

# Principles of Ecology

BIOL 203

Section 03: Tu/Th 12:30-1:45, Bailey 104

Section 04: Tu/Th 11:00-12:15, ISC 131

## Welcome!

We are so glad you are here. Together we will build a community where everyone has a chance to contribute the insights that come from their unique talents and experiences.

## What is this course about?

*We are living in a time of unprecedented environmental change, with far-reaching consequences.*

This class provides you with an opportunity to gain a foundation in the principles of ecology—knowledge and skills for you to contribute to a more sustainable society. But, our course is not just about ecology! This course is also about learning and practicing skills for upper-level course and also today's careers: communication, collaboration, critical thinking, and creativity. This course is deliberately designed to focus on your individual growth as a learner. Expect an opportunity to challenge yourself and be rewarded for your growth.

Finally, this course is also about developing a supportive and just community of learners. We are not only living in a time of unprecedented environmental change, but also a time of social activism. Racial, economic, and environmental injustice in US society have been and continue to be disproportionately greater for Black, Indigenous, and Latine communities. Be ready to journey with us as we learn from each other and discover what we can accomplish together.

## Land acknowledgement

Acknowledging the original occupants of the land upon which SUNY Geneseo resides is essential to our understanding of human interactions with the environment as well as an important reminder to honor and express gratitude to those who are the traditional stewards of the land. The location of our classroom is on the homeland of the Seneca Nation of Indians and Tonawanda Seneca Nation. We hope what you discover in this course will inspire you to learn more about these original

occupants and those indigenous to other places you have lived. Please check out the [Native Land app](#) and/or websites such as [sni.org](#) to learn more about the community of more than 7,000 enrolled Indigenous Peoples.

## Who will be helping you to learn?

**INSTRUCTOR:** Dr. Suann Yang (she/her)

**OFFICE:** ISC 256

**EMAIL:** [yang@geneseo.edu](mailto:yang@geneseo.edu) (preferred, or use Brightspace)

**PHONE:** 585-245-5311 (make sure to write this down somewhere as a backup!)

**DROP-IN HOURS (NO APPOINTMENT NECESSARY):** In person Tuesdays/Thursdays 2:30-3:30 PM (ISC 203) and online Fridays 1:30-2:20 PM ([Link to join, works best on a laptop with Chrome](#) or copy and paste <https://tinyurl.com/YangOfficeHours>)

**PEER LEARNING ASSISTANTS:** Anna Green (she/her, Biology & Sustainability Studies '24) and Abby Moziak (Biology & Sociomedical Science '24)

**DROP-IN HOURS:** Schedule available after the first week of classes

**YOUR FELLOW STUDENTS:** The Help Lounge is a series of public discussion forums on Brightspace where anyone can ask questions, and anyone who knows the answer can provide it. We can not only learn a lot from each other, we can also learn a lot by working with and teaching each other. After the first week of the semester, you will be assigned to a group for the collaborative assignments in the class.

## What will you learn?

I have designed this course to enable you to integrate multiple bodies of knowledge with your personal experience and apply what you have learned, in a learning community that values you and your growth.

### Course Learning Outcomes

We will work together to achieve these learning outcomes for Principles of Ecology:

1. Use unifying principles of ecology to explain how ecological systems work and how they relate to each other from local to global scales.
2. Apply ecological concepts to understand the interdependence of human activities and the environment, in the context of global change and conservation.
3. Practice and develop confidence in using important quantitative skills for ecology, especially for data visualizations, statistics, and models within the processes of scientific inquiry.
4. Apply fundamental science skills, such as solving problems, designing experiments, working in teams, and communicating about science to diverse audiences.
5. Cultivate a supportive learning community that fosters belonging and empowers all members.

## GLOBE Learning Outcomes

The learning outcomes of this course, listed above, support your progress toward the **GENESEO LEARNING OUTCOMES FOR A BACCALAUREATE EDUCATION (GLOBE)**, particularly Contemporary Global Challenges:

1. Students will understand how local and global systems depend upon one another
2. Students will apply global perspectives in addressing challenges and solving problems

## Biology Major Learning Outcomes

This course also helps you to work on these learning outcomes of the **BIOLOGY MAJOR**:

1. Students will have the knowledge base and intellectual (conceptual) framework to use reasoning and problem-solving skills to; (1) read critically, (2) evaluate support for competing hypotheses, and (3) critique experimental design.
  - *BIOL 203 emphasizes practice in applying knowledge to new situations.*
2. Students will have the laboratory and inquiry skills and technical ability to formulate hypotheses, design and run experiments using instruments to test their hypotheses, and analyze and interpret the results. They will be able to build on earlier work to design further experiments.
  - *BIOL 203 has many opportunities to analyze and interpret data from real experiments conducted by diverse scientists.*
3. Students will be able to communicate biological ideas from literature or their own laboratory investigations to audiences of biologists and non-biologists in a variety of formats including written reports, poster and oral presentations.
  - *BIOL 203 is designed with team learning activities, giving you practice with explaining ecological concepts to your peers.*
4. Students will recognize the importance of scientific integrity and ethical research and applications of biology to science policy. They will be able to work independently and in teams for life-long learning.
  - *BIOL 203 is motivated by the need to address global change and conservation of natural and human resources.*
5. Students will be able to demonstrate a broad and diverse background in biology and related sciences and a strong foundation for graduate and professional programs of study or employment.
  - *BIOL 203 hopes to foster your interest in the ecological systems that support life's diversity, including human society.*

## What do you need for this class?

I have designed this course to be as affordable as possible. Required materials for the class have no cost for Geneseo students.

### Required materials

1. Regular access to our course **Brightspace** site. You may be used to using Canvas for other courses; Brightspace is similar. Use our Brightspace site as the starting point for everything you need to do in the course. It will also be the primary mode of communication used by the instructional team to send you regular announcements and updates.
2. Reliable **Internet** access and a **laptop** that can run these **applications**:
  - a. R software (free download, <https://cran.r-project.org/>)
  - b. RStudio (free download, <https://posit.co/downloads/>). RStudio requires a 64-bit operating system.
  - c. Microsoft Excel (free to all Geneseo students, <https://wiki.geneseo.edu/display/cit/Software+at+Geneseo>)
  - d. We will be using several web-based programs, which will work best if your operating system is up-to-date.
3. Free **Top Hat account** for tutorials
  - a. Create an account at <https://app.tophat.com/register/>. Use your Geneseo email and G# when joining. If you have previously signed up for Top Hat with another email, you must change your Top Hat settings or you will not have access to our Top Hat tutorial materials. Geneseo has paid for our Top Hat access, and you should not purchase access independently (note: If you accidentally purchase Top Hat access, you cannot be reimbursed).
  - b. You can access the tutorials through Brightspace automatically, or use Join Code 243222. See also <https://success.tophat.com/s/article/Student-Getting-Started-with-Top-Hat>.
4. Free **Padlet account** for collaborative work and other activities
  - a. Please use this link to create a free account: <https://padlet.com/referrals/yang11>

### Recommended materials

1. Elements of Ecology by Thomas M. Smith and Robert Leo Smith, 9<sup>th</sup> edition or any you can get your hands on. Any format is acceptable: used, new, paperback, digital.
2. A Primer in Biological Data Analysis and Visualization Using R by Gregg Hartvigsen. When I can, I will provide page numbers from both the first and second editions, so you can purchase the either edition used.

## How will you know that you are learning?

### **LEARNING OPPORTUNITIES IN THIS COURSE CONSIST OF**

1. *Self-paced tutorials*
2. *Applied assignments*
3. *Unit tests, and*
4. *A suite of in-class and outside-of-class participation activities*

You will always receive feedback on your work to help you gauge your progress toward your desired level of success with our course goals (see previous section **WHAT WILL YOU LEARN?**). You will gain practice in evaluating your own work accurately—a key skill beyond college.

The learning opportunities in our course are designed so you can work on concrete tasks tied to specific concepts and skills. Deadlines are frequently and regularly distributed to help you to schedule your work. Some of this work will be collaboratively completed, while other work is for completing on your own.

The different levels of success in learning will always be communicated for all work that is assigned. While I, the instructor, designate some of these benchmarks, you will also develop criteria for demonstrating different levels of success. Likewise, while I will evaluate some of your work to determine your level of success (i.e., grading), you will also be responsible for analyzing your progress according to the standards of success that you establish. Thus, both you and I will share the important responsibility of accurately measuring how much you are learning in the class.

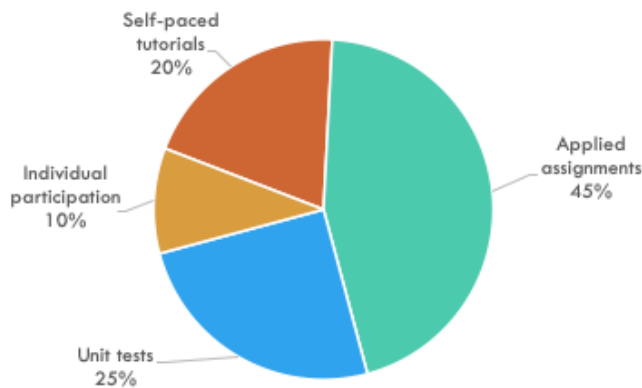
Because modern biology is collaborative and increasingly reliant on computational tools, we will be developing our teamwork and computing skills, in addition to other critical scientific inquiry skills such as communication, problem-solving, creativity, and resilience.

### **Grading scheme**

<b>Component</b>	<b>Percent</b>	<b>Graded by</b>	<b>Notes</b>
Self-paced tutorials	20	Dr. Yang	Independently completed, both inside and outside of class.
Applied assignments	45	Dr. Yang	Most are independently completed, and started during class time.
Unit tests	25	Dr. Yang and Peer Mentors	Independently and collaboratively completed during class time; 5 total
Individual participation	10	You!	Independently completed; evaluated at start of semester and at end of each unit; 6 total

Final course grades will be assigned as shown below:

A range	B range	C range	D and below
A 93.3 - 100%	B+ 86.6 - 89.99%	C+ 76.6 - 79.99%	D 60.0 - 69.99%
A- 90.0 - 93.29%	B 83.3 - 86.59%	C 73.3 - 76.59%	E <59.99%
	B- 80.0 - 83.29%	C- 70.0 - 73.29%	



The breakdown of your grade is shown in the graph on the left. The graph illustrates how applied assignments make up the bulk of your grade. Most of these assignments are completed on your own. Tests are one-fourth of your grade, and completed on your own and collaboratively. Both self-paced tutorials and your participation are completed individually, and together make up 30% of your grade.

## Components of your grade

The list below describes the components of your with a bit more detail, including how you will learn to evaluate your own work accurately.

1. **Tutorials** (independently completed, graded by me; 20%)
  - a. Tutorials can be found in Brightspace, and require a Top Hat account (see REQUIRED MATERIALS)
  - b. You are allowed to try multiple times until you achieve your desired score, graded on correctness.
  - c. Each tutorial has a specific deadline, to prepare you for doing an associated applied assignment.
2. **Applied assignments** (independently completed, graded by me; 45%)
  - a. Applied assignments can be found in Brightspace.
  - b. Applied assignments are graded after a single attempt for correctness.
  - c. Most applied assignments will have class time dedicated for you to work on them and get help from the instructor, peer mentors, and your fellow students. Each applied assignment has a specific deadline that gives you time to finish them outside of class if you need more time.
3. **Unit tests** (independently and collaboratively completed, graded by instructor and peer mentors; 25%)
  - a. The first four unit tests occur on the Tuesday or Thursday at the prior to the start of the next unit. The fifth one occurs during the final exam period.
  - b. Questions will be in both multiple choice and constructed response (including short essay, calculations, etc.) formats
  - c. For each test, you will first answer questions on your own. Then, you will immediately retake the test with your teammates. Working with your team will benefit you,

because a portion of your team effort will be added to your individual score, as follows:

- i. Your test score = your initial test points +  $\frac{1}{2}$  (team retake test points – your team's average initial test points)
  - ii. If the initial test points earned by each individual of a group is within 5% of the team's retake test points, the team benefit will three points (six times the maximum benefit that would be calculated as above).
- d. I assume that everyone intends to contribute their best effort! Note that if there is evidence that a student is not contributing fairly to the team effort, I could deny any student this team test benefit. In the event of an excused absence on a test date, group points on the make-up test will be determined by taking the average of group points over the whole semester.
4. Participation (independently completed, graded by you; 10%)
- a. Participation consists of:
    - i. Completing assignments in a timely fashion
    - ii. Contributing to your group's work
    - iii. Contributing to our learning community, through participating in class activities, creating collaborative learning resources, and being a resource and support to others
    - iv. Applying what you are learning to broader contexts
  - b. The number and types of activities needed for you to successfully participate is determined by you! Thus, the way that you will report how your level of engagement in the class meets our participation criteria is through unit performance reports. Generally, in your unit performance reports, you will list and describe your activities for the past unit, explain how they contribute to your learning and the learning of your peers, and justify the grade you should receive for your participation during the unit. Note that the questions to be answered in each unit's performance report may differ slightly, depending on the available participation activities. You can expect support and feedback from me to help you with this task.

This class follows the Biology Department practice of a limited timeframe for regrading of assignments or test questions, in the case of grading errors, discrepancies, or other similar issues. Please submit your request for regrading of an assignment or test question in writing (by email) within two weeks of receiving the grade. In this request, please include enough information for us to identify which item you'd like us to re-examine and your reason for this examination. You can use this [link in Brightspace](#) to email us with this request.



## What are our shared responsibilities to our learning community?

Students, the peer mentor, and the professor have communal responsibilities to our community, to promote learning, maintain a respectful environment, and prioritize our health and wellbeing. In our classroom, we are preparing you for not only other courses in the biology program, but also for your professional career.

### Our responsibilities to promote learning

- **Making space for everyone to contribute.** Scientific innovation arises from the insights of a diverse community. The unique talents, experiences, and contributions of each individual in our class are crucial and necessary. Be ready to learn from others and be willing to teach what you can in return. As in any learning endeavor, we naturally may make mistakes despite good intentions. Each person will do their best, and believe that others are doing their best, to learn from and correct mistakes that are harmful to others.
- **Attendance.** If there is an emergency or you are ill and risk infecting others, it is reasonable for you to miss a class. However, educational researchers conclude that class attendance is highly tied to success in a course. These findings are supported by new research on companies with employees that work from home vs. in person: collaborating with co-workers results in much more effective learning than working alone. Thus, class meeting times will be used to introduce ideas, check our understanding of what we learned in the self-paced tutorials, and to get live help while completing applied assignments. I have designed class in this way to try to anticipate any challenges posed by unexpected disruptions such as illness. If you need to miss a class meeting, please let me know as soon as possible so that we can discuss ways to keep you on track. If you are experiencing longer-term disruptions, please be proactive in communicating with me and contact the Dean of Students if you expect to be out for an extended period of time. If I need to cancel a class meeting because of an emergency, I will use Brightspace to inform you as soon as I can.
- **Preparation.** All members of our community – students, peer mentors, and professors – must come to class engaged and prepared for the day's work. Science is a process of discovery, and our willingness to engage in this process is critical for each person's success in this class. Be prepared to take an active role in learning the material and practicing new skills. The course is designed with a workload that is typical for 3 credit classes: about 9-10 hours per week. Each week's materials will be available to you no later than the previous Friday, and I will communicate with you and adjust deadlines if there are any unforeseen delays. For each class session, I may ask you to get started on a specific tutorials and/or applied assignments prior to class, so you are ready to engage in the work set out for that session. I will also use Brightspace to send you weekly announcements to remind you of the tasks to be completed each week. Please set your Brightspace preferences so that you can receive these messages through the format that is best for you (text, email, etc.)
- **Timeliness and deadlines.** Everyone should arrive a few minutes before class begins. This allows us to start on time. The professor will not cause students to be late for their next class, while students will work efficiently and carefully during class. Completing our work in a timely fashion is also a vital element for success. Posted deadlines and your own personal deadlines keep the work manageable in the context of all of your other courses, activities, and responsibilities.



Likewise, the instructional team will also strive to return feedback on assignments and tests within one week, to help you monitor your learning. If you discover that a due date might be a problem, you should contact me immediately with a proposed solution so that we can negotiate a timeline that works for us both.

### **Our responsibilities to maintain a respectful environment**

- **Commitment.** Everyone will dedicate ourselves to doing our best work within the circumstances that we're experiencing. At any time, there can be stressful situations that anyone in our community is managing. Thus, we should all try to promote an effective learning environment by minimizing distractions and designing a place to work that helps us to focus and stay on task. In addition, we should also try to help others to stay on task, especially during class sessions, or time we have scheduled to work with our teammates outside of class.
- **Communication.** Everyone is expected to check their email at least twice a day on weekdays, and use email, Brightspace, or other agreed upon methods to communicate with group members. Please make sure to set Brightspace notifications to send you emails with updates. Please also note that the instructional team follows the Biology Department practice of replying to your emails within one or two business days after you send the message. We'll typically respond to emails received after 5:00 PM during the next business day. If you do not hear from us within this time frame, please feel free to send us a reminder email.
- **Uphold the student code of conduct.** The Geneseo code of conduct asks all students to commit to behaviors so that all members of our community can fulfill the values of the college: Learning, Creativity, Belonging, Civic Engagement, and Sustainability. Academic dishonesty and behavior that physically or psychologically harms others will be reported to the corresponding authorities. Academic dishonesty includes providing false information (lying, making up data), cheating (seeking, receiving and/or offering unpermitted help) and plagiarism (representing work as your own when it was created by others, including AI such as ChatGPT). In addition, all materials used in this course, including lectures, slides, videos, and handouts, have specific licensing and copyright restrictions that identify how they can be used, distributed, and adapted. I would rather work with you to solve problems before they become issues of misconduct, so please come talk to me early and often. For full details of the Student Code of Conduct, please see the [Student Handbook](#).

### **Our responsibilities to prioritize health and well-being**

- The COVID-19 pandemic has disrupted our learning over the last few years and significantly changed many other aspects of our lives. I have designed this course keeping in mind these impacts that the pandemic may have had on our learning community. Please consider our communal responsibilities of prioritizing health and wellbeing, especially with extending grace to yourself and others, and being thoughtful about your own safety and that of others.
- College policy no longer requires that we all wear a face mask in instructional spaces and all common areas. Please feel free to continue wearing a face mask in crowded conditions where the risk of COVID transmission is high, such as classrooms, lecture halls, laboratory rooms, and residence halls. If you choose to wear a mask to protect yourself and others, remember that the mask needs to fit securely, covering your nose and mouth.

- The changes brought on by COVID-19 have impacted us all in a number of ways, and will continue to do so at various times and to varying degrees during the upcoming semester. Your health and wellbeing are foundational to your ability to learn, and if you find that you are feeling unwell (physically or mentally) and it is impacting your ability to complete your coursework, please reach out. Please remember that it's never too late to ask for help. The Dean of Students (585-245-5706, [Dean's website](#)) can assist and provide direction to appropriate campus resources. The college also has collected resources in a [Coping with COVID webpage](#).

## How else does this class support your success and well-being?

At Geneseo, we strive to support your academic success and well-being. This course works with and complements the resources available campus wide, such as support services, accessibility, mental health, diversity and inclusion policies, and much more. Links are available on Brightspace.

### Getting help with technology

We will be using computers in our class all the time. For everyday troubleshooting in the apps used the class, we have the instructor, peer mentor, and each other. For other assistance, CIT also provides a range of [technology support resources](#), including self help resources and options to request technology assistance. CIT also provides free access to over 7,500 online tutorials for software, digital tools, web development, programming, and design through [LinkedIn Learning](#).

### Library Research

Fraser Hall Library has an award-winning staff trained in finding the best information using library resources and advanced search strategies. Students may ask questions about using library services, locating materials, or conducting research projects. There is a librarian who specializes in the subject matter for each major. The librarian for the Biology Department is Sherry Larson-Rhodes; however, you are welcome to work with any of our knowledgeable librarians. Librarians meet with students through a variety of ways, including chat, email, and in-person and virtual one-on-one research consultations. Email [libraryhelp@geneseo.edu](mailto:libraryhelp@geneseo.edu) or visit their [online help desk](#).

### Accessibility

All course materials are available on Brightspace and I've made every attempt to ensure that they are accessible to everyone. If you have difficulties accessing any materials (including needs for alternative formats), please let me know as soon as possible and I will do my best to address the situation.

SUNY Geneseo is dedicated to providing an equitable and inclusive educational experience for all students. If you are experiencing any kind of barrier to learning opportunities, please know that there is support for you. The Office of Accessibility will coordinate accommodations, auxiliary aids, and/or services designed to ensure full participation and equal access to all academic programs, activities, and services at SUNY Geneseo. Please contact the Office of Accessibility Services for questions related to access and accommodations: Erwin Hall 22 or call (585) 245-5112 or email

[access@geneseo.edu](mailto:access@geneseo.edu). Visit the Office of Accessibility Services for more information  
[www.geneseo.edu/accessibility-services](http://www.geneseo.edu/accessibility-services)

- **Student responsibility:** Once your accommodations request has been approved or renewed (at the beginning of the semester or as soon as they have been established), please make an appointment with me (Dr. Yang) to discuss arrangements.
- **Instructor responsibility:** I am committed to working with you to figure out how to create a just learning environment while meeting the learning outcomes of the course. Unless you communicate otherwise, I will keep all accommodations confidential.

## Well-Being

Prioritizing well-being can support the achievement of academic goals and alleviate stress. Eating nutritious foods, getting enough sleep, exercising, avoiding drugs and alcohol, maintaining healthy relationships, and building in time to relax all help promote a healthy lifestyle and general well-being. Concerns about academic performance, health situations, family health and wellness (including the loss of a loved one), interpersonal relationships and commitments, and other factors can contribute to stress. I strongly encourage you to communicate any issues related to your well-being to me or other faculty and staff, and seek support before you experience unmanageable stress or have difficulty with daily functioning. Dr. Leonard Sancilio, Dean of Students (585-245-5706), can assist and provide direction to appropriate campus resources. For more information, see [www.geneseo.edu/dean\\_students](http://www.geneseo.edu/dean_students).

## Mental Health

I consider mental health to be no less important than physical health with respect to learning. As a student, you may experience a range of challenges that can impact your mental health and thus impact your learning; common examples include increased anxiety, shifts in mood, strained relationships, difficulties related to substance use, trouble concentrating, and lack of motivation, among many others. These experiences may reduce your ability to participate fully in daily activities and affect your academic performance. SUNY Geneseo offers free, confidential counseling for students at the Lauderdale Center for Student Health and Counseling (call 585-245-5716 to make an appointment), and seeking support for your mental health can be key to your success at college. You can learn more about the various mental health services available on campus at [health.geneseo.edu](http://health.geneseo.edu). **If you or a friend are feeling suicidal, are in mental health crisis, or need someone to talk to, call or text 988** for 24/7, confidential support to people in mental-health related distress.

## Food Security for SUNY Geneseo Students

There are resources available for students who are food insecure. If you're unfamiliar with the phrase "food insecurity," you can learn more at the following link on Feeding America's website: [Understanding Food Insecurity](#).

The Pantry at Geneseo, our on campus food pantry, works in partnership with the Geneseo-Groveland Emergency Food Pantry (GGEFP) and is facilitated by interns and volunteers working out of the Office of Student Volunteerism and Community Engagement as well as the School of Business, and the GOLD Leadership and Student Athlete Mentors programs.

Any student who is food insecure can submit a request here: [Food Pantry Request Form](#) to receive a bag of food that will provide them with items that will last a few days, including nonperishables and when available fresh fruits, vegetables, meat, and dairy. Once submitted, interns will connect directly with the student to communicate next steps and the time of your pick up. Pickups will take place in the MacVittie College Union, Room 114 - the GOLD Leadership Center.

This program will provide individuals with a bag of food up to once a month. We will do our utmost to ensure anonymity, while also working to destigmatize food insecurity in our community.

Students are also able to access the [Geneseo-Groveland Emergency Food Pantry](#) on their own if that is their preference. It is located at 31 Center St. and is open Tuesdays and Thursdays 10 AM - 2 PM and Wednesdays 4 - 6:30 PM.

If you have any questions about this process or anything relating to food insecurity, or have a need beyond what is outlined above, please refer to our website or contact us directly at [foodpantry@geneseo.edu](mailto:foodpantry@geneseo.edu) / 585-245-5893 or the Dean of Students at 585-245-5706.

### **Emergency Funding**

The college has three sources of emergency funding for students experiencing short-term financial crises. The [Camiolo Student Emergency Loan Fund \(SELF\)](#) provides short-term loans to students for situations both temporary and beyond their control. The SELF was established with the expectation that students who use the fund seek to "pay it forward" as soon as they are able by contributing to the fund so other students can be helped, too. While there is not a legal obligation, the donors hope that student loan recipients respect and honor the value of community and helping others in their time of crisis. The [One Knight Student Aid Emergency Fund](#) assists Geneseo students who are facing financial emergencies mainly related to the COVID-19 pandemic. The fund offers grants (one-time award) depending on a student's documented financial need. For those students expecting a refund from financial aid, a Temple Hill loan of up to \$500 can be offered prior to the approved loan dispersal. If you are experiencing financial hardship, please contact the Dean of Students (585-245-5706), who can assist and provide direction to appropriate campus resources.

### **Religious Observances and Class Attendance/Deadlines**

If you anticipate an absence or conflict with an assignment deadline due to religious observances, please contact me as early in the semester as possible to make alternative arrangements for those days that you'll miss. Student attendance in classes on religious holidays is governed by New York State Education Law 224-a. See [calendar of major religious observances](#).

## **Military Obligations and Class Attendance**

Federal and New York State law requires institutions of higher education to provide an excused leave of absence from classes without penalty to students enrolled in the National Guard or armed forces reserves who are called to active duty. If you are called to active military duty and need to miss classes, please let me know and consult as soon as possible with the Dean of Students.

## **Bias-Related Incidents**

“We are here to listen, to learn, to teach, to debate, to change, to grow. We should all be safe to pursue these goals at SUNY Geneseo while being who we are. Together, we commit ourselves to pluralism, cultivating a community that respects difference and promotes a sense of inclusion and belonging.” As this excerpt from our Community Commitment to Diversity, Equity, and Inclusion states, here at SUNY Geneseo, we want to provide a space where everyone feels welcome to learn and grow in their identities as well as in their role as students, faculty, and staff. If in the unfortunate instance you experience an incident of bias, we encourage you to reach out to the Chief Diversity Officer ([routenberg@geneseo.edu](mailto:routenberg@geneseo.edu)) and/or our University Police Department. In trying to create an environment that facilitates growth through diverse thoughts and ideas, reporting incidents of bias - including threats, vandalism, and microaggressive behaviors - can help bring a better understanding of our campus climate as well as provide opportunities for learning and restoring harm. For ideas, questions, or concerns related to diversity, equity, and inclusion in the Biology Department, please reach out to [bio-diversity@geneseo.edu](mailto:bio-diversity@geneseo.edu).

## Schedule

All of the concepts and skills we learn in the course are organized into five units, each addressing a major environmental issue. All unit assignments (tutorials and applied assignments) will be posted on Brightspace along with their due dates on a weekly basis. Class meeting times will be used to introduce ideas, check our understanding of what we learned in the self-paced tutorials, and to get live help while you are working on applied assignments.

### 1. Global change (August 28-September 19)

*What are the past and current changes in the earth system, and how does this affect ecological systems?*

**TOPICS:** course format, components, expectations, and regularly used tools; ecological inquiry, biological diversity, biomes, microevolution, climates and climate change

**NO CLASS** on Labor Day

**UNIT TEST** on Tuesday, September 19

### 2. Alien invaders (September 19-October 12)

*Why do some species become established in new locations, and why is this problematic?*

**TOPICS:** life history, population dynamics, competition, landscape dynamics, decomposition and nutrient cycling

**NO CLASS** on Tuesday October 10 (Fall Break)

**UNIT TEST** on Thursday, October 12

### 3. Omnivore's dilemma (October 12-October 31)

*What should we eat, and why? Simple question, complex answers*

**TOPICS:** plant and animal adaptations to terrestrial and aquatic environments, decomposition and nutrient cycling (cont'd), food webs, ecosystem energetics, sustainability

**UNIT TEST** on Tuesday, October 31

#### 4. Pollinator crisis (October 31-November 21)

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*Why are pollinators in decline, and why should we worry about them?*

**TOPICS:** mutualism, predation, competition (cont'd), behavior, landscape dynamics (cont'd), biological diversity (cont'd)

**UNIT TEST** on Tuesday, November 21 (this date is the Tuesday before Thanksgiving Break)

#### 5. Restoration and rewilding (November 21-December 11)

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*How can ecological restoration meet global development goals?*

**TOPICS:** life history (cont'd), population dynamics (cont'd), community dynamics and structure, landscape dynamics (cont'd)

**NO CLASS** on Thursday, November 23 (Thanksgiving Break)

**UNIT TEST** during Final Exam Period

- Section 203-03: Tuesday, December 19, 12:00-2:30 PM
- Section 203-04: Monday, December 18, 8:00-10:30 AM