/week = 100 pts\*These are required HW items. Prelabs\* at 4 pts/wk =40 ptsadministered at beginning of lab. Labs Reports 8 at 5 pts/wk =40 ptsSimbio labs will be 10 pt each = 20 ptsLab Exam (in week 10) = 20-25 ptsFinal Exam =75 pts Total = 400 pts

# **Grading Scheme:**

A - 90 - 100%, B - 80 - 89%, C - 70 - 79%, D - 60 - 69%, F less than 59.49%

I generally grade based on rounding up so 89.5 is rounded to a 90%.

\*Late Work: Will NOT be accepted without supporting documentation to show your inability to meet deadlines e.g. a doctor's note or hospital admission form, this is the case for all deadlines.

**Getting Started with Waymaker:** You will find a video and guide that walk you through how to access Waymaker and how to complete your readings and assignments here: **lumenlearning.com/gettingstartedwithwaymaker** 

Waymaker is different from other course materials in these ways:

- There is no separate textbook. Everything you need is in the Moodle course, including an e-Book.
- The study plans in Waymaker will provide guidance on where to focus your attention. As you complete self-check questions, "Show What You Know" sections in the study plans, and quizzes, you'll get feedback on which areas you need to read and study more.
- Instructors can see where students are struggling. I can see how you do on your quizzes and offer individualized help when you need it. I can also see if you are doing the self-checks and practice activities. I'm here to help you!

Lab Reports –These must be *submitted by Saturday midnight* – no extensions granted, so plan accordingly, but the closer to your actual lab the better. Submit with your answers high-lighted in yellow. I only accept pdf forms, do not upload Google Docs – these will NOT be graded, Moodle cannot handle Google doc links. I will begin grading only AFTER the lab deadline, after all students have submitted their lab reports. Expect a one week turn around for getting items graded. Generally, the lab report questions are a synopsis of what you did in the lab, examining specimens, conducting activities etc. This may involve taking photos e.g. of specimens or drawings of microscope views, so bring materials that will allow you to support this "qualitative data capture" i.e. phone with camera or colored pencils (3-5 is sufficient) to lab. Generally,

since lab reports are worth 5 pts, there will be 10 questions that are short answer response or a combination of images/photos – expect typically around 2 pages. These are only available for students that attended lab – so attendance will be taken.

**Prelabs** – will be activated once you are in the lab. Each lab will likely have a different prelab set of questions, but this is based on your "preparation" for the lab, meaning you have looked over the lab and know what to expect. You have completed to the best of your ability the textbook readings that compliment the concepts (this means you must read the text and the lab BEFORE) coming to the lab. The prelabs will only be allowed 10 minutes to answer the questions – generally 4 fill in the blank or multiple choice questions. Late attendees will not be granted access, **so be on time! .....or a little early!** 

Waymaker Quizzes: You will have a Study Module (generally 2-4 units) each week to read through, take the "self test" - which you can take numerous times and then the weekly HW guiz (based on the readings) is taken to show what you know. Quizzes help you learn the content. These may be 12-30 questions (depends upon the number of units). You will have two tries (the highest score is recorded and sent to me to record). I will tally this in an offline spreadsheet and give you biweekly updates to how your score is going – reported to you in Moodle. The total score per week is 10 pts, regardless of the number of questions. If you get 100% as your highest score, then you will have 10 pts recorded per each week. No "lowest" score is dropped, if you miss the deadline you receive a zero. **Deadline is Saturday midnight** (same as the lab report). This is adaptive software though, so it is recommended that you attempt early In the week and then a second opportunity to improve your score after adaptive exercises/activities are attempted. Waymaker allows you one initial attempt but by week 2 if you have not paid, you will no longer have access to the quiz tool. This component of the course will not allow you to score 25% of the grade, so it is a required component of the course – i.e. not optional.

### **Department & College Policies:**

Labs: All labs are two 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. Lab documents will be available in Moodle and will be filled out digitally during lab or after lab, and submitted via Moodle. No guests (including children or pets) are allowed into the lab. Social distancing requires you to wear a mask and keep 6 ft distance at all times, violation of this campus wide policy can result in being dismissed for the day.

## **Department Lab Attendance Policy:**

You must attend and complete 7 of the 10 labs in order to pass the class. Any student who has missed more than 3 labs will automatically fail the course.

**Accommodations**: 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 their instructor 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** for steps on how to apply for services or call (541) 917-4789.

**Statement of inclusion**: To promote academic excellence and learning environments that encourage multiple perspectives and the free exchange of ideas, all courses at LBCC will provide students the opportunity to interact with values, opinions, and/or beliefs different than their own in safe, positive, and nurturing learning environments. LBCC is committed to producing culturally literate individuals capable of interacting, collaborating, and problem-solving in an ever-changing community and diverse workforce.

To that end, if a pattern of disrespect develops, I reserve the right to discuss appropriate behavioral expectations with individuals who may not fully understand this responsibility. At no time will a hostile or condescending classroom environment or discussion be permitted.

# 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.

**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. A minimum of 70% of the course work must be accomplished (excluding the final exam) before consideration of an incomplete is granted, failure from lack of attendance or missing numerous labs is not grounds for an incomplete. The deadline to drop the course is the end of the 7<sup>th</sup> week.

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 <a href="http://po.linnbenton.edu/BPsandARs/">http://po.linnbenton.edu/BPsandARs/</a>). Policy 1015.

# **General Behavioral Expectations**

**Integrity:** This is your learning experience – make the most of it. Relying upon internet resources to find answers is not the ideal learning experience but it is how we must make do in this climate of distance learning. Summarize findings and answer your own questions, sharing ideas is to be encouraged – sharing your answers or copying someone else's work is not a demonstration of integrity. Strive to your highest level of scholarship to get the most of this course, this means putting in the time and doing your OWN work.

Academic Misconduct: Cannot be tolerated and includes any form of cheating. The student is encouraged to read the online code of conduct for further details. If a student is found to have cheated on an exam, after due process the resulting grade will be a zero on the exam or quiz. 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 Math Division. Violations of academic honesty will be met with severe measures that may include failing the course or expulsion from the college. Using supplemental computers or smartphones on graded assessments i.e. exams is NOT permitted and is considered cheating, with the same consequences mentioned above.

**Plagiarism:** Plagiarism is the taking of ideas that are not your own and attempting to submit them as your own this is also considered academic misconduct. Using someone else's work as your own, including your classmates work, can lead to serious consequences. Plagiarism is subject to disciplinary action and after due process will affect your grade. If you use a published source to quote or paraphrase a reference it is critical to cite your sources, when in doubt ask your instructor specifics about this policy – do not assume that "not knowing" will excuse you from this college-wide policy.

→ Your instructor will provide you with a "Contract of Understanding" in week 1 in Moodle. This must be signed and brought to the lab – before any work is graded or quiz scores are entered. This contract is similar to the statements above but it is an acknowledgement that cheating in any form will result in consequences, potentially including a zero for an assignment or an F in the class i.e. there are no "second chances." I will make copies also available in the lab week 1.