# [BIOL 1801] Ecology: Theory & Practice



A river with a waterfall lies between two tree covered-cliffs in Yellowstone National Park. The sun peaks over one of the cliffs. (NPS / Jacob W. Frank)

**Dates:** June 2–July 25, 2025

**Location:** Students will participate in the course using Georgetown University's online learning management system called Canvas. To learn more about Canvas, please go through the Canvas Guide for Students.

**Professor:** Dr. Alexandra L. DeCandia

Professor Contact Information: ald86@georgetown.edu

**Virtual Office Hours:** Office Hours – TBD & by appointment

**Prerequisites:** Foundations in Biology II (BIOL 1204/1214) or equivalent

**Requirements:** This course CANNOT be taken with the 4-credit Ecology (BIOL 1800) lab course. Further, this course does NOT count towards the Environmental Biology major "Ecology" requirement, nor the Biology major "Populations" requirement. This course DOES count as a Biology of Global Health elective in the "Ecology and Evolution" cluster. Students in non-Biology majors are also welcome to register.

# **Course Description**

Welcome to Ecology: Theory and Practice! In this asynchronous online summer course, we will study the interactions between organisms and their environment across multiple ecological scales, including populations, communities, and ecosystems. In the first two modules, we'll focus on the Physical Environment by surveying earth's terrestrial and aquatic environments, the physical forces that shape them, and the dynamics of energy and **nutrient flow**. In the next three modules, we'll focus on Organisms and Populations by considering evolutionary and behavioral ecology, exploring the qualitative and quantitative dynamics of **population growth and fluctuations**, and surveying a broad range of **interspecies interactions**. In the final three modules, we'll focus on Communities and Ecosystems by quantifying species diversity and community structure, considering community change through time, and discussing ways to address contemporary ecological challenges. Throughout each module, we will explore numerous case studies of interest, practice **communicating science** to diverse audiences, and **engage with the natural world** by spending time in local natural spaces. Each of these activities is central to exploration and discovery in ecology, and will provide opportunities for students to observe, understand, and ultimately aim to protect the natural world and its marvelously diverse array of habitats and species.

## **Departmental Learning Goals**

The faculty in the Department of Biology have a deep interest in developing new and using the best practices of biology pedagogy. We have developed a set of department-wide learning goals describing fundamental concepts in biology as well as developing insight into the process and product of biological science. The Biology Department learning goals **emphasized in this course** include:

- Integration of new knowledge into existing scientific frameworks
  - Ability to **interpret/critique** scientific text, primary literature and presentations
  - o Ability to **speculate** on meanings of scientific data and possible future directions
  - Ability to **place** (**relate**) biology into other scientific disciplines
- Engagement with scientific inquiry
  - Ability to evaluate the significance and context of the area of investigation
  - Ability to use texts, primary literature, presentations and mathematical models to stimulate questioning and develop scientific hypotheses
- Representing and interpreting data in quantitative and statistically meaningful forms
  - Ability to **distinguish** between and work rigorously with qualitative and quantitative data
- Communicating scientific understanding in oral and written forms
  - Ability to communicate scientific understanding to both scientific and general audiences
  - Ability to present scientific ideas arguing from evidence
  - Ability to write and speak precisely
  - Ability to **stimulate interest** of the audience

- Appreciating the epistemology of science
  - Ability to **understand** how scientific principles are applied to interpret new data
  - Ability to **understand** the limitations of methodologies as they affect the interpretation of data
  - Ability to understand the biological basis of scientific debate and the role of probability (certainty and uncertainty) in science
  - Ability to **appreciate and participate** in a scientific community as a forum for scientific thinking, research, debate and progress
- Organization of molecular, cellular, organismal and ecological systems
  - **Understand** the hierarchy of biological organizations (e.g., individual, population, community, ecosystem)
  - Understand behavior of molecules, cells, organisms
- The origins and evolution of biological systems
  - o **Understand** evidence for evolution and natural selection
  - Understand the mechanisms of evolution and their actions at the molecular, developmental and phenotypic levels
  - Understand variation and evolution
- The flow of energy and matter in biological systems
  - Understand the mechanisms of harvesting energy from organic and inorganic sources
  - Understand food webs, biogeochemical cycles (e.g., nitrogen and carbon cycles)
- Interdependence and interactions within biological systems and their emergent properties
  - **Understand** the interactions between genetic and environmental factors leading to emergent properties of phenotypes
  - **Understand** the plasticity of biological systems (e.g., learning, behavior)
  - Understand the intercellular and inter-organismal communications and interactions
  - Understand how population and species interactions lead to the organization of ecological communities

## **Course Learning Objectives**

By the end of this course, you should be able to:

- 1. Explain how physical factors influence the distribution of life on earth. Students will explain how the physical environment more specifically, temperature, precipitation, light, and nutrient availability influence the structure and function of terrestrial and aquatic environments and drive energy production and flow through ecosystems.
- 2. Synthesize concepts from organismal through population ecology to explain the origin and diversification of life and dynamic population trends through space and time. Students will synthesize concepts from evolutionary, behavioral, and population ecology to explain the long-term evolutionary trajectories of species and the more ephemeral dynamics of populations from both qualitative and quantitative angles.

- 3. Evaluate the impact of diverse interspecies interactions on community structure and ecosystem stability, including biodiversity and ecosystem functions. Students will evaluate how different types of interspecies interactions contribute to the structure and stability of ecological communities. They will assess the consequences of these interactions for the species directly involved as well as larger-scale patterns of biodiversity, ecosystem functioning, and community dynamics.
- **4. Proposed evidence-based solutions supported by ecological theory to real-world environmental challenges.** By the end of the course, students will draw upon the ecological principles discussed in each module in order to address contemporary environmental challenges, such as habitat destruction, climate change, and biodiversity loss, by proposing scientifically-informed solutions to anthropogenically-mediated problems.

## **Course Materials**

The required text for this course is Ecology (6th Edition) by William D. Bowman and Sally D. Hacker (ISBN: 9780197614044). The 6th Edition is available in print and online through Oxford Learning Link (which provides additional resources). As Ecology editions 3, 4, 5, and 6 are largely the same, you can opt for an older edition of the text. However, if you do so, be sure to reference the Canvas document that aligns chapter numbers across editions. Any additional readings from outside this text will be made available through Canvas. Course readings are meant to complement – and not replace – lecture material. Therefore, I highly recommend that you stay up to date with all readings. Some students benefit from doing the reading before lecture as a primer for topics covered; others benefit from doing the reading after lecture to reinforce concepts covered.

# Course Assignments & Grading Criteria

## **Graded Assignments**

## Office Hour Attendance

Students are required to attend office hours at least two times over the course of the summer session. These conversations can center around course content, case studies, activity reports, ecology in the news, etc. and are meant to facilitate communication between students and the course instructor.

## Activity Reports and Responses

Students are required to complete an activity and interact with the course discussion board every other module. In Modules 1 and 5, they must upload short videos where they (1) argue why their assigned biome or aquatic environment should receive conservation funding and (5) describe an interspecies interaction of their choice as a case study from the primary scientific literature. In Modules 3 and 7, they must engage in (3) behavioral observation of a species of their choice and (7) complete a "local ecology bioblitz" that catalogues species in their area. These activities encourage students to engage with the scientific literature and the natural world,

while also practicing effective science communication with scientific and non-scientific audiences. In addition to contributing their videos/reflections, students must comment on other students' contributions in order to facilitate active engagement with our class-wide community.

#### Knowledge Check Quizzes

Each lecture will be followed by a short "knowledge check quiz" that encourages students to assess their understanding of course material covered in that lecture. These low-stakes assignments provide a bank of practice questions for the four course exams. The lowest score will be dropped.

#### Course Exams

Each pair of modules will culminate in an exam that tests students' knowledge of the material presented in the previous two modules. Exams will consist of variable question formats that test knowledge of key terms and concepts, use of quantitative formulas and tools, and the ability to apply knowledge to novel case studies presented as short-answer prompts.

## **Grading Scheme**

Assessment	Points	Percent of Grade
Student Survey & Introductory Discussion Post Video	10	3.125%
Office Hour Attendance (2)	10	3.125%
Activity Videos/Reports	80	25.000%
Activity Responses	20	6.250%
Knowledge Check Quizzes (21, drop lowest score)	60	18.750%
Four Exams (non-cumulative)  • Modules 1-2 Exam  • Modules 3-4 Exam  • Modules 5-6 Exam  • Modules 7-8 Exam	140	43.750%
TOTAL POINTS	320	100.000%

#### Final Course Grade and Regrade Policy

Course grades will follow the percentages listed in the table below. I do not honor requests to alter or round grades at the end of the semester out of fairness to other students. During the semester, regrade requests must be made within one week of assignments being returned and will consist of the entire assignment being re-evaluated by the course instructor.

A	93.000-100.000%	C+	77.000-79.999%
A-	90.000-92.999%	С	73.000-76.999%
B+	87.000-89.999%	C-	70.000-72.999%
В	83.000-86.999%	D+	67.000-69.999%
B-	80.000-82.999%	D	60.000-66.999%
		F	<60.000%

## **Course Schedule**

## MODULE 1: June 2, 2025 - June 8, 2025

#### **Introduction to Ecology and Earth's Environmental Contexts**

In our first module, we'll set the stage for our exploration into the theory and practice of ecology. You'll meet the ecological scales that we'll traverse throughout the course, and consider the three overarching approaches that ecologists use to address questions of interest. You'll also begin engaging with earth's physical environment by learning about the forces driving global and regional climate patterns. Together, we'll connect these patterns to the distribution and defining characteristics of earth's distinct terrestrial biomes and aquatic environments. This module will culminate in our first activity.

#### **Topics**

- 1. Introduction to Ecology
- 2. Global and Regional Climate
- 3. Terrestrial Biomes
- 4. Aquatic Environments

#### Module Objectives

- **Define** ecology
- Consider human impacts on planet earth
- **Describe** the different levels of ecological organization, from individuals through the entire biosphere
- **Differentiate** between the three main categories of ecological research and cite examples of each

- **Describe** how solar radiation & atmospheric circulation cells influence global patterns of temperature and precipitation; and how ocean currents, the distribution of land and water, elevation, and vegetation shape regional climate patterns
- **Engage** in thoughtful discourse about the primary threats facing each of earth's nine terrestrial biomes and ten aquatic environments

#### Readings & Resources

- Bowman, W. D., & Hacker, S. D. (2023). Chapter 1. In Ecology (6th ed.)
- Bowman, W. D., & Hacker, S. D. (2023). Chapter 2. In Ecology (6th ed.).
- Bowman, W. D., & Hacker, S. D. (2023). Chapter 3.1. In Ecology (6th ed.).
- Bowman, W. D., & Hacker, S. D. (2023). Chapter 3.2-3.3. In Ecology (6th ed.).

#### Activities and Assessments

- Knowledge Check Quizzes for Lectures [01], [02], [03], [04]
- Battle of the Biomes Video and Responses

#### MODULE 2: June 9, 2025 - June 15, 2025

#### **Energy Production & Flow**

In this module, we will continue our discussion of the physical environment by learning about how photosynthetic (and chemosynthetic) organisms produce energy, and how that energy flows through ecosystems. This module will culminate in our first exam and will cover content from the modules 1 and 2.

#### **Topics**

- 5. Energy Acquisition and Production
- 6. Energy Flow
- 7. Exam o1

#### Module Objectives

- Order the steps involved in energy production by chemosynthetic and photosynthetic organisms
- **Describe** the differences, benefits, and trade-offs associated with different photosynthetic pathways (C<sub>3</sub>, C<sub>4</sub>, and CAM)
- **Differentiate** between gross primary production, net primary production, and net ecosystem exchange, considering scale energy production and acquisition to the ecosystem level
- **Reconstruct** energy and biomass trophic pyramids, while understanding each component of trophic efficiency (consumption, assimilation, and production)
- Interpret food webs, considering whether food web complexity leads to food web stability

#### Readings & Resources

- Bowman, W. D., & Hacker, S. D. (2023). Chapter 5. In Ecology (6th ed.)
- Bowman, W. D., & Hacker, S. D. (2023). Chapter 20. In Ecology (6th ed.)
- Bowman, W. D., & Hacker, S. D. (2023). Chapter 21. In Ecology (6th ed.)



#### Activities and Assessments

- Knowledge Check Quizzes for Lectures [05], [06]
- Exam 01

## MODULE 3: June 16, 2025 - June 22, 2025

#### **Evolution & Behavior**

In this module, we will engage with organisms and populations by considering the evolutionary origin and diversification of species, digging into behavioral ecology, and understanding the spatial arrangement of organisms and populations on the landscape as we learn about distribution and abundance. This module will culminate in our second activity.

#### **Topics**

- 8. Evolutionary Ecology
- 9. Behavioral Ecology
- 10. Distribution & Abundance

#### Module Objectives

- **Describe** four mechanisms of evolution (i.e., mutation, natural selection, genetic drift, and gene flow)
- Consider how the dual processes of speciation and extinction shape the diversity of life on earth
- **Consider** the ecological and evolutionary basis of animal behavior, primarily focusing on foraging ecology, mating behavior, and group living
- **Describe** key concepts in population ecology, including population size, density, distribution, abundance, and the methods used to measure abundance
- **Analyze** the factors influencing species distribution and abundance, including habitat suitability, historical factors, dispersal, and **describe** the relationship between populations, metapopulations, and geographic ranges

#### Readings & Resources

- Bowman, W. D., & Hacker, S. D. (2023). Chapter 6. In Ecology (6th ed.)
- Bowman, W. D., & Hacker, S. D. (2023). Chapter 8. In Ecology (6th ed.)
- Bowman, W. D., & Hacker, S. D. (2023). Chapter 9. In Ecology (6th ed.)

#### Activities and Assessments

- Knowledge Check Quizzes for Lectures [08], [09], [10]
- Behavioral Observations Activity and Responses

## MODULE 4: June 23, 2025 - June 29, 2025

#### **Population Dynamics**

In this module, we will continue our discussion of populations by considering their changes through time. More specifically, we will explore qualitative and quantitative models of population dynamics. This module will culminate in our second exam and will cover content from modules 3 and 4.

#### **Topics**

- 11. Qualitative Population Dynamics
- 12. Quantitative Population Dynamics
- 13. Exam 02

#### Module Objectives

- **Qualitatively describe** four patterns of population growth (i.e., exponential growth, logistic growth, population fluctuations, and regular population cycles)
- **Explain** how population fluctuations, small population size, genetic factors, demographic stochasticity, and environmental stochasticity contribute to extinction risk
- **Implement** mathematical models and **interpret** graphical representations of three population growth patterns (i.e., geometric, exponential, and logistic)
- Differentiate between density independent and density dependent factors, and describe how each type of factor affects population size and growth rate

#### Readings & Resources

- Bowman, W. D., & Hacker, S. D. (2023). Chapter 10. In Ecology (6th ed.)
- Bowman, W. D., & Hacker, S. D. (2023). Chapter 11. In Ecology (6th ed.)

#### Activities and Assessments

- Knowledge Check Quizzes for Lectures [11], [12]
- Exam 02

## MODULE 5: June 30, 2025 - July 6, 2025

#### **Interspecies Interactions**

In this module, we will consider a diverse array of interspecies interactions, ranging from mutually harmful to mutually beneficial and everything in between. More specifically, we will cover quantitative models and qualitative case studies of competition (-/-), predation (-/+), parasitism (-/+), commensalism (0/+), and mutualism (+/+). This module will culminate in our third activity.

#### **Topics**

- 14. Lotka-Volterra Competition Models
- 15. Predation & Parasitism
- 16. Mutualism & Commensalism

#### Module Objectives

- **Apply** Lotka-Volterra competition models to predict whether the outcome of competition will be competitive exclusion or coexistence
- **Enumerate** adaptations that enable predators to more effectively capture prey and allow prey to escape or reduce predation risk
- **Differentiate** between ectoparasites and endoparasites, and enumerate the benefits and drawbacks of each strategy
- **Justify** why mutualisms are not altruistic, considering how the balance of costs and benefits shapes the nature of interspecies interactions

• **Describe** how competition, predation, parasitism, commensalism, and mutualism can alter communities

#### Readings & Resources

- Bowman, W. D., & Hacker, S. D. (2023). Chapter 14. In Ecology (6th ed.)
- Bowman, W. D., & Hacker, S. D. (2023). Chapter 12. In Ecology (6th ed.)
- Bowman, W. D., & Hacker, S. D. (2023). Chapter 13. In Ecology (6th ed.)
- Bowman, W. D., & Hacker, S. D. (2023). Chapter 15. In Ecology (6th ed.)

#### Activities and Assessments

- Knowledge Check Quizzes for Lectures [14], [15], [16]
- Interspecies Interaction Case Study Video and Responses

## MODULE 6: July 7, 2025 - July 13, 2025

#### **Community Ecology**

In this module, we will scale up our discussion of ecological principles to the community and ecosystem levels. More specifically, we will gain an introduction to community ecology and the way communities change through time. This module will culminate in our third exam and will cover content from modules 5 and 6.

#### **Topics**

- 17. Communities
- 18. Community Change
- 19. Exam 03

#### Module Objectives

- **Describe** the two primary approaches that ecologists use to define communities (i.e., by physical or biological characteristics)
- **Quantify** species diversity (alpha diversity) and composition (beta diversity), using a diversity of metrics (richness, evenness, Shannon index, Jaccard index, and Bray-Curtis dissimilarity)
- **Identify** abiotic and biotic agents of change (including disturbance and stress), and **describe** how disturbance intensity, frequency, and extent influence the tempo of succession in communities
- **Define** alternative stable states and **describe** how human activities have caused regime shifts that may or may not be reversible

#### Readings & Resources

- Bowman, W. D., & Hacker, S. D. (2023). Chapter 16. In Ecology (6th ed.)
- Bowman, W. D., & Hacker, S. D. (2023). Chapter 17. In Ecology (6th ed.)

#### Activities and Assessments

- Knowledge Check Quizzes for Lectures [17], [18]
- Exam o3

## MODULE 7: July 14, 2025 - July 20, 2025

#### **Biodiversity & Conservation**

In this module, we will consider the drivers of species diversity across diverse temporal (geologic vs. shorter-term) and spatial (global vs. local) scales. We will then enumerate drivers of species decline and describe conservation approaches that can mitigate anthropogenic stressors. This module will culminate in our fourth activity.

#### **Topics**

- 20. Biogeography
- 21. Species Diversity
- 22. Conservation Biology

#### Module Objectives

- **Explain** how patterns of species diversity and composition are connected across different spatial scales
- **Describe** the equilibrium theory of biogeography and how it applies to different types of "island communities"
- **Evaluate** how regional species pools, environmental conditions, and species interactions shape species diversity in local communities
- **Compare** the three hypotheses (i.e., complementarity, redundancy, and idiosyncratic) that seek to explain the relationship between species diversity and community function
- **Describe** the primary threats to biodiversity (i.e., habitat modification, invasive species, overexploitation, pollution, disease, and climate change)
- **Describe** how genetic techniques, demographic models, and ex situ conservation efforts can mitigate biodiversity loss (citing examples of each)

#### Readings & Resources

- Bowman, W. D., & Hacker, S. D. (2023). Chapter 18. In Ecology (6th ed.)
- Bowman, W. D., & Hacker, S. D. (2023). Chapter 19. In Ecology (6th ed.)
- Bowman, W. D., & Hacker, S. D. (2023). Chapter 23. In Ecology (6th ed.)

#### Activities and Assessments

- Knowledge Check Quizzes for Lectures [20], [21], [22]
- Local Ecology BioBlitz Activity and Responses

## MODULE 8: July 21, 2025 - July 25, 2025

## **Landscape & Global Change Ecology**

In our final module, we will scale up our discussion of anthropogenic stressors and mitigation/adaptation approaches to the landscape and biosphere levels. More specifically, we will gain an introduction to landscape ecology and global climate change ecology. This module will culminate in our fourth exam and will cover content from modules 7 and 8.

#### **Topics**

- 23. Landscape Ecology
- 24. Global Climate Change Ecology



#### Module Objectives

25. Exam 04

- **Enumerate** the effects of habitat fragmentation (i.e., biological impoverishment, edge effects, and altered evolutionary processes) on landscapes
- **Apply** best practices for designing nature reserves, and evaluate how collaborative ecosystem management can lead to better solutions than adopting strictly science-based decisions
- **Define** global biogeochemical cycles and understand the key components (i.e., pools and fluxes) of the nitrogen and carbon cycles
- **Enumerate** the negative effects of anthropogenic nitrogen and carbon fluxes on the biosphere
- Differentiate between climate change mitigation and adaptation strategies.

#### Readings & Resources

- Bowman, W. D., & Hacker, S. D. (2023). Chapter 24. In Ecology (6th ed.)
- Bowman, W. D., & Hacker, S. D. (2023). Chapter 25. In Ecology (6th ed.)

#### Activities and Assessments

- Knowledge Check Quizzes for Lectures [23], [24]
- Exam 04

# **Information About Tools & Technical Requirements**

In this course we will use the following tools:

- Canvas
- Zoom

# Course Policies & Expectations

#### **Attendance & Deadlines**

This course is entirely ONLINE and ASYNCHRONOUS. As such, we will not meet in person. All materials will be made available through the course Canvas page, where I will provide timely feedback on submitted assignments. While you are not required to follow the schedule outlined at the end of this syllabus when viewing lectures and completing activities, all assignments will be due by 11:59pm ET on the dates listed. If you are unable to complete work by the assigned due date due to a health-related reason, religious holiday, University-sanctioned activity, or documented family or medical emergency, please email me as soon as possible. Allowances will be made for the exceptions listed above if they are properly documented and brought to my attention well before the deadline. Outside of these exceptions, assignments submitted late to Canvas will lose 1 point every 24 hours and will not be accepted after one week. I do not accept

excuses for late or missing work resulting from computer crashes, lost files, or inability to access Canvas or other Internet resources.

#### **Student Expectations**

You are expected to complete all readings, assignments, and activities on time. Participation is essential to your success in this class. You are expected to actively participate in Canvas discussions with your peers, and contribute to all activity assignments. It is important to subscribe to the course discussion boards so that you receive notifications when new messages are posted. In order to get full credit for participation, you will have to complete all of your module assignments and quizzes on time.

#### **Time Expectations**

Students should plan on spending approximately 6-9 hours a week on assignments, readings, projects, etc. in addition to the 2.5 hours of instructional time.

#### **Communication Expectations**

Building an inclusive climate of mutual respect and inquiry in this class:

I respect your right to be called whatever you want to be called, because I understand that for all of us, social recognition of our sense of self is key to our own integrity and flourishing. I expect everyone in the class to do the same. In particular, if you would like to be called by a specific set of pronouns or name that might not be obvious from your official school records, please let me know in any way that makes you comfortable.

Georgetown's Trans, Non-Binary, and Gender Non-Conforming Resource Guide: <a href="https://lgbtq.georgetown.edu/resources/transatgu/">https://lgbtq.georgetown.edu/resources/transatgu/</a>

#### Communication with Peers

You will be expected to engage with your peers via the discussion board and other required tools on a regular basis.

#### Communication with Professor

Please feel free to email me with your questions and concerns, and/or to schedule a time to meet over Zoom. When sending emails please remember to follow the guidelines outlined below.

If you have general questions about assignments and course materials please post these questions in the <u>General Question Discussion Board Forum</u>, which you can access by clicking Discussions in the course navigation menu. This is an open forum, and you are encouraged to give answers and help each other.

- *Check the syllabus*. Before sending your email or message, be sure that your question has not already been addressed in the syllabus or announcements.
- *Be patient*. If you have a concern and send me a message, you can expect a response within 3 business days. Please allow 5 business days for assessment submission feedback.
- Specify subject. The subject line should include the topic of the message and class title.
- *Greet & Close*. E-mails should begin with a formal greeting and end with you signing your name in all messages/emails.
- Check writing. Proofread (i.e., grammar and spelling) your message before sending.

## Netiquette Guidelines

To promote the highest degree of education possible, we ask each student to respect the opinions and thoughts of other students and be courteous in the way that you choose to express yourself. Students should be respectful and considerate of all opinions.

In order for us to have meaningful discussions, we must learn to genuinely try to understand what others are saying and be open-minded about others' opinions. If you want to persuade someone to see things differently, it is much more effective to do so in a polite, non-threatening way rather than to do so antagonistically. Everyone has insights to offer based on their experiences, and we can all learn from each other. Civility is essential.

## **Accommodations**

#### **Students with Disabilities**

Under the Americans with Disabilities Act (ADA) and the Rehabilitation Act of 1973, individuals with disabilities have the right to specific accommodations that do not fundamentally alter the nature of the course. Some accommodations might include note takers, books on tape, extended time on assignments, and interpreter services among others. Students are responsible for communicating their needs to the <u>Academic Resource Center</u>, the office that oversees disability support services,(202-687-8354; <a href="academic Resource Center">academic Resource Center</a>, the office that oversees disability support services,(202-687-8354; <a href="academic Resource Center">academic Resource Center</a>, the office that oversees disability support services,(202-687-8354; <a href="academic Resource Center">academic Resource Center</a>, the office that oversees disability support services,(202-687-8354; <a href="academic Resource Center">academic Resource Center</a>, the office that oversees disability support services, the office that oversees disability support services,

### **Accessibility and Inclusion**

One of the central tenets of Georgetown's educational mission is cura personalis, a Latin phrase meaning "care of the whole person." Georgetown is committed to showing care and concern for each student by creating an inclusive and accessible learning environment that follows universal design principles to meet the needs of its diverse student body.

I am committed to creating a learning environment for my students that supports a diversity of thoughts, perspectives and experiences, and honors your identities (including race, gender, class, sexuality, religion, ability, etc.). If your name or pronoun needs to be corrected, please let me know early in the semester so that I can make the appropriate changes to my records.

## **Academic Integrity**

Ecology is a collaborative discipline, so I encourage you to discuss the concepts from class with your peers. However, all submitted work must be produced independently unless it is specified that you can work together on the assignment. You will submit written assignments through TurnItIn.com, a resource that can help you learn to use and cite sources properly. As a general rule, sharing a file (other than raw data) is sharing too much. Copying or paraphrasing from published sources or from other students, failing to give full credit for quotations or ideas, consulting unauthorized sources during an exam, or attempting to pass any work done by others as your own are examples of plagiarism.

Students at Georgetown University are expected to maintain the highest standards of academic and personal integrity. Although most Georgetown students conduct themselves in accordance with these standards, occasionally, there are students who violate the code of conduct. Cheating harms the University community in many ways. For example, honest students are frustrated by the unfairness of cheating that goes undetected and students who cheat can skew the grading curve in a class, resulting in lower grades for students who worked hard and did their own work.

Academic dishonesty in any form is a serious offense, and students found in violation are subject to academic penalties that include, but are not limited to failure of the course, termination from the program, and revocation of degrees already conferred. All students are expected to fully adhere to the policies and procedures of <u>Georgetown's Honor System</u> and to take the Honor Code Pledge.

## **Honor Code Pledge**

In pursuit of the high ideals and rigorous standards of academic life I commit myself to respect and to uphold the Georgetown University honor system:

- To be honest in every academic endeavor, and
- To conduct myself honorably, as a responsible member of the Georgetown community as we live and work together.

#### **Plagiarism**

Stealing someone else's work is a terminal offense in the workplace, and it will wreck your career in academia, too. Students are expected to work with integrity and honesty in all their assignments. The Georgetown University Honor System defines plagiarism as "the act of passing off as one's own the ideas or writings of another." More guidance is available through the Gervase Programs. If you have any doubts about plagiarism, paraphrasing, and the need to credit, check out Plagiarism.org.

All submissions must be your original work. Any submission suspected of plagiarism will be immediately referred to the Honor Council for investigation and possible adjudication. All students are expected to follow Georgetown's honor code unconditionally. If you have not done so, please read the honor code material located online at the <u>Honor Council website</u>.

# **Support Services**

Below are some resources available to you:

- Academic Resource Center
   202-687-8354 | arc@georgetown.edu
- <u>Counseling and Psychiatric Services</u> 202-687-6985
- Institutional Diversity, Equity & Affirmative Action (IDEAA)
   (202) 687-4798

## Title IX/Sexual Misconduct

Georgetown University and its faculty are committed to supporting survivors and those impacted by sexual misconduct, which includes sexual assault, sexual harassment, relationship violence, and stalking. Georgetown requires faculty members, unless otherwise designated as confidential, to report all disclosures of sexual misconduct to the University Title IX Coordinator or a Deputy Title IX Coordinator. If you disclose an incident of sexual misconduct to a professor in or outside of the classroom (with the exception of disclosures in papers), that faculty member must report the incident to the Title IX Coordinator, or Deputy Title IX Coordinator. The coordinator will, in turn, reach out to the student to provide support, resources, and the option to meet. Please note that the student is not required to meet with the Title IX coordinator. More information about reporting options and resources can be found on the <u>Sexual Misconduct Resource Center website</u>.

If you would prefer to speak to someone confidentially, Georgetown has a number of fully confidential professional resources that can provide support and assistance. These resources include:

• Health Education Services for Sexual Assault Response and Prevention: confidential email sarp@georgetown.edu

 Counseling and Psychiatric Services (CAPS): 202.687.6985 or after hours, call (833) 960-3006 to reach Fonemed, a telehealth service; individuals may ask for the on-call CAPS clinician

More information about reporting options and resources can be found on the <u>Sexual Misconduct</u> Website.

## Title IX/Pregnancy and Parenting Accommodations

Georgetown University is committed to creating an accessible and inclusive environment for pregnant and parenting students. Students may request adjustments based on general pregnancy needs or accommodations based on a pregnancy-related complication. Specific adjustments will be handled on a case by case basis and will depend on medical needs and academic requirements. Students seeking a pregnancy adjustment or accommodation should follow the process laid out on the <u>Title IX at Georgetown website</u>.

Discrimination based on sex, including sexual misconduct and discrimination based on pregnancy or parenting status, subverts the University's mission and threatens permanent damage to the educational experience, careers, and well-being of students, faculty, and staff.

## **Georgetown Library**

If you have a question for a librarian you can go to the <u>Get Help page</u> where you will have the option to chat online, send an email, or schedule a Zoom appointment to discuss a research topic, develop a search strategy, or examine resources for projects and papers. Librarians offer an overview of and in-depth assistance with important resources for senior or master's theses, dissertations, papers and other types of research. This service is available to currently enrolled students who need assistance with Georgetown-assigned projects and papers. Please review the <u>Services & Resources Guide for Online Students</u> for additional information.

## Office of the Student Ombuds (OSO)

Confidential | Independent | Impartial | Informal

The Office of the Student Ombuds (OSO) serves all undergraduate and graduate students, including SCS and BGE, on the main campus. Consider contacting the Student Ombuds when you want to talk to a caring professional about a University-related issue but don't know where to turn. The OSO is a confidential and safe space that is independent of formal university organizations or structures where students can discuss their concerns, share their experiences, ask questions and explore their options. The student ombuds can help you problem-solve, identify your goals, and empower you to think through ways to navigate complex situations. Some reasons for you to visit the office may be to address academic concerns, clarify administrative policies, discuss interpersonal conflicts, seek coaching, mediation or facilitation to handle a sensitive situation, advise you on the process to file a formal complaint if you are

experiencing bias, harassment, bullying or other forms of intimidation, identify other appropriate campus resources, and allow you to safely express your frustrations and concerns.

Request an in-person or zoom appointment with the Student Ombuds by writing studentombuds@georgetown.edu or calling 202-784-1081. The OSO is located in Room 207 of the Reiss Building (across from Arrupe Hall). Find more information at <a href="the Office of the Student">the Office of the Student</a> Ombuds website.

#### **eResources**

Students enrolled in courses have access to the University Library System's eResources, including 500+ research databases, 1.5+ million ebooks, and thousands of periodicals and other multimedia files (films, webinars, music, and images). You can access these resources through the <u>Library's Homepage</u> by using your NetID and password.

#### **Learning Resources**

Georgetown offers a host of learning resources to its students. Two that you might find particularly helpful in this course are the <u>Writing Center</u> and <u>Refworks</u>.

- The Writing Center offers peer tutoring by trained graduate and undergraduate students who can assist you at any point in the writing process. They help at any stage of your writing process, from brainstorming to revision. Tutors can offer advice on thesis development, use of evidence, organization, flow, sentence structure, grammar, and more. The Writing Center will not proofread or edit papers; rather, they will help to improve your proofreading and editing skills to become a better writer. Appointments can be booked online through their website.
- <u>Refworks</u> is an online research management tool that aids in organizing, storing, and presenting citation sources for papers and projects.

## **Technical Support**

All students have 24/7 access to Canvas technical support 24 hours a day, 7 days a week, including live chat and a support hotline at 855-338-2770. Use the 'Help' icon in the lower left of your Canvas window to view all available support and feedback options. If you're looking for help on a specific feature, check out the <u>Canvas Student Guide</u>.