



BSC 307.01B: Ecology- Spring 2024

W 1:00 pm – 3:50 pm; STC 136

Instructor Information:

Bjorn Schmidt

Office: STC 212

Email: bjorn.schmidt@tamuc.edu

Preferred contact: email (answered within 48 hours)

Office Hours: TR 1:00 pm – 3:00 pm, or by appointment

Textbook & materials (required):

Ecology, from Individuals to Ecosystems. 5th edition. 2021. Michael Begon and Colin Townsend.

versions:

ISBN: 9781119279358 (paperback)

ISBN: 9781119279310 (ebook)

Access to a computer and d2l (myleo online) is required; all course materials will be uploaded through d2l

Course Description

Ecology is the study of living things and their interactions with their environment. This class takes a hierarchical look at ecological processes from ecosystems, factors affecting production and biodiversity, zones of tolerance, ecological succession, ecotones and ecoclines, community ecology, niche theory, population models, and evolutionary arms races.

Student Learning Outcomes

- Students will understand ecological niche theory and resource driven analysis of ecological processes
- Students will demonstrate knowledge of patterns and processes of population dynamics and life history theory
- Students will demonstrate knowledge of ecological determinants of community patterns including competition, predation/parasitism, and facilitation
- Students will understand food web connections in communities and how communities change in space and time
- Students will demonstrate knowledge of how energy flows and cycles through ecosystems

Instructional Methods

Instruction will consist of in-class lectures, in-class activities, and online assessments. PowerPoints for lectures will be made available that day through d2l (myLeo Online). Each class will have a powerpoint lecture and in-class activity/assignment for that week. The blended components of the course will be weekly online quizzes or exams. Specific weekly assignments may also have online components. Announcements will be presented during class time and will also be announced in d2l system. Gradebooks, quizzes, and online materials will be maintained in d2l.

Course Evaluations

Tests: There will be four regular exams and a comprehensive final exam

Quizzes: There will be eleven quizzes spaced throughout the semester. Students will get to drop the lowest quiz grade for the semester

Assignments: Each week there will be a short assignment over that week's topic (15 total). There will be dedicated class time each week to complete the assignment, during the second half of the scheduled class time. Some assignments can be completed as groups. Specific details will be given each week during class and on d2l. In general, these assignments will need to be turned in before the next class period (due next Tuesday at 11:59 pm)

Evaluation Points

Four exams – 320 points (80 points each)

Final exam - 100 points

Ten quizzes - 200 points (20 points each, drop lowest quiz grade)

Fifteen assignments - 225 points (15 points each)

Total points = 845

Grading

A: 89.96-100%

B: 79.96-89.95%

C: 69.96-79.95%

D: 59.96-69.95%

F: <59.96%

General Makeup Policy: The student is responsible for requesting a makeup when they are unable to submit the regularly scheduled assessment before the due date and must schedule the makeup by email within **1 day** after the class date. Requests will only be granted for university approved reasons. If the assessment is not made-up, the student will receive a zero for that item.

Course AI Statement: AI writing tools, including predictive text generators like ChatGPT, are not allowed in this course. Students are responsible for their own work in the course, and are subject to requirements and consequences of the TAMUC academic dishonesty policy and the student code of conduct:

<https://inside.tamuc.edu/aboutus/policiesProceduresStandardsStatements/rulesProcedures/13students/undergraduates/13.99.99.R0.03UndergraduateAcademicDishonesty.pdf>

<https://www.tamuc.edu/student-life/division-of-student-affairs/office-of-student-rights-and-responsibilities/student-code-of-conduct/>

Syllabus Change Policy

The syllabus is a guide. Circumstances and events, such as student progress, may make it necessary for the instructor to modify the syllabus during the semester. Any changes made to the syllabus will be announced in advance.

Tentative Course Schedule (subject to change)

The course is organized into five sections, each chapter/week will have an online quiz (that chapter only) or online exam (multiple chapters). Quizzes and exams during the semester will be in d2l and are open book/open notes. The final exam will be in person and will be comprehensive.

Each week will have a short activity/assignment. This will usually involve dedicated in-class time (second half of the class). In general, these assignments will be due before the following class (turned in through d2l). More details will be given each week for that assignment.

Section 1 (Introduction/Background):

Ch 1: Organisms in their environments – Quiz 1

Ch 2: Conditions – Quiz 2

Ch 3: Resources – Exam 1 (Chs 1-3)

Section 2 (Population Dynamics: Life Tables and Life History Strategies)

Ch 4: Matters of Life and Death – Quiz 3

Ch 7: Life History Ecology and Evolution – Quiz 4

Section 3 (Competition)

Ch 5: Intraspecific Competition – Quiz 5

Ch 8: Interspecific Competition – Exam 2 (Chs 4, 7, 5, 8)

Section 4 (Predation, Parasitism, and Facilitation)

Ch 9: The Nature of Predation – Quiz 6

Ch 10: The Population Dynamics of Predation – Quiz 7

Ch 12: Parasitism and Disease – Quiz 8

Ch 13: Facilitation: Mutualism and Commensalism – Exam 3 (Chs 9, 10, 12, 13)

Section 5 (Community Patterns and Ecological Energetics)

Ch 16: Community Modules and the Structure of Ecological Communities – Quiz 9

Ch 17: Food Webs – Quiz 10

Ch 18: Patterns in Community Composition in Space and Time – Quiz 11

Ch 20: The Flux of Energy through Ecosystems – Exam 4 (Chs 16-18, 20)

Week of	Topics (Book Chapters)	Notable Online Assignments
1/08	Introduction, Ch 1: Organisms in their environments Invasive Species Activity -invasive species assignment-	Quiz 1 – due 1/16 at 11:59 pm
1/15	Ch 2: Conditions -ecological niche assignment-	Quiz 2 – due 1/23 at 11:59 pm

1/22	Ch 3: Resources -ecological resource assignment-	Exam 1 – due 1/30 at 11:59 pm
1/29	Ch 4: Matters of Life and Death -life table assignment-	Quiz 3 – due 2/06 at 11:59 pm
2/05	Ch 7: Life History Ecology and Evolution -life history assignment-	Quiz 4 – due 2/13 at 11:59 pm
2/12	Ch 5: Intraspecific Competition -intraspecific competition assignment-	Quiz 5 – due 2/20 at 11:59 pm
2/19	Ch 8 : Interspecific Competition -interspecific competition assignment-	Exam 2 – due 2/27 at 11:59 pm
2/26	Ch 9: The Nature of Predation -predation assignment-	Quiz 6 – due 3/05 at 11:59 pm
3/04	Ch 10: The Population Dynamics of Predation -predation population dynamics assignment-	Quiz 7 – due 3/19 at 11:59 pm
3/11	*spring break – no class*	
3/18	Ch 12: Parasitism and Disease -parasitism assignment-	Quiz 8 – due 3/26 at 11:59 pm

3/25	Ch 13: Facilitation: Mutualism and Commensalism -facilitation assignment-	Exam 3 – due 4/02 at 11:59 pm
4/01	Ch 16: Community Modules and the Structure of Ecological Communities -community structure assignment-	Quiz 9 – due 4/09 at 11:59 pm
4/08	Ch 17: Food Webs -food web assignment-	Quiz 10 – due 4/16 at 11:59 pm
4/15	Ch 18: Patterns in Community Composition in Space and Time -succession assignment-	Quiz 11 – due 4/23 at 11:59 pm
4/22	Ch 20: The Flux of Energy through Ecosystems -ecological energetics assignment-	Exam 4 – due 4/30 at 11:59 pm
4/29	*no class activities this week, study for final exams*	
5/06	Final Exam: Fri., May 10th 10:30 am -12:30 pm; STC 136	

Technology Requirements:

LMS

All course sections offered by Texas A&M University-Commerce have a corresponding course shell in the *myLEO* Online Learning Management System (LMS). Below are technical requirements:

LMS Requirements:

<https://community.brightspace.com/s/article/Brightspace-Platform-Requirements>

LMS Browser Support:

https://documentation.brightspace.com/EN/brightspace/requirements/all/browser_support.htm

Access and Navigation

You will need your campus-wide ID (CWID) and password to log into the course. If you do not know your CWID or have forgotten your password, contact the Center for IT Excellence (CITE) at 903.468.6000 or helpdesk@tamuc.edu

Communication and Support

If you have any questions or are having difficulties with the course material, please contact your Instructor.

Technical Support

If you are having technical difficulty with any part of *Brightspace*, please contact Brightspace Technical Support at 1-877-325-7778. Other support options can be found here:

<https://community.brightspace.com/support/s/contactsupport>

Interaction with Instructor Statement

Response time to any questions sent by email regarding the course will be answered within 72 hours. However, students are encouraged to interact with the instructor directly during the class time and office hours, if necessary. Exceptions such as widespread internet outage apply.

Counseling Services Statement

The Counseling Center at A&M-Commerce, located in the Halladay Building, Room 203, offers counseling services, educational programming, and connection to community resources for students. Students have 24/7 access to the Counseling Center's crisis assessment services by calling 903-886-5145. For more information regarding Counseling Center events and confidential services, please visit www.tamuc.edu/counsel

Course and University Procedures/Policies:

Course Specific Procedures/Policies:

You are expected to check your TAMUC email and d2l every day to check for any announcements. Additional information about all course assessment components is provided under "Course Evaluations". Please do not attend class if feeling ill, if an illness occurs during a course assessment, please see the "General Makeup Policy" section above for guidance.

University Specific Procedures:

Student Conduct

All students enrolled at the University shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment. The Code of Student Conduct is described in detail in the [Student Guidebook](http://www.tamuc.edu/Admissions/oneStopShop/undergraduateAdmissions/studentGuidebook.aspx).
<http://www.tamuc.edu/Admissions/oneStopShop/undergraduateAdmissions/studentGuidebook.aspx>

Students should also consult the Rules of Netiquette for more information regarding how to interact with students in an online forum: [Netiquette](http://www.albion.com/netiquette/corerules.html)
<http://www.albion.com/netiquette/corerules.html>

TAMUC Attendance

For more information about the attendance policy please visit the [Attendance](http://www.tamuc.edu/admissions/registrar/generalInformation/attendance.aspx) webpage and [Procedure 13.99.99.R0.01](http://www.tamuc.edu/admissions/registrar/generalInformation/attendance.aspx).
<http://www.tamuc.edu/admissions/registrar/generalInformation/attendance.aspx>

<http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/academic/13.99.99.R0.01.pdf>

Academic Integrity

Students at Texas A&M University-Commerce are expected to maintain high standards of integrity and honesty in all of their scholastic work. For more details and the definition of academic dishonesty see the following procedures:

[Undergraduate Academic Dishonesty 13.99.99.R0.03](http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/undergraduates/13.99.99.R0.03UndergraduateAcademicDishonesty.pdf)

<http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/undergraduates/13.99.99.R0.03UndergraduateAcademicDishonesty.pdf>

[Graduate Student Academic Dishonesty 13.99.99.R0.10](#)

<http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/13students/graduate/13.99.99.R0.10GraduateStudentAcademicDishonesty.pdf>

AI Statement

Texas A&M University-Commerce acknowledges that there are legitimate uses of Artificial Intelligence, ChatBots, or other software that has the capacity to generate text, or suggest replacements for text beyond individual words, as determined by the instructor of the course.

Any use of such software must be documented. Any undocumented use of such software constitutes an instance of academic dishonesty (plagiarism).

Individual instructors may disallow entirely the use of such software for individual assignments or for the entire course. Students should be aware of such requirements and follow their instructors' guidelines. If no instructions are provided the student should assume that the use of such software is disallowed.

In any case, students are fully responsible for the content of any assignment they submit, regardless of whether they used an AI, in any way. This specifically includes cases in which the AI plagiarized another text or misrepresented sources.

13.99.99.R0.03 Undergraduate Academic Dishonesty

<https://inside.tamuc.edu/aboutus/policiesproceduresstandardsstatements/rulesprocedures/13students/undergraduates/13.99.99.R0.03UndergraduateAcademicDishonesty.pdf>

Students with Disabilities – ADA Statement

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you have a disability requiring an accommodation, please contact:

Office of Student Disability Resources and Services

Texas A&M University-Commerce

Gea Library- Room 162

Phone (903) 886-5150 or (903) 886-5835

Fax (903) 468-8148

Email: studentdisabilityservices@tamuc.edu

Website: [Office of Student Disability Resources and Services](http://www.tamuc.edu/campusLife/campusServices/studentDisabilityResourcesAndServices/)
<http://www.tamuc.edu/campusLife/campusServices/studentDisabilityResourcesAndServices/>

Nondiscrimination Notice

Texas A&M University-Commerce will comply in the classroom, and in online courses, with all federal and state laws prohibiting discrimination and related retaliation on the basis of race, color, religion, sex, national origin, disability, age, genetic information or veteran status. Further, an environment free from discrimination on the basis of sexual orientation, gender identity, or gender expression will be maintained.

Campus Concealed Carry Statement

Texas Senate Bill - 11 (Government Code 411.2031, et al.) authorizes the carrying of a concealed handgun in Texas A&M University-Commerce buildings only by persons who have been issued and are in possession of a Texas License to Carry a Handgun. Qualified law enforcement officers or those who are otherwise authorized to carry a concealed handgun in the State of Texas are also permitted to do so. Pursuant to Penal Code (PC) 46.035 and A&MCommerce Rule 34.06.02.R1, license holders may not carry a concealed handgun in restricted locations.

For a list of locations, please refer to the [Carrying Concealed Handguns On Campus](#) document and/or consult your event organizer.

Web url:

<http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/34SafetyOfEmployeesAndStudents/34.06.02.R1.pdf>

Pursuant to PC 46.035, the open carrying of handguns is prohibited on all A&M-Commerce campuses. Report violations to the University Police Department at 903-886-5868 or 9-1-1. at 903-886-5868 or 9-1-1.