

PCB 3354 - Tropical Ecology and Conservation

Fall 2022, 3 credits

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

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

Office Hours: When - Mondays 2:00p-4:00p, Thursdays 12:30p-3:30p, Fridays 11:00a-12:00p

How - By appointment only;

- To schedule an appointment, go to: https://calendly.com/dr_klowden/office_hours
- Appointments must be scheduled at least 2 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)

Contact: You may (A) Message me in Webcourses or (B) Email me via your Knights 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 (Tropical Ecology) and (B) a brief description of your question (e.g. Tropical Ecology – Question about rainforest 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 Knights 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.

Class Times: In-person: Tuesdays (and a few Thursdays) 2:00p -3:20p in BIO 209

Team meetings: Thursdays 2:00 pm -3:20 pm

- Every Thursday you should meet with your team in the location of your choosing
- Some Thursdays you will also meet with Dr. Klowden via Zoom

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

Intended Audience: Advanced Biological Science majors & minors.

Course Description:

This course is an introduction to the geography, ecology, and environmental problems encountered in various tropical ecosystems with particular emphasis towards terrestrial systems in tropical rainforests. You will study species diversity, community structure and biogeographic patterns of tropical flora and fauna in various ecosystems and the main abiotic and biotic characteristics that contribute to their distribution, abundance and dynamics including climate, hydrology, soils, nutrient cycles, species interactions and coevolution. In the last part of the course you will study the effects of human activities on species, biological communities and ecosystems and consider various conservation issues and strategies from both theoretical and practical standpoints.

Course Goals:

I want you to take away several things from this course. I want to move beyond the "Discovery Channel" approach to the tropics and, while keeping a sense of the wonder of tropical diversity, help you develop a sound background in modern tropical ecology and conservation, and the tools to continue learning about and acting on behalf of tropical ecosystems.

Specifically, by the end of the course:

1. You should understand modern ecological and evolutionary theory that applies to "how the tropics work", and why tropical ecosystems are different (if they are) from temperate systems. For example, why are there are so many species in the tropics? How is species diversity maintained? How do physiological and behavioral adaptations shape interactions among organisms?
2. "The Tropics" are not monolithic – there are high diversity rain forests, low diversity dry forests, coastal mangroves, alpine páramo, seasonally flooded forests, and many kinds of agro-ecosystems - these systems vary widely in what makes them work. I want you to have a working knowledge of ecosystem diversity in the tropics, and its biogeographic distribution.
3. You should come away from the course with a better understanding of some of the threats to tropical ecosystems

Required Resources:

- Text: There is not a text for this course.
- + 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: Zoom, announcements, assignments, grades, etc. will be made available at this site.
- + Zoom: Office hours will be held on Zoom. Zoom can be accessed via your mobile phone, tablet, desktop or laptop

For technical support see: <https://www.ucf.edu/online/student-resources/ucf-it-support/>
or: <https://cdl.ucf.edu/support/webcourses/>

Performance Evaluation:

	Proportion of grade
Exams	55%
Best exam grade = 32%	
Worst exam grade = 23%	
Library Resources Modules	1%
Tropical Biome Website (Team and individual)	28%
Website critiques (Peer review) (8 x 2%)	<u>16%</u>
	100%

Grading

Scale:

A	93.0 - 100%	B+	87.0 - 89.9%	C+	77.0 - 79.9%	D+	67.0 - 69.9%	F	0 - 59.9%
A-	90.0 - 92.9%	B	83.0 - 86.9%	C	70.0 - 76.9%	D	63.0 - 66.9%		
		B-	80.0 - 82.9%			D-	60.0 - 62.9%		

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).

Lectures

Engage your brain - take notes and ask questions! You are responsible for all material covered in class. 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 print these prior to attending or watching the lectures and take additional notes during lecture.

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 her/his computer, laptop, phone, watch, etc. for reasons not related to class will be asked to leave for the day.

Academic Activity Verification

To meet the registrar's requirement for documentation of your participation in this course, all faculty members are required to document students' academic activity at the beginning of each course. Completion of the following assignments will serve to document that you began this course and will also aid in the semester-long project. Be sure to complete these by 5pm on the deadline. Failure to do so may result in a delay in the disbursement of your financial aid.

- A. How to Avoid Plagiarism
- B. Searching for Scientific Journal Articles
- C. UCF Creed Based Academic Integrity Commitment

Exams

There will be two midterm exams. While exams are not comprehensive, a working knowledge of previous material is expected and necessary to do well. 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.

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 policies. 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 make arrangements for completion of assignments.
3. For unforeseeable absences, 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.

Tropical Biome Website

For this assignment you will construct a website discussing the flora, fauna, and conservation of a tropical biome and several ecosystems.

There are 13 possible tropical biomes:

Terrestrial Biomes:

1. Tropical dry forest
2. Tropical savannah
3. Tropical hot desert
4. Tropical island

Mountain Biomes:

5. Tropical cloud forest
6. Paramo
7. Puna grassland
8. Polylepis forest

Aquatic Biomes:

9. Tropical river OR Floodplains
10. Tropical lake
11. Tropical mangrove
12. Tropical seagrass
13. Tropical coral reef

- Websites can be built and made publicly available using freely available site building websites such as Wix or Weebly or by other means as long as it is made publicly available on the internet for class review. Wix and Weebly are very easy to use, even for those of you that may be somewhat technologically challenged.
- Complete details regarding the expectations for this project are available on Webcourses.
- **Biome Reservations:**
To reserve your preferred biome, go to the Website Biome Reservation assignment in Webcourses and click on the Signup Genius link. This process is 1st come 1st served so don't delay. I encourage you to pick a biome which you know very little about to really increase your knowledge of the tropics.

Teams:

- This project will be completed in teams of 3 to 4 people, so will require coordination outside of class, but also entails individual contributions by each member:
 - Each team is responsible for constructing a webpage that includes general information about your biome, general information about your specific ecosystem(s), 3-4 conservation case studies (1 per team member)
 - Each team member is individually responsible for obtaining the information for 1 detailed conservation case study.
- Once biomes have been reserved and teams have been finalized, I will create an individual Webcourses page for each team. Within these pages you can have discussions, cowrite/ edit using Google Docs, store documents, etc.

A note about working in teams:

While the dynamics of teamwork 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 his/her 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:

Thursdays of each week are reserved for team meetings. You may meet as a team 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 team'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 team meetings, your grade on this assignment will be reduced accordingly. In some weeks, I advise that you meet with your team more often, and should schedule necessary meetings as needed to assure a successful outcome.

During class time and any 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.

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

Team Progress Reports:

There will be 2 mid-project team progress reports. To submit your reports, you must download the blank report form from Webcourses, complete it, and upload it by the due dates listed above and in the syllabus. Failure to submit the statement of contribution on time will result in a 5% reduction PER DAY from the team website grade.

Statements of Contribution:

Several times throughout the semester you must fill out 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 his/her 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.

Grading:

- Websites will be graded on (A) content and (B) appearance. As there are both team and individual portions of each website, team members may not receive the same grades.
- The top 3 ranked sites by Dr. Klowden will receive a 2% bonus on your course grade and the next 2 will receive a 1% bonus.

Website Peer Review:

Following submission of the websites, each student will be assigned 8 websites to anonymously critically review (details forthcoming).

Resources used in the preparation of this course:

In addition to a great many peer-reviewed scientific journal articles, I consulted the following books to prepare the materials for this course. If you desire a deeper understanding of the concepts presented it is recommended that you read associated journal articles and books and discuss the concepts with your peers and/or with me.

- Kricher, John. 2011. *Tropical Ecology*. Princeton University Press. Available at Book Store.
- Osborne, P. L. 2000. *Tropical Ecosystems and Ecological Concepts*. Cambridge University Press.
- Sodhi, N. S., B. W. Brook, and C. J. A. Bradshaw. 2007. *Tropical Conservation Biology*. Blackwell Publishing
- Kellman, M. and R. Tackaberry. 1997. *Tropical Environments*. Routledge.
- Ghazoul, J. and D. Sheil. 2010. *Tropical Rain Forest Ecology, Diversity, and Conservation*. Oxford U. Press.

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.

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.

COVID-19

COVID-19 can affect anyone, and the disease can cause symptoms ranging from mild to very severe. We know that certain things can make people more likely to get very sick with COVID-19. We also know that certain settings and activities can make you more likely to get infected with the virus that causes COVID-19.

Understanding the risk of COVID-19 for yourself and those around you can help you make informed decisions to keep yourself and other people safe and healthy. There are many ways your actions can help protect you, your household, and your community from severe illness from COVID-19. In addition to basic health and hygiene practices, like handwashing, to protect yourself and those around you, it is recommend that you:

- Stay Up to Date with COVID-19 Vaccines
- Wear an N95 or surgical grade mask when indoors or in crowded areas
- Get Tested for COVID-19 If Needed
- Follow Recommendations for What to Do If You Have Been Exposed
- Stay Home If You Have Suspected or Confirmed COVID-19
- Seek Treatment If You Have COVID-19 and Are at High Risk of Getting Very Sick
- Avoid Contact with People Who Have Suspected or Confirmed COVID-19

COVID-19 vaccines help your body develop protection from the virus that causes COVID-19. Although vaccinated people sometimes get infected with the virus that causes COVID-19, staying up to date on COVID-19 vaccines significantly lowers the risk of getting very sick, being hospitalized, or dying from COVID-19. CDC recommends that everyone who is eligible get a booster and stay up to date on their COVID-19 vaccines.

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.

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.

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 and/or on Webcourses.

**"Unless someone like you cares a whole awful lot, nothing is going to get better. It's not."
- Dr. Seuss**

Course Calendar – See next page

TENTATIVE Course Calendar (subject to change)

(Week) Date	Location	Activity / Topic	Due Dates
(1) 8/23	In-person	Class introduction Lecture 1 - What and where are the tropics?	
8/25	In-person	Lecture 2 - Tropical rainforest intro and general structure Intro to library Resources	Library Resources Modules (due 8/26 by 5:00p)
(2) 8/30	In-person	Lecture 3 - Nutrient cycling and tropical soils	Biome Reservation Deadline (8/30 by 5:00p)
9/1	No class	Team meetings optional - On Campus Football Game	
(3) 9/6	In-person	Lecture 4 - Lowland tropical rainforest development & dynamics	
9/8	Team Mtgs	Mandatory Team Meeting	
(4) 9/13	In-person	Lecture 5 - Biotic interactions and coevolution in rainforests	
9/15	Team Mtgs	Mandatory Team Meeting *Quick meetings with Dr. Klowden (on Zoom)	
(5) 9/20	In-person	Lecture 6 - Trophic dynamics in evolutionary context	
9/22	Team Mtgs	Mandatory Team Meeting	Team Progress Report 1 (Due 9/22 by 11:59p)
(6) 9/27	In-person	Exam 1 (Lectures 1-6)	In-class
9/29	Team Mtgs	Mandatory Team Meeting	
(7) 10/4	In-person	Lecture 7 - Why do the tropics have such high biodiversity?	
10/6	Team Mtgs	Mandatory Team Meeting *Quick meetings with Dr. Klowden (on Zoom)	Contribution Statement 1 (Due 10/6 by 11:59p)
(8) 10/11	In-person	Lecture 8 - Lowland tropical rainforest tree species richness Lecture 9 - Survey and comparison of select rainforests	
10/13	No Class	Team meetings optional - On Campus Football Game	
(9) 10/18	In-person	Lecture 10 - Forest fragmentation and biodiversity	
10/20	Team Mtgs	Mandatory Team Meeting	Team Progress Report 2 (Due 10/20 by 11:59p)
(10) 10/25	In-person	Lecture 11 - Tropical savannas and Dry Forests	
10/27	Team Mtgs	Mandatory Team Meeting *Quick meetings with Dr. Klowden (on Zoom)	
(11) 11/1	In-person	Lecture 12 - Mountain ecosystems	
11/3	Team Mtgs	Mandatory Team Meeting	
(12) 11/8	In-person	Lecture 13 - Tropical Deserts and Tropical Rivers	
11/10	Team Mtgs	Mandatory Team Meeting	Website Submissions (Due 11/10 by 11:59p) Contribution Statement 2 (Due 11/11 by 11:59p)
(13) 11/15	In-person	Lecture 14 - Tropical Mangroves and Tropical Islands	
11/17	Team Mtgs	Mandatory Team Meeting	
(14) 11/22	No Class	No class – Thanksgiving	Website critiques 1 (Due 11/22 by 11:59)
11/25	No Class	No class – Thanksgiving	
(15) 11/29	In-person	Lecture 15 - TBA	
12/1	No Class	No Class	Website critiques 2 (Due 12/1 by 11:59)
(Finals) 12/6 @ 1:00p	In-person	Exam 2 (Lectures 7-15) **NOTE The final exam is <u>earlier</u> than normal class time	In-class