## ECOL 3500: ECOLOGY UNIVERSITY OF GEORGIA SPRING 2022

**Meeting Times:** Tue/Thu 12:45- 2:00 Ecology Auditorium Room 201

**Instructors:** 

Dr. Ricardo Holdo Dr. JP Schmidt

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(Please contact us through email, and not the eLC system discussion board)

### **Course Overview and Objectives**

This course is designed to give you an appreciation of the complexity and simplicity of natural systems. By the end of this course, you should have a better understanding of system structure and function at the levels of organisms, populations, communities, and ecosystems. You should be able to think in both a reductionist and holistic capacity, and utilize these perspectives to examine novel ecological situations. The ecological background presented in this course will provide you with the tools to evaluate environmental problems confronting society, and understand how to conserve and/or manage systems for future generations. This course emphasizes critical thinking skills and the scientific method as a way to introduce facts into an arena which information and sound logic are sometimes completely lacking. We will examine current environmental issues, both within Georgia and globally, to reinforce the relevance of the material being studied. This course is also designed to prepare you for more advanced courses in ecology, such as population and community ecology, behavioral ecology, limnology, and systems ecology.

#### **Text and Additional Materials**

<u>The course will have no textbook</u>. We will assign readings from the primary literature and from other sources (e.g., news articles), which we will announce in class and post ahead of time on eLC. Each article has been chosen because of its relevance to current events. You will be expected to have read and understood the main points in each article. Although it will not be possible (due to time constraints) to discuss each paper during class, *several questions on each exam may be related to these readings*.

We will provide copies of all PowerPoint lectures on eLC. We will also provide video files of the Powerpoint lectures with the lecture audio on Kaltura.

Important class information and updates will be posted on UGA eLearning Commons (www.elc.uga.edu).

#### Attendance

Attendance in lecture is strongly encouraged as material covered and emphasized in class will be the basis for the quizzes and exams. We recognize, however, that we are in the middle of a massive COVID-19 surge as of this writing, and that you may come down with symptoms or test positive for COVID-19. In either of those cases, please temporarily refrain from coming to lecture and rely on the recorded Kaltura videos that we are offering as a backup. Note, however, that the Kaltura videos may not be able to capture everything that takes place in the classroom.

#### **Electronics**

The use of computers, cell phones, tablets etc., during class time must be directly related to class activities.

### **Course Assignments and Grading**

Quizzes: There will be 8 short quizzes during the course of the semester, consisting of 5 questions each. They will be administered <u>virtually via eLC</u>, and will be due by the end of week in which they are posted. Late submissions will not receive credit. The quizzes are intended to keep students up-to-date on class material, and will provide examples of the types of questions to expect on the exams. There are no make-up quizzes. However, students can miss up to **two** quizzes for any reason (sickness, travel, transportation issues, job interview, death in the family, etc.) without penalty. In the event that a student completes more than 6 quizzes, only the top 6 quiz scores will count for the final grade calculation.

<u>Reading assignments</u>: Four reading assignments will be posted over the course of the semester. The assignments will be accompanied by a question sheet, to be completed via eLC. Students will receive credit for submitting the completed answer sheet. Questions on the readings may be used in exams.

Exams: Three exams will be administered prior to the final exam. The exams, which will be timed, will be administered virtually via eLC, and will be taken during regular class time. The exams will be multiple choice. Questions will be written to assess your ability to synthesize material presented in class, including any assigned readings. Students can miss any one of the first three exams for any reason (sickness, travel, transportation issues, death in the family, etc.) without any penalty. In the event that a student completes all three exams, the lowest score of the first three exams will be dropped. The final exam is **mandatory**, and students may not drop the score on the final exam. The final exam is not comprehensive, and will only cover material presented after the 3<sup>rd</sup> exam. Makeup exams will **not be allowed** for any exam, except possibly for the very rare instance where a student experiences serious personal illness or immediate family emergency on the date of the exam and also meets each of the following requirements: 1) Student must notify the instructor of the reason for their absence prior to the exam; 2) Student must provide official documentation of serious personal illness or immediate family emergency within 2 days of the exam date; and 3) If the documentation is confirmed, the make-up exam will be taken at the earliest possible date following the scheduled exam. The exam will not be identical to the class exam, and may be entirely essay-based.

Grading for the course will be determined by the six highest quiz grades, reading assignments, two highest in-class exam grades and the final exam grade. The final grade will be based on the

following breakdown: Quizzes (18%), Readings (13%), two of first three exams (46%), final exam (23%).

Any grading dispute must be addressed within **one week** from the date that the relevant exam grade is posted on eLC.

The plus/minus grading system will be used, according to UGA policy. This course grading will strictly follow this plus/minus grading scale, **with no rounding**:

<u>Videos</u>: The instructors may present videos to complement or illustrate class material during the weekly lecture sessions; these videos address a variety of current environmental issues and concerns. The videos, or links to the videos, will be posted on eLC. Most videos have been tested to play with a VLC player run through Firefox. If students anticipate needing to view these videos through eLC, they must to ensure that the system they are using will play the videos well in advance of any exam that relates to the video content.

## **Summary of Important Dates to Remember**

<u>Event</u>	Date(s)
First day of class	Jan 11
Add/Drop	Jan 10 - 14
Martin Luther King Jr. Day – No Class	Jan 17, Monday
Exam #1	Feb 3, Thursday
Exam #2	Mar 3, Thursday
Spring Break	Mar 7 -11, Monday-Friday
Withdrawal Deadline	Mar 24, Thursday
Classes End	May 3, Tuesday
Exam #3	Apr 7, Thursday
Reading Day	May 4, Wednesday
Final Exam	May 5, Thursday 12 - 3pm

#### Lecture schedule (subject to change)

Lecture	Date	Day	Instructor	Topic
1	11 Jan	Tue	Holdo	Introduction and Overview
2	13 Jan	Thu	Holdo	The abiotic environment, temperature and salinity
3	18 Jan	Tue	Holdo	Photosynthesis and water relations, adaptations to variable environments
4	20 Jan	Thu	Holdo	Biogeographical patterns
5	25 Jan	Tue	Holdo	Evolution and natural selection
6	27 Jan	Thu	Holdo	Life histories
7	1 Feb	Tue	Holdo	Behavioral ecology, movement
8	3 Feb	Thu	Holdo	Exam #1
9	8 Feb	Tue	Holdo	Populations: Structure
10	10 Feb	Thu	Holdo	Populations: Growth & Regulation
11	15 Feb	Tue	Holdo	Populations: Dynamics
12	17 Feb	Thu	Holdo	Populations: Genetics

13	22 Feb	Tue	Holdo	Species Interactions
14	24 Feb	Thu	Holdo	Consumer/Resource Interactions
15	1 Mar	Tue	Holdo	Competition
16	3 Mar	Thu	Holdo	Exam #2
17	8 Mar	Tue	Break	
18	10 Mar	Thu	Break	
	15 Mar	Tue	Schmidt	Parasitism and infectious disease
	17 Mar	Thu	Schmidt	Covid-19
19	22 Mar	Tue	Schmidt	Mutualisms
20	24 Mar	Thu	Schmidt	Diversity
21	29 Mar	Tue	Schmidt	Succession
22	31 Mar	Thu	Schmidt	Community structure
23	5 Apr	Tue	Schmidt	Biogeography
24	7 Apr	Thu	Schmidt	Exam #3
25	12 Apr	Tue	Schmidt	Nutrient cycling
26	14 Apr	Thu	Schmidt	Production
27	19 Apr	Tue	Schmidt	Human impacts
28	21 Apr	Thu	Schmidt	Climate change
29	26 Apr	Tue	Schmidt	Regime change
30	28 Apr	Thu	Schmidt	Covid-19 and infectious disease threats
31	3 May	Tue	Schmidt	Conservation ecology

**Diversity**: Diversity encompasses acceptance and respect. The term "diversity" encompasses differences of culture, background and experience among individuals and groups. Such differences include, but are not limited to, differences of race, ethnicity, national origin, color, gender, sexual orientation, gender identity, age, and abilities, as well as political and religious affiliation and socioeconomic status. The College of Family and Consumer Sciences at the University of Georgia embraces a commitment to diversity by modeling for the state and nation, a community of individuals and programs which seek to reduce prejudice, disparities, and discrimination and build a supportive environment for all. More about diversity.

**Academic honesty:** "I will be academically honest in all of my academic work and will not tolerate academic dishonesty of others." A Culture of Honesty, the University's policy and procedures for handling cases of suspected dishonesty, can be found can be found at: <a href="https://honesty.uga.edu/Academic-Honesty-Policy/">https://honesty.uga.edu/Academic-Honesty-Policy/</a>. All academic work must meet the standards outlined in "A Culture of Honesty" found at: <a href="https://honesty.uga.edu/">https://honesty.uga.edu/</a>.

**Course Plans:** The course syllabus is a general plan for the course; deviations announced to the class by the instructor may be necessary.

**Accommodations due to disability:** If you plan to request accommodations for a disability, please register with the Disability Resource Center (DRC). The DRC can be reached by visiting Clark Howell Hall, by calling 706-542-8719 (voice) or 706-542-8778 (TTY), or by visiting <a href="http://drc.uga.edu">http://drc.uga.edu</a>.

**Mental Health and Wellness Resources:** If you or someone you know needs assistance, you are encouraged to contact Student Care and Outreach in the Division of Student Affairs at 706-542-7774 or visit <a href="https://sco.uga.edu">https://sco.uga.edu</a>. They will help you navigate any difficult circumstances you may be facing by connecting you with the appropriate resources or services. UGA has several resources for a student seeking mental health services

(<a href="https://www.uhs.uga.edu/bewelluga/bewelluga">https://www.uhs.uga.edu/bewelluga/bewelluga</a>) or crisis support

(<a href="https://www.uhs.uga.edu/info/emergencies">https://www.uhs.uga.edu/info/emergencies</a>). If you need help managing stress anxiety, relationships, etc., please visit BeWellUGA (https://www.uhs.uga.edu/bewelluga/bewelluga) for a list of FREE workshops, classes, mentoring, and health coaching led by licensed clinicians and health educators in the University Health Center. Additional resources can be accessed through the UGA App.

**FERPA Notice:** The Federal Family Educational Rights and Privacy Act (FERPA) grants students certain information privacy rights. FERPA allows disclosure of directory information (name, address, telephone, email, date of birth, place of birth, major, activities, degrees, awards, prior schools), unless

a <a href="https://reg.uga.edu/">https://reg.uga.edu/</a> resources/documents/imported/FERPARequestForRestriction.pdf is submitted to the Registrar's Office.

#### COVID-19

**Face coverings:** Following guidance from the University System of Georgia, face coverings are recommended for all individuals while inside campus facilities.

How can I obtain the COVID-19 vaccine? University Health Center is scheduling appointments for students through the UHC Patient Portal

(<u>https://patientportal.uhs.uga.edu/login\_dualauthentication.aspx</u>). Learn more here – <u>https://www.uhs.uga.edu/healthtopics/covid-vaccine.</u>

The Georgia Department of Health, pharmacy chains and local providers also offer the COVID19 vaccine at no cost to you. To find a COVID-19 vaccination location near you, please go to: <a href="https://georgia.gov/covid-vaccine">https://georgia.gov/covid-vaccine</a>.

What do I do if I have COVID-19 symptoms? Students showing COVID-19 symptoms should self-isolate and schedule an appointment with the University Health Center by calling 706-542-1162 (Monday-Friday, 8 a.m.-5p.m.). Please DO NOT walk-in. For emergencies and after-hours care, see, <a href="https://www.uhs.uga.edu/info/emergencies">https://www.uhs.uga.edu/info/emergencies</a>.

What do I do if I test positive for COVID-19? If you test positive for COVID-19 at any time, you are required to report it through the <a href="DawgCheck Test Reporting Survey">DawgCheck Test Reporting Survey</a>. We encourage you to stay at home if you become ill or until you have excluded COVID-19 as the cause of your symptoms. UGA adheres to current Georgia Department of Public Health (DPH) quarantine and isolation <a href="guidance">guidance</a> and requires that it be followed. Follow the instructions provided to you when you report your positive test result in DawgCheck.

Guidelines for COVID-19 Quarantine Period (As of 8/1/21; follow DawgCheck or see DPH website for most up-to-date recommendations): Students who are fully vaccinated do not need to quarantine upon exposure unless they have symptoms of COVID-19 themselves. All others should follow the Georgia Department of Public Health (DPH) recommendations:

Students who are not fully vaccinated and have been directly exposed to COVID-19 but are not showing symptoms should self-quarantine for 10 days. Those quarantining for 10 days must have been symptom-free throughout the monitoring period and continue self-monitoring for COVID-19 symptoms for a total of 14 days. You should report the need to quarantine on DawgCheck (<a href="https://dawgcheck.uga.edu">https://dawgcheck.uga.edu</a>), and communicate directly with your faculty to coordinate your coursework while in quarantine. If you need additional help, reach out to Student Care and Outreach (<a href="sco@uga.edu">sco@uga.edu</a>) for assistance.

Students, faculty and staff who have been in close contact with someone who has COVID-19 are no longer required to quarantine if they have been fully vaccinated against the disease and show no symptoms.

# Well-being, Mental Health, and Student Support

If you or someone you know needs assistance, you are encouraged to contact Student Care & Outreach in the Division of Student Affairs at 706-542-7774 or visit <a href="https://sco.uga.edu/">https://sco.uga.edu/</a>. They will help you navigate any difficult circumstances you may be facing by connecting you with the appropriate resources or services.

UGA has several resources to support your well-being and mental

health: https://wellbeing.uga.edu/

Counseling and Psychiatric Services (CAPS) is your go-to, on-campus resource for emotional, social and behavioral-health support: <a href="https://caps.uga.edu/">https://caps.uga.edu/</a>, 7AO Online Support (<a href="https://caps.uga.edu/tao/">https://caps.uga.edu/tao/</a>), 24/7 support at 706-542-2273. For crisis

support: <a href="https://healthcenter.uga.edu/emergencies/">https://healthcenter.uga.edu/emergencies/</a>.

The University Health Center offers FREE workshops, classes, mentoring and health coaching led by licensed clinicians or health educators: <a href="https://healthcenter.uga.edu/bewelluga/">https://healthcenter.uga.edu/bewelluga/</a>

**Monitoring conditions:** Note that the guidance referenced in this syllabus is subject to change based on recommendations from the Georgia Department of Public Health, the University System of Georgia, or the Governor's Office or. For the latest on UGA policy, you can visit coronavirus.uga.edu.