

BSC 4330 – Invasion Biology

Fall 2021, 3 credits

The course calendar can be found at the end of the syllabus

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

Office Hours: Where: See Office Hours page on Webcourses for Zoom link;
When: Mon 2:00-3:00p, Tue 4:00-5:00p, Thurs 2:30-4:30p, or by appointment

Contact: You can contact me using Webcourses or by directly emailing me from your Knight's email at gklowden@ucf.edu

I receive a large volume of emails from several courses. To help me help you, please include:

- Your first and last names
- Course name (Invasion Biology)

- * 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.
- * Due to confidentiality, I will only reply to questions emailed from your Knights email.
- * Any questions about grades must be discussed in person and cannot be discussed via email.

Class times: Lectures & Exams: Tuesdays 12:30 -1:45 pm in BIO 209
Group meetings: Thursdays 12:30-1:45 pm
Meetings w/ Dr. Klowden will be on Zoom. Meetings with your group can be wherever you like.

Required Resources:

- + Text: Lockwood, J. L., M. F. Hoopes, and M. P. Marchetti. 2013. Invasion Ecology, 2nd edition. Wiley-Blackwell.
- + 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 group 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/>

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/>
- I'veGot1 – 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.

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.

Exams:

There will be three unit exams. The questions will be a mixture of multiple choice, fill in the blank and short answer essay. All questions will pertain to material covered in lectures, textbook readings and additional assignments. The final exam will not be comprehensive. Please bring a #2 pencil with you to each exam. Cell phones and PDAs must be turned off and stowed during the exam period. Grades will be posted on WebCourses. Exams can be reviewed individually in my office hours.

Late For the Exam Policy:

If you arrive late for any exam, you will be allowed to take the test if no one has yet turned in an exam. However, you must turn in the test paper at the regular scheduled end of the test. You will not be allowed extra time unless a documentable emergency has occurred.

Makeup Exam Policy:

If you miss an exam, you will not automatically be granted a make-up: these will be given only in exceptional circumstances, with written documentation from a competent authority (physician, coach, counselor, etc.). Make up exams, IF permitted, will be in essay format. Unexcused absence from an exam will result in a failing grade for the missed exam.

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 group 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 group 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 group should submit your request.
- * Prior to submission, each group must decide who is in charge of 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>

Groups:

Group membership will be randomly assigned. Group composition may not be changed. While the dynamics of group work can be challenging, it offers many advantages including reduced work load and more effective partitioning of individual interests and abilities. Working well in a group 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 come see 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 his/her share. You will have the opportunity to anonymously evaluate your group 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, his/her grade may be reduced.

Group meetings:

Thursdays of each week are reserved for group meetings. You may meet as a group in a single location (library conference rooms are an excellent option) or may meet via Zoom, etc. It is expected that you will attend your group's weekly meeting during the scheduled class period. You should not schedule other activities, including work, during this time period. If you do not attend scheduled group meetings, your grade on this assignment will be reduced accordingly. In some weeks, I advise that you meet with your group more often, and should schedule necessary meetings as needed to assure a successful outcome. During class time, Dr. Klowden will be available for questions on Zoom. One or more group members can join Zoom on an as needed basis to discuss ideas, clarify requirements, etc.

Some meetings with Dr. Klowden (see class schedule) are required. You must log into Zoom at the start of class, as a group in one location or individually, and Dr. Klowden will meet for ~5 minutes with each group. He will rotate between groups in a random order so be patient, someone must be last 😞. You must remain on Zoom until your meeting has completed.

Statements of Contribution:

Several times throughout the semester you must fill out a survey on Webcourses describing your project progress and group member contributions. I encourage all group members to participate equally, to balance the workload and work together to achieve a common goal. As reported anonymously by the other group members, any member who is not pulling his/her weight or who is unnecessarily dominating will have his/her grade reduced.

Late contribution statements will result in a 5% reduction PER DAY in your individual grade for the project.

Optional Book Review Assignment:

This assignment is OPTIONAL. See schedule for due date. Submit via Webcourses. If you choose to do this, it will be worth 4% of your total grade, replacing 4% of your lowest exam grade (making that one exam worth 11% rather than 15%). If you choose, pick an invasion ecology themed book ([see approved book list on Webcourses](#)) of at least 300 pages or more to read and write a summary report demonstrating that you read the entire book and your understanding and opinions of the book. I am particularly interested in your opinions so be sure they are amply represented. Summaries should be 500 to 750 words, no more, no less. Reviews should be for this class only and not a book used in another class. Summaries must be entirely your own work. Plagiarism will not be tolerated and will result in a failing grade for the course. I reserve the right to orally quiz you about the book if I suspect you have not read it.

Note - Optional assignments are not extra credit however like extra credit can boost your grade. As opposed to extra credit, which can be neutral or help your grade, optional assignments can benefit your grade IF you do a good job but could hurt your grade if you do a poor job. If you choose not to do the assignment it will not affect your grade. I design it this way as a way to encourage you to take the assignment seriously and to do a good job and to avoid you turning in a hastily prepared assignment in hopes of getting a point or two.

Performance Evaluation:	Proportion of grade
Online discussion assignment	3%
Exams (3)	64%
Best grade	27%
Mid grade	22%
Lowest grade	15%
Public Awareness Campaign	33%
Plagiarism prevention assignment	1%
Public Awareness Campaign	22%
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).

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.
 - 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.

Plagiarized work is easily detected and university regulations on academic misconduct will be strictly enforced.

- 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) 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 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>.

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.

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 Pantry 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.

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 Knights email about changes specific to this course.

COVID-19 and Illness Notification

Students who believe they may have COVID-19 should contact UCF Student Health Services (407-823-2509) so proper contact tracing procedures can take place. Students should not come to campus if they are ill, are experiencing any symptoms of COVID-19, have tested positive for COVID, or if anyone living in their residence has tested positive or is sick with COVID-19 symptoms. CDC guidance for COVID-19 symptoms can be found at: <https://www.cdc.gov/coronavirus/2019-ncov/symptoms-testing/symptoms.html>

Students should contact their instructor(s) as soon as possible if they miss class for any illness reason to discuss reasonable adjustments that might need to be made. When possible, students should contact their instructor(s) before missing class.

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 Knights email for any alterations to this course.

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.

The course calendar is on the next page

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 8/24	Course introduction Introduction to Invasion Biology (Ch 1)	
	Th 8/26	None – Work on academic activity verification assignment	Academic Activity Verification Discussion - Initial comment due F 8/27 by <u>5:00p</u>
2	Tu 8/31	Transport Vectors and Pathways (Ch 2)	- Replies to initial comment due M 8/30 by 11:59p
	Th 9/2**	Group meetings – Mandatory Zoom meeting w/ Dr. K	Mandatory Zoom meeting w/ Dr. K Th 9/2 ~12:30p - Summary comment due F 9/3 by 11:59p
3	Tu 9/7	Trends in Numbers of Invaders (Ch 3) Propagules (Ch 4)	- Summary comment Replies due M 9/6 by 11:59p Final Campaign Topic due W 9/8 by 11:59p
	Th 9/9	Group meetings – Dr. K available on Zoom	
4	Tu 9/14	Exam 1 (Chapters 1-4)	Exam 1 (Chapters 1-4) – In person in class
	Th 9/16	Group meetings – Dr. K available on Zoom	
5	Tu 9/21	Disturbance (Ch 5)	Plagiarism prevention module due Tu 9/21 by 11:59p
	Th 9/23**	Group meetings - Mandatory Zoom meeting w/ Dr. K	Mandatory Zoom meeting w/ Dr. K Th 9/23 ~12:30p
6	Tu 9/28	Establishment Success: The Influence of Biotic Factors (Ch 6)	
	Th 9/30	Group meetings – Dr. K available on Zoom	Preliminary campaign outline due Th 9/30 by 11:59p Statement of Contribution 1 due F 10/1 by 11:59p
7	Tu 10/5	Modeling the Geographical Spread of Invasive Species (Ch 7)	
	Th 10/7	Group meetings – Dr. K <u>not</u> available today	
8	Tu 10/12	Ecological Processes & the Spread of Non-native Species (Ch 8)	
	Th 10/14	Group meetings – Mandatory Zoom meeting w/ Dr. K	Mandatory Zoom meeting w/ Dr. K Th 10/14 ~12:30p
9	Tu 10/19	Exam 2 (Chapters 5-8)	Exam 2 (Chapters 5-8) – In person in class
	Th 10/21	Group meetings – Dr. K available on Zoom	
10	Tu 10/26	Ecological Impacts of Invasive Species (Ch 9)	
	Th 10/28	Group meetings – Dr. K available on Zoom	
11	Tu 11/2	Impact Synthesis (Ch 10)	
	Th 11/4	Group meetings – Mandatory Zoom meeting w/ Dr. K	Mandatory Zoom meeting w/ Dr. K Th 11/4 ~12:30p
12	Tu 11/9	Evolution of Invaders (Ch 11)	
	Th 11/11	No class - Veterans Day	Optional book review due F 11/12 by 11:59pm
13	Tu 11/16	Predicting and Preventing Invasion (Ch 12) Eradication and Control of Invaders (Ch 13)	
	Th 11/17	Group meetings – Dr. K available on Zoom	Final Campaign submission due F 11/18 by 11:59p Statement of Contribution 2 due Sa 11/19 by 11:59p
14	Tu 11/23	None – Happy Thanksgiving	
	Th 11/25	No class - Thanksgiving	
15	Tu 11/30	Exam 3 (Chapters 9-13)	Exam 3 (Chapters 9-13) – In person in class
	Th 12/2	Group meetings – Mandatory Zoom meeting w/ Dr. K	Mandatory Zoom meeting w/ Dr. K Th 12/2 ~12:30p
Finals	Th 12/9	Presentations - 10:00a – 12:50p	Statement of Contribution 3 due F 12/10 by 11:59p