



PCB 3043
Principles of Ecology
50421 001
Summer 2026

Instructor Name

David Lewis

University Course Description

An introduction to the basic principles and concepts of ecology at the ecosystem, community, and population level of organization.

Course Prerequisites

Prerequisite(s):

(BSC 2010 Minimum Grade: C-
or BSC 1010 Minimum Grade: C-
or BSC 2010C Minimum Grade: C-
or BSC 1010C Minimum Grade: C-
or Biology Minimum Score: 4)
and (BSC 2010L Minimum Grade: C-
or BSC 1010L Minimum Grade: C-
or BSC 2010C Minimum Grade: C-
or BSC 1010C Minimum Grade: C-
or Biology Minimum Score: 4)
and (BSC 2011 Minimum Grade: C-
or BSC 1011 Minimum Grade: C-
or BSC 2011C Minimum Grade: C-

or BSC 1011C Minimum Grade: C-
or Biology Minimum Score: 5)
and (BSC 2011L Minimum Grade: C-
or BSC 1011L Minimum Grade: C-
or BSC 2011C Minimum Grade: C-
or BSC 1011C Minimum Grade: C-
or Biology Minimum Score: 5)
and (CHM 2046 Minimum Grade: C-
or CHM 1046 Minimum Grade: C-
or CHM 2046C Minimum Grade: C-
or CHM 1046C Minimum Grade: C-
or Chemistry Minimum Score: 5)

Corequisite(s):

Course Format

Course delivery

This course combines presentations, readings, homework assignments, and exams to help you achieve the course learning objectives . There will be a homework assignment for each chapter of the textbook. Accordingly, one or two homework assignments will be due prior to each class meeting. Generally, the homework assignment for a chapter will be due before that chapter is covered in lecture.

Missed coursework

Homework assignments and exams constitute the graded evaluations in this course. Any homework assignment not turned in by the time it is due will receive a score of zero, unless it is not turned in for an acceptable reason, in which case a make-up opportunity will be provided. Any missed exam will receive a score of zero unless it is missed for an acceptable reason and a make-up exam is taken. Acceptable reasons for missed evaluations (homework assignments and exams) are medical needs, court-imposed legal obligations, requirements of military service, observation of select holy days, and funerary events. In select cases, special requirements of university-sponsored events might constitute

acceptable reasons for missed evaluations. Acceptable reasons for missing an exam must relate specifically to the time when the exam was given. Acceptable reasons for failing to turn in an assignment by the time it is due must relate to the entire time period in which the assignment was available to the student.

Acceptable reasons must be documented in writing by an involved professional. The instructor retains the right to make additional inquiries concerning the documentation. The instructor may deny the request for a make-up opportunity if the instructor deems that the reason for missing the original evaluation was not acceptable, did not pertain to the day or time period of the missed evaluation, or was insufficiently documented.

If a student will miss an evaluation owing to a scheduled absence—that is, a time conflict known in advance—they must request a make-up opportunity as soon as they are aware of the scheduled absence. Make-up requests made after the original exam or assignment due date will be denied if the evaluation was missed owing to a scheduled absence.

Invalid reasons for missing exams and failing to complete homework assignments on time include, but are not limited to, employment schedules, athletic training schedules, and personal appointments, events, and vacations. If an exam is missed or homework is not completed on time because of an invalid reason, no make-up opportunity will be provided.

In the case of unscheduled absences involving unforeseen emergencies, such as illness, injury, hospitalization, death in the immediate family, and consequences of severe weather, students should contact the instructor as soon as possible. The instructor may require documentation or verification to excuse unscheduled absences.

If a make-up exam is granted, the instructor retains the right to give a make-up exam that is different in content and style than the original, and to schedule the make-up exam at any time including prior to the date of the original. If a make-up exam is granted, only one make-up exam

opportunity will be provided. Once that make-up opportunity is scheduled, it will not be rescheduled. If a student fails to attend a make-up exam, they will receive a zero for that exam. If a make-up opportunity is granted for a homework assignment, the instructor retains the right to issue a make-up assignment that is different in content and style than the original. If a make-up assignment is not turned in by its due date, it will receive a score of zero.

Reviewing assignments and exams

Students may review their performance on an assignment or exam up to one week from the assignment due date or exam date. Past one week from the date an assignment is due or an exam is taken, the evaluation is no longer available for review, and any recorded grade will be final. Exceptions to this one-week policy are assignments due and exams occurring during the final week of the semester; these evaluations may be reviewed only until the final day of the semester.

Intellectual property

All course material is provided to students for their personal use only. No one is permitted to record class activities by any means for the purpose of sale. No one is permitted to make course material available to people not enrolled in the course. You may not post course material online or distribute hard copies of course material. All course material including, but not limited to, lectures, assignments, exams, in-class learning activities, practice questions, learning objectives, and study guides are copyrighted and the intellectual property of others. Do not disseminate course material outside of the course.

Academic integrity

See the "USF Core Syllabus Policies" section of this syllabus. It provides a link that will lead you to University academic integrity policies and procedures. In addition to those policies, the following policies will be in effect. Each student must complete homework assignments on their own

using only the textbook and any notes they have taken themselves while reading the textbook or attending lecture. Students may not work with others to complete homework. Students may not seek assistance on homework through the use of other resources, including (but not limited to) internet search engines and generative artificial intelligence tools. Use of tools beyond the textbook and a student's own notes, and completing homework with the assistance of others, are violations of academic integrity. When taking exams, students may access no materials other than a writing utensil and the exam form material provided by the instructor. Using any other materials or communicating with other students during the exam will be considered violations of academic integrity. Prohibited activities during exams include, but are not limited to, using scratch paper or cheat sheets, looking at another student's exam, acquiring exam information from or providing exam information to another student, communicating with another student by any means during the exam, and using computer materials (including but not limited to smart phones, smart glasses, smart watches, tablets, laptop computers, desktop computers, and other internet-accessing or digital data-storing devices).

Use of technology in the classroom

Students using laptop computers, tablets, phones, and other internet-accessing or computing devices during class may use them only for course-related purposes. These purposes include accessing the electronic version of the textbook, accessing this course's Canvas site and material posted there, and taking notes on the presentation. These devices may not be used during class for non-course purposes. Use of devices for non-course purposes will be treated as disruptions of the academic process.

Student Learning Outcomes

Upon successful completion of this course, students will demonstrate an improved ability to accomplish the following.

1. The Physical Environment & Climate: Synthesize the physical, geological, and atmospheric processes that dictate global and local climates.
2. Evolutionary Foundations & Adaptations: Evaluate the mechanisms of evolution and the physiological, behavioral, and anatomical adaptations of organisms.
3. Life History & Bioenergetics: Apply the principle of allocation to model life-history strategies and fitness.
4. Population Dynamics: Model and analyze the factors regulating population growth and distribution.
5. Species Interactions: Compare and contrast the ecological and evolutionary drivers and outcomes of species interactions.
6. Community Structure & Biodiversity: Analyze the complexity and diversity of community assemblages, food webs, and successional change.
7. Ecosystem Processes: Construct models of energy flow and nutrient cycling within ecosystems.
8. Landscape & Global Ecology: Examine the influence of landscape structure and global change on ecological patterns and processes.

Throughout these outcomes, students will learn how manipulative experiments, comparative studies, and quantitative modeling are used to test ecological hypotheses.

Course Objectives

The objectives of this course are to introduce students to the principles of ecology at the ecosystem, community, population, and individual levels of organization; foster understanding of the hierarchical organization of living systems; teach this material in the context of evolutionary processes and adaptive traits; encourage synthetic thinking and applications of knowledge; and promote career readiness by fostering critical thinking and problem-solving aptitudes.

Required Texts and/or Readings and Course Materials

"Ecology: Concepts and Applications", 9th edition, Anna A. Sher and Manuel C. Molles, Jr., publisher McGraw-Hill.

Grading Scale

A+ 96 or greater

A 92 to <96

A- 89 to <92

B+ 86 to <89

B 82 to <86

B- 79 to <82

C+ 76 to <79

C 72 to <76

C- 69 to <72

D+ 66 to <69

D 62 to <66

D- 59 to <62

F <59

Grade Categories and Weights

Homework: 21%

Exams: 79%

Course Schedule

Course Schedule

Exams	Dates	
Exam 1	2 June	
Exam 2	18 June	
Exam 3	7 July	
Exam 4	23 July	

In addition to the above exam dates, class will meet every scheduled day during the Summer C term. Homework assignments will be due every day or nearly every day that the course meets. This schedule information is tentative and may change. Pay attention to course announcements for any changes.

USF Core Syllabus Policies

USF has a set of central policies related to student recording class sessions, academic integrity and grievances, student accessibility services, academic disruption, religious observances, academic continuity, food insecurity, pregnancy and related conditions, and sexual harassment that **apply to all courses at USF**. Be sure to review these online:

<https://www.usf.edu/provost/faculty-success/resources-policies-forms/core-syllabus-policy-statements.aspx>

Student Recordings

Florida Statute 1004.097 Free Expression on Campus

Students may, without prior notice, record video or audio of a class lecture for a class in which the student is enrolled for their own personal, educational use (USF Policy 10-048). A class lecture is defined as a formal or methodical oral presentation as part of a university course intended to present information or teach enrolled students about a particular subject. Recording class activities other than class lectures, including but not limited to lab sessions, student presentations (whether individually or part of a group), class discussion, clinical presentations such as patient history, academic exercises involving student participation, test or examination administrations, field trips, private conversations between students in the class or between a student and the faculty member is prohibited. Recordings may not be used as a substitute for class participation and class attendance and may not be published or shared without the written consent of the faculty member. Failure to adhere to these requirements may constitute a violation of the USF Student Conduct Code.

Course Policies: Grades

There will be no rounding of scores. There will be no extra credit.

Grades of "Incomplete"

The current university policy concerning incomplete grades will be followed in this course.

For undergraduate courses: An “I” grade may be awarded to a student only when a small portion of the student’s work is incomplete and only when the student is otherwise earning a passing grade. The time limit for removing the “I” is to be set by the instructor of the course. For undergraduate students, this time limit may not exceed two academic semesters, whether or not the student is in residence, and/or graduation, whichever comes first. For graduate students, this time limit may not exceed one academic semester. “I” grades not removed by the end of the time limit will be changed to “IF” or “IU,” whichever is appropriate.

Campus Free Expression

It is fundamental to the University of South Florida’s mission to support an environment where divergent ideas, theories, and philosophies can be openly exchanged and critically evaluated. Consistent with these principles, this course may involve discussion of ideas that you find uncomfortable, disagreeable, or even offensive.

In the instructional setting, ideas are intended to be presented in an objective manner and not as an endorsement of what you should personally believe. “Objective” means that the idea(s) presented can be tested by critical peer review and rigorous debate, and that the idea(s) is supported by credible research.

In this course you may be asked to engage with complex ideas and to demonstrate an understanding of the ideas. Understanding and engaging with an idea does not require you to believe it or to agree with it.

Course Policies: Technology and Media

Read full text of syllabus for course policies.

Course Policies: Student Expectations

Health and Wellness

Your health is a priority at the University of South Florida. We encourage members of our community to look out for each other and to reach out for help if someone is in need. If you or someone you know is in distress, please make a referral at www.usf.edu/sos so that the Student Outreach & Support can contact and provide helpful resources to the student in distress. A 24-hour licensed mental healthcare professional, offered through the counseling center, is available by phone at 813-974-2831, option 3. Please remember that asking for help is a sign of strength. In case of emergency, please dial 9-1-1.

Title IX Policy

USF is committed to fostering a safe and respectful learning environment, free from sex discrimination and sexual harassment, in accordance with Title IX and USF Policy 0-004. If a student shares an experience of sexual harassment, sexual assault, stalking, or relationship violence with a USF employee (including faculty), that employee will notify the Title IX Office. This allows the Title IX Office to send the student an email with information about support resources and options—if it is safe to do so. Students are not required to respond to this email. The Title IX Office is a private resource. Information is shared only on a need-to-know basis to provide students with support measures. To speak to a confidential resource, students may contact USF Center for Victim Advocacy at 813-974-5757. Confidential resources do not notify the Title IX Office unless the student requests it. For more information about Title IX, available resources, or to make a report, please visit www.usf.edu/title-ix.

Course Hero / Chegg Policy

The USF Policy on Academic Integrity specifies that students may not use websites that enable cheating, such as by uploading or downloading material for this purpose. This does apply specifically to Chegg.com and CourseHero.com – almost any use of these websites (including uploading proprietary materials) constitutes a violation of the academic integrity policy.

Professionalism Policy

Per university policy and classroom etiquette; mobile phones, iPods, etc. must be silenced during all classroom and lab lectures. Those not heeding this rule will be asked to leave the classroom/lab immediately so as to not disrupt the learning environment. Please arrive on time for all class meetings. Students who habitually disturb the class by talking, arriving late, etc., and have been warned may suffer a reduction in their final class grade.

Turnitin.com

In this course, turnitin.com may be utilized. Turnitin is an automated system which instructors may use to quickly and easily compare each student's assignment with billions of web sites, as well as an enormous database of student papers that grows with each submission. Accordingly, you will be expected to submit all assignments in both hard copy and electronic format. After the assignment is processed, as instructor I receive a report from turnitin.com that states if and how another author's work was used in the assignment. For a more detailed look at this process visit <http://www.turnitin.com>. Essays are due at turnitin.com the same day as in class.

Netiquette Guidelines

1. Act professionally in the way you communicate. Treat your instructors and peers with respect, the same way you would do in a face-to-face environment. Respect other people's ideas and be constructive when explaining your views about points you may not agree with.
2. Be sensitive. Be respectful and sensitive when sharing your ideas and opinions. There will be people in your class with different linguistic backgrounds, political and religious beliefs or other general differences.
3. Proofread and check spelling. Doing this before sending an email or posting a thread on a discussion board will allow you to make sure your message is clear and thoughtful. Avoid the use of all capital letters, it can be perceived as if you are shouting, and it is more difficult to read.
4. Keep your communications focused and stay on topic. Complete your ideas before changing the subject. By keeping the message on focus you allow the readers to easily get your idea or answers they are looking for.
5. Be clear with your message. Avoid using humor or sarcasm. Since people can't see your expressions or hear your tone of voice, meaning can be misinterpreted.

Email and Discussion Board Guidelines

1. Use the subject line effectively by using a meaningful line of what your email or discussion is about.
2. Keep your emails and postings related to the course content. You should not post anything personal on a discussion board unless it is requested by the instructor.
3. Any personal, course or confidential issues should be directly communicated to the instructor via email. The discussion boards are public spaces; therefore, any issues should not be posted there.

End of Semester Student Evaluations

All classes at USF make use of an online system for students to provide feedback to the University regarding the course. These surveys will be made available at the end of the semester, and the University will notify you by email when the response window opens. Your participation is highly encouraged and valued.

Food and Drink Policy (for in-campus sessions only).

Please adhere to the firm policy of no beverages (other than bottled/capped water), food, tobacco products, or like items in the classroom. Your understanding of the necessity for this policy and cooperation will be greatly appreciated. This policy will be strictly enforced.

Learning Support and Campus Offices

Academic Accommodations

Students with disabilities are responsible for registering with Student Accessibility Services (SAS) in order to receive academic accommodations. For additional information about academic accommodations and resources, you can visit the SAS website.

[SAS website for the Tampa and Sarasota-Manatee campuses.](#)

[SAS website for the St. Pete campus.](#)

Academic Support Services

The USF Office of Student Success coordinates and promotes university-wide efforts to enhance undergraduate and graduate student success. For a comprehensive list of academic support services available to all USF students, please visit the [Office of Student Success website.](#)

Canvas Technical Support

If you have technical difficulties in Canvas, you can find access to the Canvas guides and video resources in the “Canvas Help” page on the homepage of your Canvas course. You can also contact the help desk by calling 813-974-1222 in Tampa or emailing help@usf.edu.

[USF IT Service Support Tampa Campus](#)

[USF IT Support St. Pete Campus](#)

[USF IT Support Sarasota-Manatee Campus](#)

Center for Victim Advocacy

The [Center for Victim Advocacy](#) empowers survivors of crime, violence, or abuse by promoting the restoration of decision making, by advocating for their rights, and by offering support and resources. Contact information is available online.

Counseling Center

The Counseling Center promotes the wellbeing of the campus community by providing culturally sensitive counseling, consultation, prevention, and training that enhances student academic and personal success. Contact information is available online.

[Counseling Center website for the Tampa campus.](#)

[Counseling Center website for the St. Pete campus.](#)

[Counseling Center website for the Sarasota-Manatee campus.](#)

Tutoring

The Tutoring Hub offers free tutoring in several subjects to USF undergraduates. Appointments are recommended, but not required. For more information, email

asctampa@usf.edu.

[Tutoring website for the Tampa campus.](#)

[Tutoring website for the St. Pete campus.](#)

[Tutoring website for the Sarasota-Manatee campus.](#)

Writing Studio

The Writing Studio is a free resource for USF undergraduate and graduate students. At the Writing Studio, a trained writing consultant will work individually with you, at any point in the writing process from brainstorming to editing. Appointments are recommended, but not required. For more information or to make an appointment, email:

writingstudio@usf.edu.

[Writing studio website for the Tampa campus.](#)

[Writing studio website for the St. Pete campus.](#)

[Writing studio website for the Sarasota-Manatee campus.](#)

Student Ombuds Office

Florida Statute 1006.51 and Florida Board of Governors Regulation 6.011 require that all public institutions provide ombuds services to students. The Student Ombuds Office at USF is a confidential, impartial, informal, and independent resource for students experiencing challenges related to the university. Ombuds can help students safely explore options, clarify processes, and consider next steps. [Learn more or make an appointment at usf.edu/student-ombuds.](https://www.usf.edu/student-ombuds)