# BI 101: Environmental Science LBCC, Winter 2020

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**Instructor:** Diana Wheat

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CRN: 31597 Credits: 4 credits, Section: 08

**Lectures:** Monday: 10:30-11:50, Wednesday 10:30-11:50, (WOH 214)

**Lab:** Friday 10:00-11:50 ← *Note earlier time start* (WOH 214)

**Instructor Office Hours:** 1-1:50 pm Monday, Tuesday & Wednesdays

#### **Introduction:**

This course is intended for majors in disciplines other than the biological sciences. Topics presented include ecological principles, biodiversity, and impact of human activities on the environment. Additionally, the course is designed to help students discover the applications of science to their everyday lives, as well as provide elements of critical thinking. This course includes a mandatory laboratory component, which is incorporated into the integrated course grade.

#### **Recommended Prerequisite:**

MTH 075 Variables and Linear Equations, college-level reading and writing also strongly recommended.

#### **Graduation limitation:**

Students are *NOT permitted* to take two different BI 101 courses to fulfill graduation or transfer requirements. If a student has taken a different BI 101 course e.g. General Bio 101, Oregon Ecology, Marine Biology etc. then this general biology class will not gain the student credit – talk with the instructor for any necessary clarification. Disregarding this policy could cause graduation delays and financial aid issues. Majors in biology or environmental science are advised that 100 level biology courses will also not meet program requirements for graduation.

#### **Texts:**

- Environment, 10<sup>th</sup> edition, Authors: Hassenzahl, Hage, Gift, Berg & Raven, Wiley Publisher (2018) ISBN: 13 978-1119-39341-2.
- <u>Lab Book BI 101: Environmental Issues Section</u>, Gen. Bio Laboratory Manual Winter 2020 ed., Biology Department publication (available only in bookstore).
- Two Scantron forms A-E format (available in the bookstore).

#### **Recommended Materials:**

Calculator (bring to class on lab days).

Colored pencils (some will be available in class) but to do homework you will need a set.

#### **Holidays – No classes on:**

- Monday January 20<sup>th</sup> Martin Luther King Jr. Day
- Monday Feb 17<sup>th</sup> President's Day

#### **Course Outcomes**

- ✓ Be able to discuss biological community interactions.
- ✓ Be able to explain how changes in human population and/or actions impact natural ecosystems.
- ✓ Be able to describe the movement of energy & nutrients through trophic levels.
- ✓ Recognize the appropriate taxonomic level of an organism based on key characteristics or traits.

#### **Grading Scheme:**

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A: 90 - 100%, B: 80 - 89%, C: 70 - 79%, D: 60 - 69%, F: 59.4% or below No +/-
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**Grading**: Final grades for the course will be determined by each student's cumulative point total by the end of the term. This is an approximation of points for each category, and it is subject to changed, as deemed appropriate by the instructor. Note as a department policy as student must attend 70% of all labs, regardless of accumulated points in order to be eligible for passing this university transfer level course.

### **Grade Determining Events:**

Weekly reading Quizzes 7 @ 5 pts each	= 30 (lowest score dropped)
Midterm Exam	= 60
Short report	= 20
Labs 10 @ 10 pts each	= 100
In-class activities*	~ 15 (Approximately 5% of grade)
Final Comprehensive Exam	<u>= 75</u>
Total	= 300 points (Approximation)

<sup>\*</sup>In-class activities may be unannounced and are participation oriented, generally around 2-3 pts per week, they are nearly always associated with lecture days.

**Attendance**: All classes are required, no lab scores are dropped, and no make up opportunities exist for labs. This is the only section of BI 101 Environmental Science. Documented absences, including school sponsored events will be excused with proper documentation. One (optional) extra credit assignment will be assigned following the midterm to help recover points from a missed lab or in-class activity - but per department policy this will be point limited, to no more than 2% of the overall class grade.

**Late Work:** No quizzes or lab work will be accepted for credit if you were not in attendance for the class when the work was performed. Late work will only be accepted with a document attached that clearly shows why the student could not be in class to meet the deadline e.g. jury duty, court date, funeral, job interview etc.

**Quizzes:** Will generally occur on Wednesdays at the *beginning* of class and will cover the reading assigned for that week. No "for credit" quiz will occur in week 1, 5 (midterm week) and 10 (review). This leaves 7 quizzes total, and only the best 6 of 7 will be entered for a grade. Consequently, a missed class/quiz will be the dropped quiz if you are unable to attend class.

**Exams**: Objective tests consisting of multiple choices, matching, short answer, binary decision, labeling, true/false, data analysis and graphing. Please bring scantron form to each exam. There will be **NO** make-up exams unless I am informed, **in writing**, PRIOR to the exam that you will need to miss it for a "documentable" reason.

**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. Deadline to drop a course is the end of the 7<sup>th</sup> week of the course. To be eligible for an incomplete the student must be passing and have completed at least 80% of the course.

**Special Accommodations**: Students who may need accommodations due to documented disabilities, or who have medical information which the instructor should know about, or who need special arrangements in an emergency, should speak with the instructor during the first week of class. If you have not accessed services and think you may need them, please contact CFAR, 917-4789. If you have documented your disability, remember that you must **complete a "Request for Accommodations" form** every term in order to receive accommodations. It is the student's responsibility to make any needs known to me within the first week of the semester, *in writing*, so that I can give appropriate accommodation. This includes but is not limited to disabilities of visual, hearing, learning, dates needed for religious holidays, court dates etc. Student athletes and students who have *school sponsored events* that may conflict with class, e.g. missing labs or exams must make your needs known to me at least one week in advance for accommodations, this will also require instructor/coach letters explaining your situation and respective dates of missing regular scheduled class.

**Inclement Weather Policy:** If the campus is open class will be given (including lab days) and scheduled exams/quizzes will be administered. Only if the campus is closed will an exam be postponed, and this will occur on the next scheduled class/lecture date following the closure. If a late start is announced classes will resume on their usual scheduled times, early labs may resume and be held if the college opens during the scheduled lab period e.g. 2 hour delay. Please listen to local media coverage for notice of closures such as T.V. & radio stations. Closure information is also posted on the LB website.

**Statement of Respect:** Your instructor will make every attempt to create an environment free of distraction and one open to free discourse. The college environment is one of exploring ideas, but also in a context of mutual respect for your peers and instructors. If a pattern of disrespect develops the instructor reserves the right to discuss appropriate behavioral expectations with individuals that may not fully understand this responsibility. At no time will a hostile or condescending classroom environment or discussion be allowed. Civil discourse is an honored value at LBCC and one that will be upheld.

Academic Misconduct: Will not be tolerated and includes any form of cheating or plagiarism. The student is encouraged to read the student code of conduct for further details at: http://www.linnbenton.edu/admissions/academic-regulations. If a student is found to have cheated on an exam, after due process the resulting grade may be a zero on the given exam or quiz. All group work should still be written in the students own handwriting and language. You must turn in your own interpretation and work even if doing team work projects or labs.

# Winter 2020 Schedule – *Tentative* General Biology 101: Environmental Science

Week	<b>Lecture Topics</b>	Readings	Lab
1	Sustainability	Ch 1, 11	Transportation Survey
2	Worldviews & Ethics	Ch 2, 17, & pg 104-106 [exclude forest unit in Ch	Conservation & Diversity 17 & pg 356-358]
3	Ecology & Ecosystems	Ch 3, 4*,& pg 145-146 * Read section 1-2 only.	Community Ecology
4	Populations	Ch 5*, 8 *Read sections 1-2 only	Population Biology
5	Disturbance & Succession Community Interactions & E	Ch 5, pg 106-108, Ch 6 siomes	Forest Succession
6	Forests	Ch 17*, 16 * pg 346-353	Forestry Applications
7	Watersheds	Ch 13, 21	Water resources
8	Oceans & MPA	Ch 21 cont. Ch 6 & pg 71-75, 356-358 & 4	Microplastics 72-479
9	Atmosphere & Air Pollution	Ch 19, 20, 4* * Read Section 3, review	Air Quality Sec 4-1
10	Making a difference	Ch 22, 24	Pollinators lab

## **Important dates:**

*Midterm Exam* – Monday Feb 10<sup>th</sup> *Short Report* – Due Feb 21st *Final Exam* – March 16<sup>th</sup> 8-9:50 am

