BSC 4330 – Invasion Biology
Fall 2023, 3 credits

<mark>**The course calendar can be found at the end of the syllabus**</mark>

Class Times: In-person: Tuesdays and Thursdays 11:30p -12:45p in BIO 209

Instructor: Dr. Gregg Klowden (pronounced "Cloud - in")

Office Hours: When – Mondays 1:00p-4:00p & Fridays 10:00a-1:00p

How: By appointment only:
- To schedule an appointment, go to: https://calendly.com/dr_klowden/office_hours
- Appointments must be scheduled at least 24 hours in advance.

Where: On Zoom on Webcourses
- Go to the Office Hours page on Webcourses for the Zoom link (Must make an appointment first)

E-mail: You may contact me via (A) the email inside Webcourses or (B) your UCF email at gklowden@ucf.edu

I receive a large volume of emails from several courses. To help me help you, you must include:
- + A subject with (A) the course name (FL Ecology) and (B) a brief description of your question
   (e.g., FL Ecology – Question about swamp lecture)
- + Your first and last names in the message body

- * If your message does not conform to the above guidelines, it may go unanswered or be delayed.
- * Due to confidentiality, I will only reply to questions emailed within Webcourses or from your UCF email.
- * I will try to respond to emails within 48 hours however, response time may be greater.
- * Please plan accordingly by not waiting to the last minute to contact me with questions or concerns.
- * Questions about grades must be discussed during office hours or using the Webcourses email.

Required Resources:
+ Hardware: Desktop or laptop computer, stable internet connection, web camera, microphone
+ Software: Webcourses@UCF supported web browser, Zoom*, Microsoft 365*, Adobe Acrobat*

  (*free download available for all students at https://ucfapps.cloud.com)
+ Webcourses: Lecture notes, announcements, assignments, grades, etc. will be made available at this site.
+ Zoom: Office hours and possibly other meetings will be held on Zoom.
   Zoom can be accessed on Webcourses using your mobile phone, tablet, desktop or laptop computer

  Technical support: https://www.ucf.edu/online/student-resources/ucf-it-support/ **or:** https://cdl.ucf.edu/support/webcourses/

Optional Resources:
+ Simberloff, D. Invasive Species: What Everyone Needs to Know. 2013. Oxford University Press. 329pp.
+ Lockwood, J. L., M. F. Hoopes, and M. P. Marchetti. 2013. Invasion Ecology, 2nd edition. Wiley-Blackwell.
+ Elton, C. S. 1958. The Ecology of Invasions by Animals and Plants. Methuen & Co. Ltd., London.
   o https://archive.org/details/ecologyofinvasio0000unse/page/n3/mode/2up

Intended Audience: Advanced Biological Science majors & minors.

Course Prerequisite: Principals of Ecology (PCB 3044C) with a grade of C or better

Course Description:

Humans have caused an unprecedented redistribution of earth's biota. Both incidentally and deliberately we continue to disperse an ever-increasing array of species across previously insurmountable environmental barriers. The consequences of successful introductions are almost always detrimental to ecosystem function, biodiversity, and ecosystem service, and invasion is ranked as one of the major natural disasters today.

In Invasion Biology we will study introduced, non-native species and the factors that sometimes lead to their population explosions and negative ecological impacts in the new region. We will make explicit connections between fundamental concepts in ecology and evolutionary biology, topics specific to invasion ecology, and the idiosyncratic details surrounding particular invasive species. My goal is to emphasize the ecological importance of species invasions as well as discuss sociological, economic, & other associated issues.

Course Goals:

After successfully completing this course, students will be able to:
- Differentiate between commonly (mis)used terms used to describe introduced species.
- Describe the major stages of, and barriers to, invasion success.
- Describe major hypotheses used to explain invasion success.
- Understand and explain fundamental concepts in ecology and evolutionary biology in the context of species invasions.

Why study invasion biology?

Humans have transported thousands of species of plants, animals, fungi, and microbes to new locations. Without human assistance, species have always managed to spread, but much less often, much more slowly, and not nearly so far. This geographic rearrangement of the earth's biota is one of the great global changes now underway. Although many introduced species fail to establish populations or remain restricted to the immediate vicinity of the new sites where they land, others establish populations and invade new habitats, spreading widely and sometimes well beyond the initial point of introduction. Many invasions have such idiosyncratic, bizarre effects that they cannot fail to get our attention simply as fascinating tales of natural history. For example, who would have thought that…

- introducing kokanee salmon to Flathead Lake, Montana, and many years later, opossum shrimp to three nearby lakes would ultimately have led to population crashes of grizzly bears and bald eagles through a complicated chain reaction?
- introducing myxoma virus to Great Britain to control introduced rabbit populations would have led to extinction of the large blue butterfly there?
- introducing a particular grass species would lead to hybridization with a native congener, subsequent polyploidization, and the origin of a new vigorous invasive species that would change entire intertidal systems?
- competition for food with an Asian mosquito introduced to east Tennessee would render a native mosquito a more competent vector of La Crosse encephalitis?

Teasing apart such intriguing causal chains is a scientific accomplishment of the first order. The variety and idiosyncrasy of effects challenges biologists to produce general laws or rules to be able to explain why some introductions have no major impacts, yet others lead to huge invasions. Being able to predict which species will fall in the latter category if introduced, and which in the former, is the elusive holy grail of invasion biology.

Some E-resources:

- USDA National Invasive Species Information Center: http://www.invasivespeciesinfo.gov/
  - Florida: https://www.invasivespeciesinfo.gov/us/florida
- US Forest Service Invasive Species Program: http://www.fs.fed.us/invasivespecies/
- US Geological Service Non-Indigenous Aquatic Species: http://nas.er.usgs.gov/
- International Union for the Conservation of Nature (IUCN) Invasive Species Specialist Group: http://www.issg.org/
- Florida Fish and Wildlife Conservation Commission
  - Nonnative Species: https://myfwc.com/wildlifehabitats/nonnatives/
  - Invasive Plant Management: https://myfwc.com/wildlifehabitats/habitat/invasive-plants/
- Florida Natural Areas Inventory – Invasive Species: https://www.fnai.org/invasivespecies.cfm
- Center for Aquatic and Invasive Plants, University of Florida: https://plants.ifas.ufl.edu/
- Florida Exotic Pest Plant Council: https://www.fleppc.org/
- Florida Invasive Plant species mobile field guide: http://www.plantatlas.usf.edu/flip/
- Audubon Florida Invasive Species Task Force: https://fl.audubon.org/conservation/invasive-species-task-force
- Early Detection and Distribution Mapping System: https://www.eddmaps.org/florida/
- IveGot1 – App to Identify and Report Invasive Animals and Plants in Florida: https://www.eddmaps.org/florida/iphone/

Student Responsibilities:

Etiquette:

Students should show proper classroom etiquette. Students should show up to class on time. *Please do not be late or leave early, this disrupts the class.* If this is unavoidable then you should sit near the door to reduce disruption to the class. All cell phones, pagers, etc. should be turned OFF (not on vibrate) when entering the classroom. Students should not disrupt other students (or the instructor) in class by talking unless instructed to do so by the instructor. If you use a computer to take notes, please do not use it for any other purposes.

Email and Webcourses:

You will be expected to have daily access to Webcourses since I will be consistently posting assignment updates, additions, changes, clarifications, etc. All students at UCF are required to obtain a Knight's Email account and check it regularly for official university communications. If you do not own a computer, there are computers accessible to you in all UCF's computer labs, and most computer labs have computers connected to the internet. For further information on computer labs, please see the following website: http://registrar.sdes.ucf.edu/webguide/index_quickfind.aspx.

Lectures:

All lectures are in person and will not be posted online. While lecture attendance is not required, it is to your advantage to regularly attend in-person lectures, take additional notes, and ask questions. PDF copies of lecture PowerPoint presentations will be made available on Webcourses. It is recommended that you either print these prior to attending or have them available on your computer so you may take additional notes during lecture. Students who take notes have been shown to better understand the material and perform better on exams.

Out of respect for your peers, please do not disrupt class by being tardy. If this is unavoidable then you should sit near the door to reduce disruption to the class. All cell phones should be turned OFF (not on vibrate) before entering the classroom. Anyone texting during lecture or lab or using their computer, laptop, phone, watch, etc. for reasons not related to class will be asked to leave for the day.

Exams

There will be three unit exams. Each will cover material since the last exam. While exams are not comprehensive, a working knowledge of previous material is expected and necessary to do well on subsequent exams. Questions will pertain to lecture material only, not activities or discussions. Questions will be a mix of essay, fill-in-the-blank, and multiple choice, so a good understanding of the material is necessary to do well.

To be successful, you must be well-studied. If you do not know the material well, you may have trouble finishing the exam in the allotted time. If you are late, you may take the exam only if no one else has completed the exam. You will not be given additional time. Grades will be posted on Webcourses. Times for in-person review of exams will be announced. Exam review is not permitted via Zoom.

Lecture Exam Policies:

1. All exam grades count towards your semester grade. No exam grades will be dropped.
2. You must bring:
   a) a pencil
   b) your UCF ID – Note: failure to show your ID may result in a score of zero for the exam.
3. Scantrons will be supplied. You do not need to bring your own.
4. *Do not arrive late.* A late student will be allowed access to the exam only at the discretion of the instructor/proctors. Under no circumstances will extra time be allowed.
5. Prior to exams, all books, notes, and bags must be stowed under your seat.
6. Cell phones must be turned OFF and stowed during the exam period.
7. Go to the restroom before the exam. You will NOT be allowed to leave the exam.
8. Bring tissues if you have a runny nose. You will not be allowed to leave the exam.
9. You must print your PID number (not NID) on the scantron and question sheet. Be sure you know it!
10. Grades will be posted on WebCourses, and you will be informed when they are posted.
11. Review of exams will be in-person only. Dates/times will be announced. You are welcome to discuss exam questions with Dr. Klowden during online office hours but will not be able to see your actual exam online.
12. If you would like to review your exam, this must be done before the next exam.

Missed Exam Policy:

1. Make-up exams will be provided *only* for students with a valid, documented reason for missing an exam or other required class, you must provide Dr. Klowden with appropriate documentation from a competent authority (physician, coach, counselor, etc.). Falsified documentation will be dealt with according to university academic honesty polices. Acceptable absences include major illness, serious family emergencies, special curricular or professional requirements (e.g., attending a scientific meeting), court-imposed legal obligations, military obligations, certain religious holidays, and participation in official university-sponsored activities (e.g. intercollegiate athletics). Excuses from relatives (including relatives who are doctors, dentists, attorneys, etc.) will NOT be accepted. Work- or travel-related absences will NOT be considered valid excuses (e.g., "I had to cover someone else's shift", "my parents booked airplane tickets").

2. When foreseeable, you must contact Dr. Klowden prior to the absence to arrange for completion of assignments.

   For such foreseeable absences, you must inform Dr. Klowden of this anticipated absence within the 1st 10 days of the semester or you will not be eligible for an authorized absence.

3. For unforeseeable absences, if possible, contact Dr. Klowden prior to the absence. If not possible, you must contact Dr. Klowden within 24 hours after missing the exam and provide *documentation signed by a doctor, police officer, judge, coach, etc. within one week*.

4. Make up exams will have different questions than the original exam but will be of similar difficulty.

5. Unexcused absence from an exam will result in a failing grade for the missed exam.

Assignments:

Discussion (Academic activity verification)

For this assignment you will need to read the assigned articles and participate in an online group discussion.

Initial comment – After completing the readings, you should post an initial comment which gives me a good indication that you read and considered the assigned articles. It must be at least 75 words in length. Note, you will not be able to see other people's comments until you first make your own posting.

Replies – After completing your initial comment, you should reply to at least 2 other people's initial comments. Your replies should not just be brief "I agree" type statements but should be thoughtful and intended to inspire additional discussion. All replies should be respectful and professional.

Summary comment – After the "replies" due date, additional articles on the topic will be assigned in a Webcourses announcement. DO NOT post before Dr. Klowden provides these additional articles. You should read these articles and then post a summary comment of at least 125 words which incorporates your overall thoughts and opinions based on all of the assigned articles (original + new ones), comments already made by your classmates, and any additional reading on the topic you choose to do.

Summary replies – After completing your summary comment, you should reply to at least 2 other people's summary comments. Your replies should not just be brief "I agree" type statements but should be thoughtful and intended to inspire additional discussion. All replies should be respectful and professional.

Grading - You will receive 1 grade on the entire assignment (Initial comment + replies + summary comment + replies). You will be graded on following instructions and the quality of your comments and replies. So, to boost your grade, be sure to put thought into it, make your comments thorough and substantive, consider replying to more than 2 other comments, and consider replying to replies to keep the discussion going. Late submissions will not be accepted.

Public Awareness Campaign:

Reducing the proliferation of invasive species requires public cooperation and buy-in. As such, effective communication, messaging, and outreach to the general public is critical. Your challenge is to develop an educational awareness campaign to inform the public about an invasive species or a suite of species that are important or are likely to become important. All campaigns must have an associated website. Websites can be built and made publicly available using one of the many freely available site building websites such as Weebly, WordPress, Wix, or Strikingly or by other means as long as it is made publicly available on the internet for class review. Most students use Weebly as it contains a lot of features and if desired the site can be easily downloaded and transferred to another site in the future. In addition to the website, your public awareness campaign should include other elements such as posters, brochures, social platforms, videos, etc. - essentially any type of media that can reach the general public. Remember, INNOVATION is really important and campaigns that do something different to capture the public's attention are generally the ones that work the best. You will be developing your presentation in small teams. I will

randomly select the teams to facilitate equal participation. At the end of the semester, each team will present / demonstrate all aspects of their public awareness campaign. Both Dr. Klowden and your classmates will evaluate the effectiveness of the message. Bonus points will be rewarded for campaigns believed most likely to be successful.

Complete instructions and deadlines for this assignment are available on the assignment webpage on Webcourses.

Campaign Topic

On which invasive species or a suite of species your campaign is focused is up to you. You may choose plants, animals (vertebrates or invertebrates), or fungi. You may not choose diseases or single-celled organisms (bacteria or archaea) or viruses. However, don't wait too long to decide as topics are 1st come, 1st served. Each team must submit their preferred invasive species or a suite of species to Webcourses in the appropriate Discussion section. Before submitting your request, look through the other submissions to make sure your topic has not already been taken. All topics must be approved by Dr. Klowden. The deadline for topic submission is listed in the syllabus however the earlier you submit, the more likely you will get your first choice.

* Only 1 person per team should submit your request.
* Prior to submission, each team must decide who oversees this task.
* Failure to have your topic approved on time will result in a reduction of your project grade by 5% for each day late.

To help in deciding on the organism(s) for your campaign, here are a few links:
https://myfwc.com/wildlifehabitats/nonnatives/
   - Near bottom of page are links to various animal groups (mammals, reptiles, etc.)
https://en.wikipedia.org/wiki/List_of_invasive_species_in_Florida
https://en.wikipedia.org/wiki/List_of_invasive_species_in_the_Everglades
https://www.invasivespeciesinfo.gov/us/florida

Teams:

You will be developing your campaigns in small teams of 3-4 people. Team membership will be randomly assigned. Team composition may not be changed. Teams will choose their species or suite of species by signing-up online on a 1st-come, 1st-served basis. Team composition will be finalized at the end of drop/add and the signup made available at that time.

A note about working in teams:

While the dynamics of team work can be challenging, it offers many advantages including reduced workload and more effective partitioning of individual interests and abilities. Working well in a team is a skill that will benefit you in your professional life. Please try to act professionally and work out your issues amongst yourselves. If this is not possible then please talk to me early and do not wait for the issue to fester. I expect that you will partition the work equally and no one will do more or less than their share. You will have the opportunity to anonymously evaluate your team member's adherence to this guideline in the contribution statements submitted several times throughout the semester. If it is clear that an individual is not playing nicely, their grade may be reduced.

Team meetings:

Several Thursdays are reserved for required in-class team meetings (see Course Schedule). You should not schedule other activities, including work, during this time period. If you do not attend scheduled team meetings, your grade on this assignment will be reduced accordingly. Most weeks, it will also be necessary to meet with your team more often. Consistent communication with your team is essential for continued forward movement allowing you not only to complete this project but to assure a successful & optimal outcome.

During class time and office hours times (see above), Dr. Klowden will be available for consultation or questions to discuss ideas, clarify requirements, etc. Please schedule a meeting as instructed above in the Office Hours section of the syllabus. When possible, the whole team should be present during these meetings.

Statements of Contribution:

Four times during the project (see Schedule) you must complete a survey on Webcourses describing your project progress and team member contributions. I encourage all team members to participate equally, to balance the workload and work together to achieve a common goal. As reported anonymously by the other team members, any member who is not pulling their weight, not showing up to meetings, failing to communicate with their teammates, or who is unnecessarily dominating will have their grade reduced.

Failure to submit the statement of contribution on time will result in a 5% reduction PER DAY in your individual grade for the project.

Performance Evaluation:

		Proportion of grade
Online discussion assignment		3%
Exams (3)		62%
Best grade	24%	
Mid grade	21%	
Lowest grade	17%	
Public Awareness Campaign		35%
Public Awareness Campaign	25%	
Campaign outline	2%	
Oral Presentation	8%	

Grading:
Scale:

A 93.0 – 100%	B+ 87.0 - 89.99%	C+ 77.0 - 79.99%	D+ 67.0 - 69.99%	F 0 - 59.99%
A- 90.0 - 92.9%	B 83.0 - 86.99%	C 73.0 - 76.99%	D 63.0 - 66.99%	
	B- 80.0 - 82.99%	C- 70.0 - 72.99%	D- 60.0 - 62.99%	

Calculating your grade:

Since grade proportions for each exam vary (best vs worst grade), it is not possible for Webcourses to calculate grades. Because it would be inaccurate, the total grade % in Webcourses is not visible. To easily calculate or estimate your grade, I recommend that you use an online grade calculator such as the one at: thegradecalculator.com

Grade Rounding Policy:

No matter where I set the limit, there will ALWAYS be someone who is close to the next grade. If I said I would round up grades that are 0.5% or closer to the next grade, then the person that is 0.6% away would be sad. If I said I would round up grades that were 1% or closer, then the person that is 1.1% would be sad. Because of this, your overall semester grade will NOT be rounded. In other words, either you have the grade, or you don't. In other words, a 79.99 is still a 'C+'. As there are many students in this class I strive for consistency and fairness. For this reason, there will be no exceptions to this policy and no other adjustments will be made (i.e., No additional curving or extra credit will be offered).

Prevention of Disease Transmission

Help reduce and prevent the spread of diseases to others. While certain diseases may be mild for one person, they may cause others substantial health risks, inconvenience, long-term debilitation, miscarriage, or death.

If we all take precautions, we can greatly reduce disease spread and illness. There are many ways your actions can help protect you, your household, and your community from severe illness. In addition to basic health and hygiene practices, like handwashing, to protect yourself and those around you, it is recommended that you:

- Stay home if you have symptoms of flu, "colds", COVID, or other similarly transmissible illnesses!
- If you believe you might be getting or could possibly be ill, wear a mask when near others (N95 or surgical grade).
- Always cough or sneeze into a tissue or your elbow (not your hands!).
- Test for COVID if you have symptoms or think you may have been exposed and stay home if you have any doubt.
- Stay up to date with all vaccines (Flu, COVID, etc.).

  * Vaccines are the safest and most effective way to avoid severe illness. Sometimes vaccinated people can still get the flu or COVID, etc. however, vaccines significantly lower the risk of getting very sick, being hospitalized, or dying. Vaccines cannot cause the disease for which you are being vaccinated. They simply trick the immune system to think you are infected, so your body produces antibodies in case you really do get infected. Sometimes your body responds with a brief fever, but this does not mean you have the disease. It simply means your immune system is working and it is preparing you in case you really do get the disease. For more information on vaccines and how they work, read:
  https://www.cdc.gov/vaccines/hcp/conversations/understanding-vacc-work.html
  or watch videos on YouTube such as: https://www.youtube.com/watch?v=_mHo9vGulx8

Academic Integrity

Why should I care?

Beyond moral considerations, academic dishonesty diminishes the quality and value of a UCF education. If prospective employers, graduate schools, etc. have a poor perception of UCF, it undermines the value of your education and decreases your likelihood of advancement. If you are aware of academic dishonesty, it is important to report it as quickly as possible. Otherwise, you risk devaluation of your degree and hard work. Non-reporting is also considered academic dishonesty.

What should you do if you are aware of another student cheating?

You should contact Dr. Klowden <gklowden@ucf.edu> in private as soon as possible after the incident has occurred. Your reporting will remain confidential.

What is considered academic dishonesty?

Students should familiarize themselves with UCF's Rules of Conduct at http://osc.sdes.ucf.edu/process/roc.

According to Section 1, "Academic Misconduct," students are prohibited from engaging in:

- *Unauthorized assistance*: Using or attempting to use unauthorized materials, information or study aids in any academic exercise unless specifically authorized by the instructor of record. The unauthorized possession of examination or course-related material also constitutes cheating.

- *Communication to another through written, visual, electronic, or oral means*: The presentation of material which has not been studied or learned, but rather was obtained through someone else's efforts and used as part of an examination, course assignment, or project.

- *Commercial Use of Academic Material*: Selling of course material to another person, student, and/or uploading course material to a third-party vendor without authorization or without the express written permission of the university and the instructor. Course materials include but are not limited to class notes, Instructor's PowerPoints, course syllabi, tests, quizzes, labs, instruction sheets, homework, study guides, handouts, etc.

- *Falsifying or misrepresenting the student's own academic work*.

- *Plagiarism*: Using or appropriating another's work without any indication of the source, thereby attempting to convey the impression that such work is the student's own. Examples include, but are not limited to:
  - Turning in someone else's work as your own.
  - Copying words or ideas from someone else without giving credit.
  - Failing to put a quotation in quotation marks.
  - Giving incorrect information about the source of the information.
  - Changing words but copying the sentence structure of a source.
  - Copying so many phrases from a source that it makes up a substantial part of your work, even if you give credit.

- *Multiple Submissions*: Submitting the same academic work more than once without written permission of the instructor.

- *Helping another violate academic behavior standards*.

For more information about Academic Integrity, consult the International Center for Academic Integrity http://academicintegrity.org

For more information about plagiarism and misuse of sources, see "Defining and Avoiding Plagiarism: The WPA Statement on Best Practices" http://wpacouncil.org/node/9

Unauthorized Use of Websites and Internet Resources

There are many websites claiming to offer study aids to students, but in using such websites, students could find themselves in violation of academic conduct guidelines. These websites include (but are not limited to) Chat GPT, Quizlet, Course Hero, Chegg Study, and Clutch Prep. UCF does not endorse the use of these products in an unethical manner, which could lead to a violation of our University's Rules of Conduct. They encourage students to upload course materials, such as test questions, individual assignments, and examples of graded material. Such materials are the intellectual property of instructors, the university, or publishers and may not be distributed without prior authorization. Students who engage in such activity are in violation of academic conduct standards and could face course and/or University penalties. Please let me know if you are uncertain about the use of a website so I can determine its legitimacy.

If you need assistance, I recommend you visit me during my office hours and make use of the Student Academic Resource Center (SARC), the University Writing Center (UWC), the Math Lab, etc.

If you are aware of others engaging in such activity or find materials from my classes posted on these sites, I would appreciate your bringing this to my attention. We all play a part in creating a course climate of integrity.

Unauthorized Use of Technology for Graded Work

If you were in a classroom setting taking a quiz, would you ask the student sitting next to you for an answer to a quiz or test question? The answer should be no. This also applies to graded homework, quizzes, tests, etc. Students are not allowed to use GroupMe, WhatsApp, or any other form of technology to exchange course material associated with a graded assignment, quiz, test, etc. when opened on Webcourses. The completion of graded work in an online course should be considered a formal process: Just because you are not in a formal classroom setting being proctored while taking a quiz or test does not mean that the completion of graded work in an online course should not be treated with integrity.

The following are some examples of what is considered academic misconduct. This is certainly not an all-inclusive list and there are many other possible ways to be in violation.

- Taking a screen shot of an online assignment, posting it to GroupMe or WhatsApp, and asking for assistance.
- Answering, giving advice, assistance, or suggestions on how to complete an online assignment or assessment that is posted to GroupMe or WhatsApp.
- The use of outside assistance from another student or by searching the internet, Googling for answers, use of websites such as Chat GPT, Quizlet, Course Hero, Chegg Study, etc.
- Gathering to take an online quiz or test with others and sharing answers in the process.

Responses to Academic Dishonesty, Plagiarism, or Cheating

Students should also familiarize themselves with the procedures for academic misconduct in UCF's student handbook, The Golden Rule <http://goldenrule.sdes.ucf.edu/docs/goldenrule.pdf>. UCF faculty members have a responsibility for students' education and the value of a UCF degree, and so seek to prevent unethical behavior and when necessary, respond to academic misconduct. Penalties can include a failing grade in an assignment or in the course, suspension, or expulsion from the university, and/or a "Z Designation" on a student's official transcript indicating academic dishonesty, where the final grade for this course will be preceded by the letter Z. For more information about the Z Designation, see http://goldenrule.sdes.ucf.edu/zgrade.

Course Accessibility Statement

The University of Central Florida is committed to providing access and inclusion for all persons with disabilities. Students with disabilities who need disability-related access in this course should contact the professor as soon as possible. Students should also connect with Student Accessibility Services (SAS) http://sas.sdes.ucf.edu/ (Ferrell Commons 185, sas@ucf.edu, phone 407-823-2371). Through Student Accessibility Services, a Course Accessibility Letter may be created and sent to professors, which informs faculty of potential access and accommodations that might be reasonable. Determining reasonable access and accommodations requires consideration of the course design, course learning objectives and the individual academic and course barriers experienced by the student.

Campus Safety Statement

Emergencies on campus are rare, but if one should arise during class, everyone needs to work together. Students should be aware of their surroundings and familiar with some basic safety and security concepts.

- In case of an emergency, dial 911 for assistance.
- Every UCF classroom contains an emergency procedure guide posted on a wall near the door. Students should make a note of the guide's physical location and review the online version at <http://emergency.ucf.edu/emergency_guide.html>.
- Students should know the evacuation routes from their classrooms and have a plan for finding safety in case of an emergency.
- If there is a medical emergency during class, students may need to access a first-aid kit or AED (Automated External Defibrillator). To learn where those are located, see <https://ehs.ucf.edu/automated-external-defibrillator-aed-locations>.
- To stay informed about emergency situations, students can sign up to receive UCF text alerts by going to <https://my.ucf.edu> and logging in. Click on "Student Self Service" located on the left side of the screen in the toolbar, scroll down to the blue "Personal Information" heading on the Student Center screen, click on "UCF Alert", fill out the information, including e-mail address, cell phone number, and cell phone provider, click "Apply" to save the changes, and then click "OK."
- Students with special needs related to emergency situations should speak with their instructors outside of class.
- To learn about how to manage an active-shooter situation on campus or elsewhere, consider viewing this video https://youtu.be/NIKYajEx4pk.

Notifications in Case of Changes to Course Modality

Depending on the course of the pandemic during the semester, the university may make changes to the way classes are offered. If that happens, please look for announcements or messages in Webcourses@UCF or your UCF email about changes specific to this course.

In Case of Faculty Illness

If the instructor falls ill during the semester, there may be changes to this course, including having a backup instructor take over the course. Please look for announcements or mail in Webcourses@UCF or your UCF email for any alterations to this course.

Deployed Active-Duty Military Students

Students who are deployed active-duty military and/or National Guard personnel and require accommodation should contact their instructors as soon as possible after the semester begins and/or after they receive notification of deployment to make related arrangements.

Title IX

Title IX prohibits sex discrimination, including sexual misconduct, sexual violence, sexual harassment, and retaliation. If you or someone you know has been harassed or assaulted, you can find resources available to support the victim, including confidential resources and information concerning reporting options at https://letsbeclear.ucf.edu and http://cares.sdes.ucf.edu/.

For more information on diversity and inclusion, Title IX, accessibility, or UCF's complaint processes contact:
- Title IX – OIE – http://oie.ucf.edu/ & askanadvocate@ucf.edu
- Disability Accommodation – Student Accessibility Services
- Diversity and Inclusion Training and Events
- UCF Compliance and Ethics Office & complianceandethics@ucf.edu

UCF Cares

During your UCF career, you may experience challenges including struggles with academics, finances, or your personal well-being. UCF has a multitude of resources available to all students. Please visit UCFCares.com if you are seeking resources and support, or if you are worried about a friend or classmate. Free services and information are included for a variety of student concerns, including but not limited to alcohol use, bias incidents, mental health concerns, and financial challenges. You can also e-mail ucfcares@ucf.edu with questions or for additional assistance. You can reach a UCF Cares staff member between 8 a.m. and 5 p.m. by calling 407-823-5607. If you are in immediate distress, call 407-823-2811 to speak with a counselor at Counseling and Psychological Services 24/7 or call 911.

Knights Pantry

The Knights Helping Knights Pantry is committed to serving UCF students by providing basic needs including food, clothing, and personal hygiene items to foster continued academic success and increase retention for students in need. Access to the Knights Pantry is reserved for UCF Students who present a valid Student ID upon entry. Students are limited to 5 food items per day. There is currently no limit for toiletries or clothing.

Location: Ferrell Commons, Room 7H - 101 // Phone: 407-823-3663 // Hours: Mon-Fri: 10am-6pm, Sat. 12pm-5pm

The Knights Pantry relies on the support of students, faculty, and staff. Donations of food, toiletries, or clothing (business professional or casual) can be dropped off at the Pantry in Ferrell Commons or to one of our many donation boxes around campus. Campus donation boxes can be found on the UCF Mobile app maps. In addition to tangible donations, the Knights Panty accepts monetary donations to ensure food is available when demand is high. Also, the Pantry would not be able to keep its doors open without the help of student volunteers, so consider volunteering.

Final Note:

The professor(s) reserve the right to change the syllabus and management of the class at any time during the semester. These changes will be announced in lecture.

TENTATIVE Course Calendar (subject to change)

***Indicates that attendance is mandatory (Each unexcused absence on these days will result in 5% reduction to your course grade)

Week	Date	Topic / Reading / Activity	Important Dates
1	Tu 8/22	Course introduction	
	Th 8/24	01 - An Introduction to Invasion Ecology	Discussion initial comment due Fr 8/25 by 5:00p
2	Tu 8/29	IN-CLASS TEAM MEETING***	Discussion initial replies due Mo 8/28 by 11:59p
	Th 8/31	02 – From where do non-indigenous species (NIS) come and where do they go?	Final campaign topic APPROVAL due Th 8/31 by 11:59p Discussion summary comment due Th 8/31 by 11:59p
3	Tu 9/5	IN-CLASS TEAM MEETING***	Discussion summary replies due Mo 9/4 by 11:59p
	Th 9/7	03 – Ecological Impacts of Invasive Species	
4	Tu 9/12	IN-CLASS TEAM MEETING***	
	Th 9/14	Exam 1 (Lectures 1-3)	Exam 1 on Th 9/14 @ 11:30a
5	Tu 9/19	04 - Establishment Success - The Influence of Propagule Pressure	
	Th 9/21	IN-CLASS TEAM MEETING***	
6	Tu 9/26	05 – Establishment Success - The Influence of Disturbance	
	Th 9/28	IN-CLASS TEAM MEETING***	Preliminary campaign outline due Fr 9/29 by 11:59p Statement of Contribution 1 due Sa 9/30 by 11:59p
7	Tu 10/3	06 - Establishment Success - The Influence of Biotic Factors	
	Th 10/5	IN-CLASS TEAM MEETING***	
8	Tu 10/10	07 – Spread - Ecological processes and the spread of nonnative species	
	Th 10/12	IN-CLASS TEAM MEETING***	
9	Tu 10/17	Exam 2 (Lectures 4-7)	Exam 2 on Tu 10/17 @ 11:30a
	Th 10/19	08 - Evolution of Invaders	
10	Tu 10/24	09 – Impacts of Invasive Species - It's Complicated!	
	Th 10/26	IN-CLASS TEAM MEETING***	Statement of Contribution 2 due Fr 10/27 by 11:59p
11	Tu 10/31	10 - Eradication and Control of Invaders	
	Th 11/2	11 – Predicting, Preventing, and Regulating Invasions	
12	Tu 11/7	IN-CLASS TEAM MEETING***	
	Th 11/9	12 - Controversies surrounding biological invasions	
13	Tu 11/14	IN-CLASS TEAM MEETING***	Additional campaign materials Due Tu 11/14 by 11:59p
	Th 11/16	13 – Prospect – The Homogenocene	Final Website due Fr 11/17 by 11:59p Statement of Contribution 3 due Sa 11/18 by 11:59p
14	Tu 11/21	TEAM MEETING*** (In-class or remote but you must meet!)	
	Th 11/23	No class - Thanksgiving	
15	Tu 11/28	IN-CLASS TEAM MEETING***	
	Th 11/30	Exam 3 (Lectures 8-13)	Exam 3 on Th 11/30 @ 11:30a
Finals	Th 12/7	Presentations – Th 12/7 @ 10:00a – 12:50p	Presentations on Th 12/7 @ 10:00a - 12:50p Statement of Contribution 4 due Fr 12/10 by 11:59p