



**SCOTTSDALE
COMMUNITY COLLEGE**

A MARICOPA COMMUNITY COLLEGE

Course Information

Semester & Year:	Spring 2024, First Eight Weeks Session
Course Title:	Environmental Biology
Course Prefix & Number:	BIO 105
Section Number:	15586/15588
Credit Hours:	4.0
Start Date:	Jan. 16, 2024
End Date:	Mar. 8, 2024
Room Number:	Online; weekly live meeting on WebEx (through Canvas page) and on your own time throughout the week
Meeting Days:	Tuesday
Meeting Times:	5:30 – 6:30 PM Arizona time

Course Format

The course format for this course is mostly On Your Time Online, but we will have a weekly meeting for 1 hour every Tuesday from 5:30 – 6:30 PM. The rest of the course will be on your own time. You will move through the course on a regular schedule, with assignments with specific due dates.

Instructor Information

Instructor:	Shannon Mullarkey
Email:	Shannon.mullarkey@scottsdalecc.edu
Phone:	480-246-1864
Office Location:	Online via WebEx: https://maricopa.webex.com/meet/smullarkey
Office Hours:	Available every day by appointment – email, call, or text and I am happy to arrange a time, even if last minute!

Course Description

Fundamentals of ecology and their relevance to human impact on natural ecosystems.

Prerequisites

None

Course Competencies

1. Analyze environmental information using the scientific method, statistics, and critical thinking.
2. Perform investigations and report the results.
3. Explain the concept of sustainability and its three interrelated components: ecological, economic, and social.
4. Describe how the environment, working through evolutionary processes, has produced the diversity of species on the Earth.
5. Discuss why biodiversity is essential for a healthy environment and how human activities affect biodiversity in both positive and negative ways.
6. Explain the concepts of biogeochemical cycling and energy flow through ecosystems.
7. Describe the methods used by ecologists to study populations, communities, and ecosystems.
8. Describe the effects of various agricultural practices on soil, water, biodiversity, and animal welfare.
9. Recommend ways to reduce the production of solid waste, water pollution, and air pollution.
10. Assess the impacts of human activities on water resources and aquatic systems.
11. Discuss how human population growth and resource consumption affect the environment.
12. Compare the advantages and disadvantages of various sources of nonrenewable and renewable energy.
13. Explain how humans contribute to global climate change and how climate change affects the earth's ecosystems.

Texts and Course Materials

All materials will be provided to students through Open Educational Resources (OER) free of charge. We will use two different free, online textbooks:

- OpenStax, Biology (2e), accessible as a PDF or online here: <https://openstax.org/books/biology-2e/pages/1-introduction>
- Environmental Biology by Mathew R. Fisher accessible here: <https://openoregon.pressbooks.pub/envirobiology/front-matter/introduction/>
- Several activities including videos and online labs are from [HHMI Biointeractive](#)

Course Technologies

View the [Accessibility Statements & Privacy Policies](#) of technologies used in this course.

Maricopa Systems

This course uses key Maricopa systems for course management and communication.

- Canvas Learning Management System
- Student Maricopa Gmail Account
- Maricopa Open Educational Resource Learning System (MOER)

Synchronous Communication Tools

Synchronous components of this class are optional, but will use Webex. Instructor office hours are through Webex or telephone.

Streaming Media/Audio/Video Tools

This course uses webcasting, lecture capture systems, YouTube, and/or other streaming media services.

- YouTube
- Films on Demand
- Potentially other free online or app-based sources

Student Assignment Tools

This course requires students to participate in or submit assignments using desktop or cloud-based applications.

- Google Products
- Microsoft Office 365
- Screencast-O-Matic

Plagiarism Checker Tool (Turnitin)

Turnitin is a plagiarism check tool that matches text to a vast database of sources including the internet, published works, commercial databases and student work submitted to Turnitin in institutions internationally. Students must submit designated papers to Turnitin when instructed. Information and instructions for Turnitin are provided in the course. For your reference, read the [Turnitin Terms of Service](#).

Course Policies

The following are policies specific to this course. Students are also responsible for the college policies included on the [Student Regulations](#) page of the Maricopa Community College District website.

Generative Artificial Intelligence (AI) Policy

Opening Statement Regarding Generative Artificial Intelligence (AI)

The World Economic Forum defines generative AI as “a category of artificial intelligence (AI) algorithms that generate new outputs based on the data they have been trained on. Unlike traditional AI systems that are designed to recognize patterns and make predictions, generative AI creates new content in the form of images, text, audio, and more.”

Some examples of generative AI tools include but are not limited to: ChatGPT, Google Bard, Microsoft Copilot, Stable Diffusion, GrammarlyGo, and Adobe Firefly.

No Generative Artificial Intelligence (AI) Allowed

In this class, all work submitted must be your own. The use of generative AI tools will be considered academic misconduct (see Administrative Regulation 2.3.11 1.B(b)) and will be treated as such. If you are unsure if the tool or website you are using is a generative AI tool, please contact the instructor for further clarification before using the tool or website.

Grading Standards & Practices

Grade Scale

Letter Grade	Points Range
A	90 – 100%
B	80 – 89%
C	70 – 79%
D	60 – 69%
F	0 – 59%

Assignments

Assignment Groups	Percent of Grade
Discussion boards	5%
Reading/content quizzes	30%
Weekly lecture assignments	20%
Lab assignments	30%
Midterm and Final Exams	15%
TOTAL:	100%

Response Time

Students can expect a response time of 24 hours for the instructor to respond to messages sent via the Canvas Learning Management System or email. Students can expect assignments to be graded within one week of the assignment's due date in most cases, if turned in on time. Written essays may take longer than one week, depending on the length of the assignment and complexity of the subject.

Attendance Policy

Attendance in an online class means that you are checking announcements and logging in to the class regularly, at least 3 days a week. Attendance at the weekly synchronous

WebEx meeting is mandatory, as we will discuss topics directly related to course competencies and I will provide guidance on the week's online lessons.

Late work policy – Late work can be submitted up to 1 week past the due date, except for exams. Late work may be subject to a deduction of 10%. Because of the fast pace of the course, work is not accepted beyond 1 week late. Contact the instructor for information about make-up work for illness or other excused absences.

Instructional Contact Hours (Seat Time)

The Higher Learning Commission has established the minimum amount of time expected for students to work on a class per credit hour. We are required to uphold these requirements to ensure we are compliant with federal rules for accreditation. For every 1 hour or credit, students should plan on 1 hour of “instruction” and 2 hours of homework weekly in a regular 15-week semester.

This is a four (4) credit-hour course on a highly condensed 8-week schedule. The policy translates to a **total of 180 hours required instruction and homework over the 8 weeks** of class – so the expectation is that **students will spend up to 22.5 hours per week** completing all activities in the class. Each student will manage differently, but the course was designed (by federal mandate) to reflect this amount of content and study each week. (We have no control over those mandates)

Online Tutoring

SCC's tutors are available online to help with your courses. You may work with an SCC tutor remotely using Google Meet, your phone, or email. Visit the [SCC Tutoring & Learning Centers](#) page for detailed information on the five learning center's hours and procedures.

As much as possible, it is highly recommended that you utilize SCC tutors since they are more familiar with SCC coursework, instructor expectations, and assignments; however, if you need to work with a tutor outside regular hours, online and hybrid students now have access to a 24/7 online tutoring service called Brainfuse. Brainfuse provides online tutoring in a variety of academic subjects. Each student may utilize up to 6 hours of online tutoring through Brainfuse per semester, and has the option of requesting additional time if needed.

To access Brainfuse and begin working with a tutor:

1. Visit the [SCC Online Tutoring Services Through Brainfuse](https://www.scottsdalecc.edu/students/tutoring/online-tutoring) page (<https://www.scottsdalecc.edu/students/tutoring/online-tutoring>)
2. Click the **Visit a tutor online** button
3. Enter your MEID and password
4. Choose your topic and subject
5. Click the **Connect** button

Please use your time effectively and be prepared with your questions before you connect to a tutor. Tutors and students communicate in real-time so whatever you type, draw, or share on the screen, the tutor sees, and vice versa. You may also want to have screenshots ready if applicable. All Brainfuse sessions are recorded for review later.

Learning Tools and Your Privacy and Security

SCC utilizes a variety of software applications and web-based tools operated by third party vendors to support student learning. To allow student access to the application, site or tool, certain identifiable information may be required to establish a user name or password, and submit work and/or download information from these tools. Inherent with all internet-based tools, there is a risk that individuals assume when electing to use these tools, as they may place information at risk of disclosure.

To use learning tools responsibly, please observe all laws and the Maricopa Community College District [Student Conduct Code](#), such as copyright infringement, plagiarism, harassment or interference with the underlying technical code of the software. As a student using a learning tool, you have certain rights. Any original work that you produce belongs to you as a matter of copyright law. You also have a right to the privacy of your educational records. Your contributions to learning tools constitute an educational record. By using the tool, and not taking other options available to you in this course equivalent to this assignment that would not be posted publicly on the internet, you consent to the collaborative use of this material as well as to the disclosure of it in this course and potentially for the use of future courses.

Students are responsible for the information contained in this syllabus, the Syllabus page in your Canvas course and the **College Policies & Student Services** page found in the First Steps module of your Canvas course. Students will be notified by the instructor of any changes in course requirements or policies.