

PCB 3442 - 001 Aquatic Ecology

Department of Biology, College of Sciences

3 Credit Hours

Class meeting times: **12:00 – 1:15 pm (Tue, Thu)** (by Zoom lectures)

Office hours: **1:30 - 3:30 pm (Tue, Thu)** (by Zoom)

Modality: V (Synchronous attendance of live Zoom lectures is encouraged but not mandatory. All lectures will be recorded and posted to Webcourses).

To view the recorded lectures, go to the Homepage on Webcourses and click on the link entitled “Links to zoom recordings here”

Course schedule:

click [here](#) for downloadable .pdf version (this may be updated through the semester)

Zoom links and syllabus:

Click on ‘Zoom’ in left margin of Webcourses for direct links.

For security purposes, you must sign into Zoom via your UCF email!

Lectures:

Times: 12:00- 1:15 pm, Tue, Thu (please see Announcements for any changes)

Link: <https://ucf.zoom.us/j/98856771267?pwd=Lzhqb3BUUHltRExNcVlFQktaZzY5Zz09>

Meeting ID: 988 5677 1267

Passcode: 9a497x

For recorded lectures (as available) go to: Files > Resources > Lectures

Office Hours:

Times: 1:30 – 3:30 pm, Tue, Thu (please see Announcements for any changes)

Link: <https://ucf.zoom.us/j/93401030867?pwd=WGpzZ3NabEY0VlZUNUVjd3JCbCthQT09>

Meeting ID: 934 0103 0867

Passcode: 71206x

Waiting room: Office hours will be managed via the waiting room and/or breakout rooms. Please be patient during times of high demand.

Please email me in advance if you desire a 1:1 confidential meeting. This will allow me to rank students in a waiting room by order in which I received emails.

If you are unable to come to the scheduled Zoom office hours, please contact me to seek an out-of-hours appointment, via an ad-hoc 1:1 Zoom meeting.

Zoom etiquette and backup plan

For security purposes, you must sign into Zoom via your UCF email!

Please be sure to rename yourself to your first and last name (please do not use a nickname or a device name like “my iPhone” when you sign in). I encourage questions during the Zoom lectures. Please feel free to interrupt verbally at a suitable moment (e.g., when there is a pause between phrases or at the end of a slide/section), or use the ‘raise hands’ icon, or post your question to the chat. Remember that the lectures are being recorded, including all student questions. By asking a question verbally, you are consenting to being recorded. Unless you are asking a question or contributing to in-class discussions, please mute your microphones. You may have your video on or off during the lectures, as you desire.

In the case of technical difficulties that prevent me from conducting Zoom sessions (e.g., an internet outage), I will instead post a pre-recorded lecture at first opportunity. I will post such changes at first opportunity via Announcements on Webcourses.

If you have technical difficulties with Webcourses/Zoom via Webcourses, please contact:

<https://cdl.ucf.edu/support/webcourses/>

Flexibility during the COVID-19 pandemic:

During the COVID-19 pandemic and the period of remote instruction, we all should operate on the understanding that students (and instructors) may have difficulty at times in accessing the internet, as well as family/personal difficulties that may require flexibility with deadlines and assignments. *Flexibility* and *communication* will be key to providing a valuable educational experience under these conditions. Please contact me if you face any difficulties in completing course assignments. Within reason, I will do everything possible to provide the necessary flexibility so that you can reach your full potential in this class.

Instructor Information

- Instructor: William Crampton
- Office Location: NA
- Office Hours: 1.30 - 3.30 pm, Tuesday and Thursday, by Zoom.
- Digital Contact: crampton@ucf.edu

Course Information

- Term: Spring 2021
- Course Number & Section: PCB 3442-001
- Course Name: Aquatic Ecology
- Credit Hours: 3
- Class Meeting Days: Tuesday, Thursday
- Class Meeting Time: 12:00 pm - 1:15 pm
- Class Location: No physical location.
- Course Modality: V

Enrollment Requirements

Course Prerequisites (if applicable): BSC 2010C and a “B” (3.0) or better in BSC 2011C

Course Co-requisites (if applicable): None

Other Enrollment Requirements (if applicable): Not applicable

Course Description

Aquatic Ecology PCB-3442 is a general introduction to freshwater ecology. The course covers (in various amounts of detail): freshwater systems of the world, properties of water, biodiversity and diversification of freshwater organisms, adaptations to aquatic life, physiology, sensory ecology, trophic ecology, and conservation and management.

Course Abbreviated Description

The aquatic ecology of ponds, lakes, streams, and rivers.

Course Purpose

This is a lecture-based class, in which students will learn principles of aquatic ecology, as well as explore case studies. A major goal of this class is to help students develop critical and independent scientific thinking. There will be remote laboratory and field demonstrations. There will also be an experiment with live electric fish (weakly electric gymnotiform fish from South America).

Course Materials and Resources

There is no textbook.

All course material include Zoom lecture recordings, additional resources, and announcements will be posted on Webcourses (go to Files > Resources).

Hardware and software requirements

You will need a computer with broadband internet access. You will also need Adobe Reader, Microsoft Word (or any other word processing software), Microsoft Excel (or any other similar spreadsheet software), and an internet browser.

Student Learning Outcomes

- Learn core concepts in aquatic ecology
- Build upon skills learned in Introductory Biology II
- Learn to think critically about scientific questions and hypotheses
- Interpret and understand graphs, figures, and basic statistics
- Write a review paper on a chosen topic

Course Activities

Lectures: Questions are encouraged at any time. Lecture notes will be posted as Recordings of the Zoom PowerPoint lectures in Files > Resources > Lectures (as soon as available from Zoom, typically < 24 hours).

Demonstrations: I will perform lab and field demonstrations using pre-recorded/live video and present these by Zoom. You will be given Demonstration Worksheets for each numbered demonstration. Please follow the instructions on the worksheets (details will also be described in the lectures), fill these in and send them in a *single email* at the end of semester, for evaluation (between **April 9 and April 22**). You may fill in the Demonstration Worksheets with a pencil/pen or type into them. Demonstration worksheets are available via Webcourses > Files > Resources > Demonstration Worksheets. Remember, **the FINAL deadline for handing in demonstrations is April 22.**

Term Paper: You will pick an aquatic ecology-related subject of interest to you and conduct a **literature-based review**. Do not replicate your term papers with material from any other class.

Term paper instructions:

1. Submit a *preliminary* title (maximum 20 words) and *preliminary* abstract (maximum 200 words) **for pre-approval**. Submit any time in semester up to **deadline on March 11**.
2. Once your title/abstract are approved. Use online/library resources. I will discuss strategies for writing your term paper and useful resources during Demonstration 1.
3. Type your term paper, print, and submit to *by email* before the deadline on **April 22**.

Term paper formatting rules:

Go to Webcourses > Files > Resources > Term paper template for a term paper template document.

- Minimum **6** Maximum **10** pages (including abstract and figures but *excluding* references and tables).
- Use 12-point Times New Roman. Single spaced.
- Arrange in the order:

Title (on cover page) – up to 3 lines long. This can be different to your preliminary title, but I will need to approve a major topic change.

Abstract (also on cover page) (150 words minimum, 250 words maximum). This can be different to your preliminary abstract.

Background.

Then divide your text into headings of your own choice (with no more than 3 levels of e.g., 1., 1.1., 1.1.i.). and have a summary. Then add References, and finally figures.

Summary

References (list papers cited in the text at the end of the text).

- You are allowed up to six figures. Please embed these in text near the point at which they are first mentioned. Number them in order of first mention. Include a short legend below each one. Use color if you like. Cite sources of figures.
- You are allowed up to 4 tables. These should be placed at the end of the paper. They do not count in the page count. Format tables as you like.
- You are allowed an unlimited number of references. These do not count in the page count.
- No appendices or other supplementary documents should be included.
- The paper should be formatted approximately as a scientific journal (see example in Term paper template)– We will discuss how to find and cite bibliographic information in class.
- More information will be provided in class about term papers and formatting.

Activity Submission deadlines

Submit your term paper abstract for pre-approval on March 11

Submit your finished term paper between April 9 and April 22

Submit your demonstration notes between April 9 and April 22

Attendance/Participation

Attendance of lectures and office hours is encouraged but non-mandatory.

All exams must be conducted on the designated day unless an excused absence is requested from Dr. Crampton.

The Undergraduate Catalog states, “Reasons for acceptable absences may include illness, serious family emergencies, special curricular requirements (e.g., judging trips, field trips, professional conferences), military obligations, severe weather conditions, and religious holidays.”

Assessment and Grading Procedures

The table summarizes the weight distribution for each assignment.	
Assignment	Percentage of Grade
Exam 1	22% (multiple choice)
Exam 2	23% (multiple choice)
Term paper	20%
Notes on demonstrations	15%
Final Exam	20% (multiple choice)
Total	100%

Grading scale:

A: ≥ 90 - 100, **B:** $\geq 80 < 90$, **C:** $\geq 70 < 80$, **D:** $\geq 60 < 70$, **F:** < 60 .

Consult the latest Undergraduate or Graduate [catalog](#) for regulations and procedures regarding grading such as Incomplete grades, grade changes, and grade forgiveness.

Grading breakdown:

Financial Aid Quiz = 0% (there is no score for this assignment)

Exam 1 = 22% (multiple choice) (1 hr. 15 min, taken on the assigned day between 8 am and 11pm)

Exam 2 = 23% (multiple choice) (1 hr. 15 min, taken on the assigned day between 8 am and 11pm)

Term paper = 20%. You must submit your term paper before the deadline.

Notes on demonstrations = 15%. You must complete all demonstration worksheets and submit them before the deadline.

Final exam = 20% (multiple choice, to be taken at the appointed time, no makeups)

Total = 100%

Notes on Exams 1 and 2. Exams 1 and 2 will be conducted via Webcourses on the day marked in the Schedule. You will have 1 hour and 15 minutes to answer the questions once you begin. The exam will be open from **8am to 11 pm**. If you do not finish the exam before 11pm the system may score your exam 'zero' . Do not start it too late!

Notes on Final Exam. The final exam will be semi-cumulative (details to be announced later in the semester). You must take the final exam during the university-scheduled time (**10 am - 12:50 pm on April 29**).

Exams 1 and 2, and the Final exam are 'open book'. I will not use online proctoring tools. You may use your notes and any text/internet resources to help you during the exam. However, you may NOT communicate with other students during the exams, nor may you copy and distribute exam questions to other students during or after each exam. If you encounter other students breaking these rules, please report them to me so that I may refer the matter to the university Office of Student Conduct for investigation.

Notes on demonstration notes: You will be given instructions on how to fill in the worksheets. Please submit them in a single email, before April 22. Please put "Demonstration notes - Aquatic Ecology" in the subject line and put your full name in the email.

Notes on term paper: You will be given detailed instructions on how to write and format your term paper. Please submit by email before April 22. Please put "Term paper - Aquatic Ecology" in the subject line and put your full name in the email. Please send separately to your Demonstration notes.

“Curving” policy. Curves may be applied to exams. Students who achieve over 100% in Exams 1 or 2 due to curving will have those points "rolled over" to the next exam.

Extra credit: There is no extra credit in this class.

Round up: If you score between e.g., 89.5 and 90 your score will be upgraded to 90 (same for other grade boundaries).

Make-up Exams and Assignments

Make-up policy: Make-up exams for Exams 1 and 2 (i.e., doing this exam on another day) can be provided for valid, documented reasons. If you require a make-up please contact me, in advance, to seek an excused absence, or as soon as possible after the exam in the case of an emergency. You must attend the Final Exam at the scheduled time.

Per university policy, you are allowed to submit make-up work (or an equivalent, alternate assignment) for authorized university-sponsored activities, religious observances, or legal obligations (such as jury duty). If this participation conflicts with your course assignments, I will offer a reasonable opportunity for you to complete missed assignments and/or exams. The make-up assignment and grading scale will be equivalent to the missed assignment and its grading scale. In the case of an authorized university activity, it is your responsibility to show me a signed copy of the Program Verification Form for which you will be absent, prior to the class in which the absence occurs. In any of these cases, please contact me ahead of time to notify me of upcoming needs.

Correspondences

Communication: All e-mail correspondence should be via UCF email addresses or through Webcourses. **By FERPA regulation emails from third-party email addresses cannot be responded to.** Please place the course number and a brief subject description in the email title line. Please make sure you put your full name at the end of the email.

Class policy changes

I reserve the right to change the syllabus and class schedule. These changes will be announced in lectures and via Webcourses.

Academic engagement quiz

All instructors/faculty are required to document student academic activity at the beginning of each course. In order to document that you began this course, please complete the quiz labeled 'Academic Engagement Quiz (under Quizzes)' by the end of the first week of classes or as soon as possible after adding the course. Failure to do so may result in a delay in the disbursement of your financial aid.

University Services and Resources

Academic Services and Resources

A list of available academic support and learning services is available at [UCF Student Services](#). Click on "Academic Support and Learning Services" on the right-hand side to filter.

Non-Academic Services and Resources

A list of non-academic support and services is also available at [UCF Student Services](#). Click on "Support" on the right-hand side to filter.

If you are a UCF Online student, please consult the [UCF Online Student Guidelines](#) for more information about your access to non-academic services.

Policy Statements

COVID-19

To protect members of our community, [everyone is required to wear a facial covering](#) inside all common spaces including classrooms. Students who choose not to wear facial coverings will be asked to leave the classroom by the instructor. If they refuse to leave the classroom or put on a facial covering, they may be considered disruptive (please see the [Golden Rule](#) for student behavior expectations). Faculty have the right to cancel class if the safety and well-being of class members are in jeopardy. Students will be responsible for the material that would have been covered in class as provided by the instructor.

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 a COVID-19 diagnosis 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 is located here: (<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.

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.

Accommodations may need to be added or adjusted should this course shift from an on-campus to a remote format. Students registered with Student Accessibility Services should speak with their instructor and should contact sas@ucf.edu to discuss specific accommodations for this or other courses.

Academic Integrity

Students should familiarize themselves with UCF's [Rules of Conduct](#). 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.
- *Multiple Submissions*: Submitting the same academic work for credit more than once without the express written permission of the instructor.
- *Helping another violate* academic behavior standards.

For more information about Academic Integrity, students may consult [The Center for Academic Integrity](#).

For more information about plagiarism and misuse of sources, see "[Defining and Avoiding Plagiarism: The WPA Statement on Best Practices](#)".

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](#). 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](#) (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.

Copyright

This course may contain copyright protected materials such as audio or video clips, images, text materials, etc. These items are being used with regard to the Fair Use doctrine in order to enhance the learning environment. Please do not copy, duplicate, download or distribute these items. The use of these materials is strictly reserved for this online classroom environment and your use only. All copyright materials are credited to the copyright holder.

Third-Party Software and FERPA

During this course you might have the opportunity to use public online services and/or software applications sometimes called third-party software such as a blog or wiki. While some of these could be required assignments, you need not make any personally identifying information on a public site. Do not post or provide any private information about yourself or your classmates. Where appropriate you may use a pseudonym or nickname. Some written assignments posted publicly may require personal reflection/comments, but the assignments will not require you to disclose any personally identity-sensitive information. If you have any concerns about this, please contact your instructor.

Statement of diversity and inclusion

All participants in this class are expected to abide by the following statement, in the UCF Golden Rule: “UCF values diversity and inclusion of all in our community. Accordingly, discrimination on the basis of race, sex, national origin, religion, age, disability, marital status, or veteran’s status is prohibited by federal and/or state law. It is our policy to treat all people with dignity and respect, without regard to race, creed, color, national origin, religion, sex, age, disability, marital status, sexual orientation, gender expression, gender identity, veteran status, or political opinions and affiliations.”

Zoom Privacy Statement

<https://zoom.us/privacy>