

## BIOL 112: Principles Of Biology II

|                                  |  |
|----------------------------------|--|
| <b>Location:</b>                 | Evening  |
| <b>Address:</b>                  | 1001 Rogers Street Columbia, MO 65216  |
| <b>Section:</b>                  | 19FALL1/BIOL/112/EVA   |
| <b>Semester Credit Hours:</b>    | 3  |
| <b>Class Day(s) and Time(s):</b> | Tuesday, Thursday 5:30 PM - 7:30 PM from August 26, 2019 to October 19, 2019 |

### Syllabus Contents

- [Course Information](#)
- [Textbooks](#)
- [Technology Requirements](#)
- [Course Learning Outcomes](#)
- [Grading](#)
- [Schedule of Due Dates](#)
- [Assignment Overview](#)
- [Course Outline](#)
- [Additional Resources](#)
- [Columbia College Policies & Procedures](#)

### Course Information

#### Catalog Description

A continuation of BIOL 110. Topics to be covered include population genetics, evolution and natural selection, taxonomy, survey of plants and animals, and ecology and ecosystems.

**Prerequisite:** BIOL 110.

### Textbooks

As part of Truition<sup>SM</sup>, students will receive their course materials automatically as described below.

 Mader/Windelspecht. (2019). *Biology* (13th). McGraw-Hill. eText

#### Bookstore Information

Visit <https://www.ccis.edu/bookstore.aspx> for details.

#### eText Information

If a course uses an eText, (see textbook information above) the book will be available directly in Desire2Learn (D2L) seven days before the session begins, if registered for courses prior to that date. Upon first login to VitalSource, students should

use their CougarMail email address; alternate email addresses cannot be used. More information about how to use the VitalSource platform, including offline access to eTexts, can be found in D2L.

#### Physical Course Materials Information

Students enrolled in courses that require physical materials will receive these materials automatically at the shipping address on file with Columbia College. Delivery date of physical materials is dependent on registration date and shipping location. Please refer to confirmation emails sent from Columbia College for more details on shipping status.

**Returns:** Students who drop a class are responsible for returning any physical course materials that were shipped. To initiate a return, visit [Ingram Returns](#) to generate a pre-paid return label. Materials from dropped courses must be returned within 30-days of receipt. **Failure to return physical items from a dropped course will result in a charge to the student account for all unreturned items.**

**Note:** Students who opt-out of having their books provided as part of [Tuition<sup>SM</sup>](#) are responsible for purchasing their own course materials.

#### Technology Requirements

##### **THIS IS A TECHNOLOGY-ENRICHED COURSE WHICH COMBINES IN-SEAT INSTRUCTION WITH ONLINE LEARNING.**

Participation in this course will require the basic technology for all classes at Columbia College:

- A computer with reliable internet access
- A web browser
- Acrobat Reader
- Microsoft Office or another word processor such as Open Office

For more information, see [technical requirements](#).

#### Course Learning Outcomes

1. Describe and illustrate the core principles of natural selection and evolution.
2. Apply the biological species concept and give examples of how new species arise.
3. Using taxonomic hierarchy, name the major taxonomic groups of life and list defining characteristics of each.
4. List characteristics used to describe populations and describe population growth patterns.
5. Outline the major biogeochemical cycles and illustrate energy movement in an ecosystem.
6. Compare characteristics of major biomes and aquatic ecosystems.
7. Describe how species interact at the community level and list the effects of these interactions.

#### Grading

##### Grading Scale

| Grade | Points     | Percent |
|-------|------------|---------|
| A     | 900 - 1000 | 90-100% |
| B     | 800 - 899  | 80-89%  |
| C     | 700 - 799  | 70-79%  |
| D     | 600 - 699  | 60-69%  |
| F     | 0 - 599    | 0-59%   |

##### Grade Weights

| Assignment Category | Points | Percent |
|---------------------|--------|---------|
| Population Genetics | 40     | 4%      |
| Quizzes             | 60     | 6%      |
| Online Discussions  | 150    | 15%     |
| Writing Assignment  | 150    | 15%     |
| Exams               | 600    | 60%     |

|              |             |             |
|--------------|-------------|-------------|
| <b>Total</b> | <b>1000</b> | <b>100%</b> |
|--------------|-------------|-------------|

## Schedule of Due Dates

| Week 1                       |        |                        |
|------------------------------|--------|------------------------|
| Assignment                   | Points | Due                    |
| Week 2                       |        |                        |
| Assignment                   | Points | Due                    |
| Quiz One                     | 20     | First Meeting of Week  |
| Online Discussion 1          | 30     | Friday/Sunday          |
| Week 3                       |        |                        |
| Assignment                   | Points | Due                    |
| Population Genetics Homework | 40     | First meeting of week  |
| Week 4                       |        |                        |
| Assignment                   | Points | Due                    |
| Exam 1                       | 200    | First meeting of week  |
| Online Discussion 2          | 30     | Friday/Sunday          |
| Week 5                       |        |                        |
| Assignment                   | Points | Due                    |
| Quiz 2                       | 20     | Second meeting of week |
| Week 6                       |        |                        |
| Assignment                   | Points | Due                    |
| Exam 2                       | 200    | Second meeting of week |
| Online Discussion 3          | 30     | Friday/Sunday          |
| Week 7                       |        |                        |
| Assignment                   | Points | Due                    |
| Quiz 3                       | 20     | Second meeting of week |
| Online Discussion 4          | 30     | Friday/Sunday          |
| Week 8                       |        |                        |
| Assignment                   | Points | Due                    |
| Online Discussion 5          | 30     | Tuesday/Thursday       |
| Writing Assignment           | 150    | Second meeting of week |
| Exam 3                       | 200    | Second meeting of week |
| <b>Total Points: 1000</b>    |        |                        |

## Assignment Overview

### Assignments

Instructional methods include lecture, instructional videos, homework assignment, online discussions, writing assignment, quizzes and exams.

If a lecture is missed, then the student should request a copy of the notes from a classmate.

Out of class activities: Read the assigned textbook chapters. Study for quizzes and exams. Complete population genetic homework assignment, online discussions and writing assignment.

Writing Assignment: Write a report on a topic approved by the instructor. The completed paper must be at least 4 pages in length using Times New Roman 12-point font and double-spacing. A minimum of three references are required, properly cited using either APA or MLA format. Submit the paper to the dropbox. **Late writing assignments are not accepted.** Paper checked for content, organization, grammar, length and format.

Population Genetics Homework: You will be given a list of questions to complete and turn in on campus by the due date listed on the schedule. It includes population genetics problems and concepts similar to what is covered in lecture. **Late assignments are not accepted.** If you are going to miss the date it is due then e-mail it to the instructor so it is not late.

Online Discussions: For each discussion, you are required to post a minimum of 3 times: an initial post and two peer responses. You will not be able to see your peers' posts before submitting yours. You should focus on completing the discussions in the order that they are assigned. There is no length requirement for discussion posts, but they must fully address the given prompt. You are not required to provide citations from our textbook in your posts. **Late Discussions are not accepted.**

There is no extra credit available in the course.

## Examinations

Quizzes: Three quizzes covering material in previous class periods. I may use a combination of question styles such as multiple choice and short answer.

Exams: Three exams covering material in previous class periods. I may use a combination of question styles such as multiple choice and short answer.

No make-up exams will be given unless the instructor feels that the absence was justified. The student must arrange a make-up time for missed quizzes or exams with the instructor.

## Course Outline

Click on each week to view details about the activities scheduled for that week.

### Week 1: Introduction; Evolution; Population Genetics

#### Lecture

First meeting of week: Introduction; Evolution

Second meeting of week: Evolution and Population genetics

#### Reading Assignments

Chapters 18, 15, 16

### Week 2: Quiz One; Evolution; Natural Selection; Speciation; Taxonomy; Online Discussion

#### Lecture

First meeting of week: Quiz One; Evolution and Natural Selection

Second meeting of week: Speciation; Taxonomy

#### Quiz One

First meeting of week: Quiz One over all of week one material.

#### Online Discussion 1

For each discussion, you are required to post a minimum of 3 times: an initial post and two peer responses. You will not be able to see your peers' posts before submitting yours. Initial post is due by Friday; Responses to two classmates are due by Sunday. Late Discussions are not accepted.

#### Reading Assignments

Chapters 17, 19

## Week 3: Population Genetics Homework DUE; Microbiology; Plant Diversity

### Lecture

First meeting of week: Population Genetics Homework DUE; Microbiology

Second meeting of week: Microbiology

### Population Genetics Homework

First meeting of week: Population Genetics Homework DUE

### Reading Assignments

Chapters 20-22

## Week 4: Exam 1; Plant Diversity; Online Discussion

### Lecture

First meeting of week: Exam 1; Plant Diversity

Second meeting of week: Plant Diversity

### Exam 1

First meeting of week: Exam 1 over chapters 15-22 and all lecture material and activities.

### Online Discussion 2

Online Discussion: initial post completed by Friday and two peer responses completed by Sunday. Late Discussions are not accepted.

### Reading Assignments

Chapters 23, 27

## Week 5: Quiz Two; Animal Diversity

### Lecture

First meeting of week: Animal Diversity

Second meeting of week: Quiz Two; Animal Diversity

### Quiz 2

Second meeting of week: Quiz Two over plant diversity and first animal diversity lecture.

### Reading Assignments

Chapters 28-29

## Week 6: Animal Diversity; Exam 2; Population and Community Ecology; Online Discussion

### Lecture

First meeting of week: Animal Diversity

Second meeting of week: Exam 2; Population and Community Ecology

### Exam 2

Second meeting of week: Exam 2 over chapters 23, 27- 29 and all lecture material.

### Online Discussion 3

Online Discussion: initial post completed by Friday and two peer responses completed by Sunday. Late Discussions are not accepted.

### Reading Assignment

Chapter 44

## Week 7: Population and Community Ecology; Quiz Three; Ecosystem Organization and Energy Flow; Online Discussion

### Lecture

First meeting of week: Population and Community Ecology

Second meeting of week: Quiz Three; Ecosystem Organization and Energy Flow

### Quiz 3

Second meeting of week: Quiz Three over Population and Community Ecology

### Online Discussion 4

Online Discussion: initial post completed by Friday and two peer responses completed by Sunday. Late Discussions are not accepted.

### Reading Assignment

Chapter 45

## Week 8: Terrestrial and Aquatic ecosystems; Writing Assignment Due; Online Discussion; Exam 3

### Lecture

First meeting of week: Terrestrial and Aquatic ecosystems

Second meeting of week: Writing Assignment Due; Exam 3

### Online Discussion 5

Online Discussion: initial post completed by **Tuesday** and two peer responses completed by **Thursday**. Late Discussions are not accepted.

### Writing Assignment

Write a report on a topic approved by the instructor. The completed paper must be at least 4 pages in length using Times New Roman 12-point font and double-spacing. A minimum of three references are required, properly cited using either APA or MLA format. Submit the paper to the dropbox. Late writing assignments are not accepted.

### Exam 3

Second meeting of week: Exam 3 over chapters 44-46.

### Reading Assignment

Chapter 46

## + Additional Resources

Online databases are available at [library.ccis.edu](http://library.ccis.edu). You may access them using your CougarTrack login and password when prompted.

### Technical Support

If you have problems accessing the course or posting your assignments, contact your instructor, the Columbia College Technology Solutions Center, or the D2L Helpdesk for assistance. If you have technical problems with the VitalSource eText reader, please contact VitalSource. Contact information is also available within the online course environment.

- Columbia College Technology Solutions Center: [CCHelpDesk@ccis.edu](mailto:CCHelpDesk@ccis.edu), 800-231-2391 ex. 4357
- D2L Helpdesk: [helpdesk@d2l.com](mailto:helpdesk@d2l.com), 877-325-7778
- VitalSource: [support@vitalsource.com](mailto:support@vitalsource.com), 1-855-200-4146

### Online Tutoring

Smarthinking is a free online tutoring service available to all Columbia College students. Smarthinking provides real-time online tutoring and homework help for Math, English, and Writing. Smarthinking also provides access to live tutorials in writing and math, as well as a full range of study resources, including writing manuals, sample problems, and study skills manuals. You can access the service from wherever you have a connection to the Internet. I encourage you to take advantage of this free service provided by the college.

Access Smarthinking through CougarTrack at [Students -> Academics -> Resources](#).

## ! Columbia College Policies and Procedures

The policies set forth in the [Policy Library](#) are the current official versions of College policies and supersede and replace any

other existing or conflicting policies covering the same subject matter. For more information on policies applicable to students, see [Student Policies](#). For more information on policies applicable to the entire Columbia College community, see [College-Wide Policies](#).

Students are expected to read and abide by the College policies. Policies of particular interest to students include, but not limited to the following:

- Graduate Grading Policy
- Undergraduate Grading Policy
- Registration Policy and Procedures
- Withdrawal Policy
- Alcohol and Other Drugs Policy
- Family Educational Rights and Privacy Act (FERPA)

#### Additional Policies:

##### Academic Integrity and Plagiarism

Academic integrity is a cumulative process that begins with the first college learning opportunity. Students are responsible for knowing and abiding by the [Academic Integrity Policy and Procedures](#) and may not use ignorance of either as an excuse for academic misconduct. Additionally, all required papers may be submitted for textual similarity review to Turnitin.com for the detection of plagiarism. All submitted papers may be included in the Turnitin.com reference database for the purpose of detecting plagiarism. This service is subject to the Terms and Conditions of Use posted on the Turnitin.com site.

##### Disability Resources

If you have a disability that requires an accommodation, please speak with the instructor and consult the [Student Accessibility Resources](#) office. Student Accessibility Resources staff will determine appropriate accommodations and will work with your instructor to make sure these are available to you. To find additional information, see our [ADA and Section 504 Policy for Students](#).

##### Notice of Non-Discrimination and Equal Opportunity:

The College has a process through which students, faculty, staff and community members who have experienced or witnessed incidents of discrimination, harassment, or retaliation on the basis of protected status, can report their experiences to a College official. For more information, see our [Non-Discrimination and Equal Opportunity Policy and Complaint Resolution Procedure](#).

##### Title IX and Sexual Misconduct

The College is committed to addressing the issues of discrimination, harassment and sexual misconduct in the educational and workplace landscape and will continue to modify policies, procedures and prevention efforts as needed. For more information, see the College's [Title IX and Sexual Misconduct Policy](#).

#### Course Policies and Procedures:

##### Attendance Policy

Columbia College students are expected to attend all classes and laboratory periods for which they are enrolled.

For classes with an online component, attendance for a week includes submitting any assigned online activity. Assigned activities are scheduled prior to the course commencing. Assigned activity due dates are subject to change based on actual course progression and will be adjusted as necessary. Attendance for the week is based upon the date work is submitted. A class week is defined as the period of time between Monday and Sunday (except for week 8, when the work and the course will end at 11:59 PM Central Time on Saturday.) The course and system deadlines are based on the Central Time Zone.

Students are directly responsible to instructors for class attendance and work missed during an absence for any cause. If absences jeopardize progress in a course, the College reserves the right to drop or withdraw students from classes. For additional information, see the Administrative Withdrawal for Non-Attendance heading in the [Withdrawal Policy](#).

##### CougarMail

All students are provided a CougarMail account when they enroll in classes at Columbia College. You are responsible for monitoring email from that account for important messages from the College and from your instructor.

Students should use email for private messages to the instructor and other students. The class discussions are for public messages so the class members can each see what others have to say about any given topic and respond.

##### Late Assignment Policy

All classes rely on participation and a commitment to your instructor and your classmates to regularly engage in the reading, discussion and writing assignments. You must keep up with the schedule of reading and writing to successfully complete the class.

No late assignments will be accepted without the prior approval of the instructor.

Acceptance of a late assignment is at the discretion of the instructor.

Make-up examinations may be authorized for students who miss regularly-scheduled examinations due to circumstances beyond their control. Make-up examinations must be administered as soon as possible after the regularly scheduled examination period and must be administered in a controlled environment.

### Student Conduct

All Columbia College students, whether enrolled in a land-based or online course, are responsible for behaving in a manner consistent with Columbia College's **Student Conduct Code** and **Acceptable Computing Use Policy**. Students violating these policies or any other College policy will be referred to the office of Student Affairs and/or the office of Academic Affairs for possible disciplinary action. The Student Code of Conduct, the **Student Behavioral Misconduct Policy and Procedures**, and the Acceptable Computing Use Policy can be found in the Policy Library at [ccis.edu/policies](https://ccis.edu/policies). The adjunct faculty member maintains the right to manage a positive learning environment all students must adhere to the conventions of online etiquette when enrolled in a course with an online component.