

BIOL 1442: Evolution and Ecology (Lecture)
Fall 2017

Instructor(s): Dr. Eric N. Smith

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Office Hours: Monday 2:00-3:00 PM, Wednesday 3:30-4:30 PM
(If these are not convenient please contact me to make an appointment at a time convenience)

Section Information: BIOL 1442 sec 004 (81608)

Time and Place of Class Meetings: Monday, Wednesday, and Friday 1:00-1:50 pm; Room UH 10 (University Hall).

Description of Course Content: Reviews significant aspects of organismal biology and presents current hypotheses concerning the origin and diversification of life on earth. The ecological and behavioral interactions between organisms and their biotic/abiotic environments are considered from an evolutionary perspective. The laboratory will examine evolution, ecology and the diversity of life using hands-on observational and experimental approaches.

Student Learning Outcomes: Student will develop a basic understanding of 1) the diversity of extant organisms; 2) the evolutionary mechanisms by which this diversity has arisen and is maintained; 3) ecological interactions within and among species, and between organisms and their environment; and 4) significance of the identity and role of Homo sapiens in the context of evolution, ecology, and biodiversity.

This course counts as part of the **Environmental and Sustainability Studies Minor**, open to students in all majors and colleges. For more information about ESS classes, requirements & advising:
<http://www.uta.edu/cappa/academics/planning-landscape-architecture/environmental-sustainability/>

Requirement: BIOL 1441 (prerequisite) or permission of the instructor.

Required Textbooks and Other Course Materials: Campbell et al., *Biology* (10th ed.) ISBN-10: 0321775658 Campbell Biology (10th/11th ed.) (with or without MasteringBiology Access). **Optional:** Campbell Biology Study Guide (10th/11th ed.). Mastering Biology Access is recommended. Book can be rented as e-textbook for different platforms or purchased or rented as hardcover or paperback.

Descriptions of major assignments and examinations:

Course Schedule

Chapter 22 Descent with Modification: A Darwinian View of Life
Chapter 23 The Evolution of Populations
Chapter 24 The Origin of Species
Chapter 25 The History of Life on Earth
Chapter 26 Phylogeny and the Tree of Life
Chapter 27 Bacteria and Archaea

Exam #1 Chapters 22-27; Wednesday, September 20, 7:00 PM, location TBA.

Chapter 28 Protists
Chapter 29 Plant Diversity 1: How Plants Colonized Land
Chapter 30 Plant Diversity 2: The Evolution of Seed Plants
Chapter 31 Fungi
Chapter 32 An Overview of Animal Diversity
Chapter 33 An Introduction to Invertebrates

Exam #2 Chapters 28-33; Wednesday, October 25, 7:00 PM, location TBA.

Chapter 34 The Origin and Evolution of Vertebrates
Chapter 51 Animal Behavior
Chapter 52 An Introduction to Ecology and the Biosphere
Chapter 53 Population Ecology
Chapter 54 Community Ecology
Chapter 55 Ecosystems and Restoration Ecology
Chapter 56 Conservation Biology and Global Change

Exam #3 Chapters 34, 51-56; Wednesday, November 29, 7:00 PM, location TBA.

Review Week.

Cumulative Final Exam (sec 004), Saturday Dec 9, time and location TBA.

As the instructor for this course, I reserve the right to adjust this schedule in any way that serves the educational needs of the students enrolled in this course.

Important dates:

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| • Aug 24 | First Day of Classes |
| • Aug 24–30 | Late Registration |
| • Sep 04 | Labor Day Holiday |
| • Sep 11 | Census Date |
| • Nov 01 | Last day to drop classes |
| • Nov 06 | Registration begins for Spring 2018 |
| • Nov 23–24 | Thanksgiving holidays |
| • Dec 06 | Last Day of Classes |
| • Dec 09–15 | Final Exams |
| • Dec 14–16 | Commencement Ceremonies |

Attendance: At The University of Texas at Arlington, taking attendance is not required but attendance is a critical indicator in student success. Each faculty member is free to develop his or her own methods of evaluating students' academic performance, which includes establishing course-specific policies on attendance. *As the instructor of this section, I allow students to attend class at their own discretion; however, students that attend on a regular basis tend to do better. My exams can include bonus points related to student questions or examples given in class, not necessarily in the book or PowerPoint presentations.* While UT Arlington does not require instructors to take attendance in their courses, the U.S. Department of Education requires that the University have a mechanism in place to mark when Federal Student Aid recipients "begin attendance in a course." UT Arlington instructors will report when students begin attendance in a course as part of the final grading process. Specifically, when assigning a student a grade of F, faculty report the last date a student attended their class based on evidence such as a test, participation in a class project or presentation, or an engagement online via Blackboard. This date is reported to the Department of Education for federal financial aid recipients. Students who attend class tend to earn higher grades, and **I do not recommend enrolling in my class this semester if you anticipate a recurring schedule conflict with work or other responsibilities.** Exam dates are listed clearly in this syllabus, so please plan around them.

Other Requirements: There will be three major exams administered on specific Wednesday evenings indicated in the agenda above, each beginning at 7:00 PM. The UTA Biology program uses a common exam for Biol 1442 & 1342 (= all instructors participate in making an exam that all students take). You will be assigned a room in which to take the exam, which may be different from the current lecture room. It is your responsibility to attend the correct exam room.

Grading: Your lecture grade is 67% (2/3) of your total grade. Your lab grade is 33% (1/3) of your total grade (see GTA for lab syllabus)

Semester Grade Calculation: $\text{total} = [\text{lecture average} \times 0.67] + [\text{lab average} \times 0.33]$ Lecture

Grade:

Exam 1 = 25% of lecture grade

Exam 2 = 25% of lecture grade Exam

3 = 25% of lecture grade

Cumulative Final = 25% of lecture grade

In the event that your final exam score is higher than one of your midterm scores, your final exam grade will be counted twice (once on its own, and once in replacement of the low or missed midterm exam grade). This should put students who do not perform to their expectations on equal footing with students who miss an exam on short notice. (Just be sure that you don't end up missing an exam _and_ getting a low score, as I can only let the double-weighted final exam replace one midterm!) If your final exam grade is your lowest exam grade, it will only count once. (Although in that event, it will still replace a missed score).

Lecture exams will contain a combination of question styles (e.g., multiple choice, matching, true/false). A typical exam will contain about 50 questions. Each student must bring an **undamaged** Scantron form 4521 (full page; blue) and a No. 2 pencil.

Semester letter grade: A = 89.5-100%, B = 79.5-89.4% C = 69.5-79.4%, D = 59.5-69.4%, F < 59.5%

Students are expected to keep track of their performance throughout the semester and seek guidance from available sources (including the instructor) if their performance drops below satisfactory levels; see "Student Support Services," below.

Honors Credit: Students enrolled for honors credit will have a chance to hone their public speaking skills. (Trust me – this will serve you very well in your future science career endeavors!) To fulfill your commitment, you will 1) sign up for a timeslot for your 15 minute presentation during the first two weeks of class, 2) submit a topic for approval at least three weeks prior to your chosen date, and 3) present a thorough but concise review of your subject material with visual aides (e.g., PowerPoint). You are also encouraged to submit an outline or draft of your talk for review at least one week in advance. Please see me individually for additional questions or for guidance choosing an ideal topic.

Make-up Exam Policy: There will be no make-up exams unless an unanticipated and severe problem prevents attendance on the scheduled date, or the student is representing the University in an officially recognized activity for which University policy allows an excusable absence (e.g. intercollegiate athletics). Written documentation of circumstances is required for make-up exams, e.g., Doctor's notes, court orders, and police reports. Make-up exams will be given only at times scheduled by the Biology Department for this purpose, by appointment with a graduate student proctor and at the instructor's discretion. If you miss an exam without adequate advance notice, please talk to your instructor about the possibility of double-weighting the final exam. This arrangement is a last resort, made on a case-by-case basis, with documentation, and at the discretion of your instructor.

Expectations for Out-of-Class Study: Biology is not a difficult subject; however, the amount of information covered, including concepts, terminology, dates, and names, can be overwhelming. Beyond the time required to attend each class meeting, students enrolled in this course should expect to spend at least an additional 6 hours per week of their own time in course-related activities (e.g., including reading required materials, completing assignments, preparing for exams, etc.). The key to succeed is to study every week at least six hours, preferably two hours of study after each lecture while the information is still

fresh in your mind. Regrettably, many student wait until the night before the exam to study, which is certainly not enough to digest all the material.

Conflict Resolution: If you are experiencing an issue in lab or class, you should first arrange a meeting with your instructor to discuss the issue. Specifically for issues with labs, you may consult the Laboratory Coordinator, Rachel Wostl (rlwostl@uta.edu), if the problem remains unresolved after discussion with your lab instructor. If you feel the issue requires further attention, you may then consult the Associate Chair of the Department of Biology, Dr. Laura Mydlarz. To do this you should first file a grievance at <https://www.uta.edu/php-lib/machform/view.php?id=3403>. You must file the online form and have all supporting documentation in order to have your issue heard. Please note, none of the listed personnel will discuss the issue with you until you have first consulted all of those preceding him/her.

Grade Grievances: Any appeal of a grade in this course must follow the procedures and deadlines for grade-related grievances as published in the current University Catalog. For undergraduate courses, see <http://catalog.uta.edu/academicregulations/grades/#undergraduatetext>. For student complaints, see <http://www.uta.edu/deanofstudents/student-complaints/index.php>.

Drop Policy: Students may drop or swap (adding and dropping a class concurrently) classes through self-service in MyMav from the beginning of the registration period through the late registration period. After the late registration period, students must see their academic advisor to drop a class or withdraw. Undeclared students must see an advisor in the University Advising Center. Drops can continue through a point two-thirds of the way through the term or session. It is the student's responsibility to officially withdraw if they do not plan to attend after registering. **Students will not be automatically dropped for non-attendance.** Repayment of certain types of financial aid administered through the University may be required as the result of dropping classes or withdrawing. For more information, contact the Office of Financial Aid and Scholarships (<http://wweb.uta.edu/aao/fao/>).

Drop for non-payment of tuition: Payment must be received by the term due date or your registration will be cancelled. If your registration is cancelled for non-payment, you may reregister for classes if seats are available.

After Hours Safety Escort: The Sam Mav Escort service provides a service to assist students, faculty, staff and campus visitors to reach their destinations after regular business hours. The hours of service are 7:00 pm to 1:00 am daily. 817-272-3381

Disability Accommodations: UT Arlington is on record as being committed to both the spirit and letter of all federal equal opportunity legislation, including *The Americans with Disabilities Act (ADA)*, *The Americans with Disabilities Amendments Act (ADAAA)*, and *Section 504 of the Rehabilitation Act*. All instructors at UT Arlington are required by law to provide "reasonable accommodations" to students with disabilities, so as not to discriminate on the basis of disability. Students are responsible for providing the instructor with official notification in the form of a **letter certified** by the Office for Students with Disabilities (OSD). Only those students who have officially documented a need for an accommodation will have their request honored. Students experiencing a range of conditions (Physical, Learning, Chronic Health, Mental Health, and Sensory) that may cause diminished academic performance or other barriers to learning may seek services and/or accommodations by contacting:

The Office for Students with Disabilities. (OSD) www.uta.edu/disability or calling 817-272-3364. Information regarding diagnostic criteria and policies for obtaining disability-based academic accommodations can be found at www.uta.edu/disability.

Counseling and Psychological Services, (CAPS): www.uta.edu/caps/ or calling 817-272-3671 is also available to all students to help increase their understanding of personal issues, address mental and behavioral health problems and make positive changes in their lives.

Non-Discrimination Policy: *The University of Texas at Arlington does not discriminate on the basis of race, color, national origin, religion, age, gender, sexual orientation, disabilities, genetic information, and/or veteran status in its educational programs or activities it operates. For more information, visit uta.edu/eos.*

Title IX Policy: The University of Texas at Arlington ("University") is committed to maintaining a learning and working environment that is free from discrimination based on sex in accordance with Title IX of the Higher Education Amendments of 1972 (Title IX), which prohibits discrimination on the basis of sex in educational programs or activities; Title VII of the Civil Rights Act of 1964 (Title VII), which prohibits sex discrimination in employment; and the Campus Sexual Violence Elimination Act (SaVE Act). Sexual misconduct is a form of sex discrimination and will not be tolerated. *For information regarding Title IX, visit www.uta.edu/titleIX or contact Ms. Jean Hood, Vice President and Title IX Coordinator at (817) 272-7091 or jmhood@uta.edu.*

Academic Integrity: Students enrolled all UT Arlington courses are expected to adhere to the UT Arlington Honor Code:

I pledge, on my honor, to uphold UT Arlington's tradition of academic integrity, a tradition that values hard work and honest effort in the pursuit of academic excellence.

I promise that I will submit only work that I personally create or contribute to group collaborations, and I will appropriately reference any work from other sources. I will follow the highest standards of integrity and uphold the spirit of the Honor Code.

UT Arlington faculty members may employ the Honor Code in their courses by having students acknowledge the honor code as part of an examination or requiring students to incorporate the honor code into any work submitted. Per UT System *Regents' Rule* 50101, §2.2, suspected violations of university's standards for academic integrity (including the Honor Code) will be referred to the Office of Student Conduct. Violators will be disciplined in accordance with University policy, which may result in the student's suspension or expulsion from the University. Additional information is available at <https://www.uta.edu/conduct/>.

In the event of a suspected breach of academic integrity (collusion, copying, plagiarism, stealing blank copies of a quiz or exam, referring to notes during a quiz or exam, etc.), you will receive a hearing by the Office of Community Standards. The hearing will be fair to the student, and judgments are based on evidence. If the outcome of the hearing finds you to be responsible for breaking the honor code, the penalty for the incident is left up to the individual instructor. It may be as severe as a failing grade for the semester.

Lab Safety Training: Students registered for this course must complete all required lab safety training prior to entering the lab and undertaking any activities. Once completed, Lab Safety Training is valid for the remainder of the same academic year (i.e., Fall through Summer II) and must be completed anew in subsequent years. There are no exceptions to this University policy. Failure to complete the required training will preclude participation in any lab activities, including those for which a grade is assigned. **See your individual laboratory instructor (GTA) for additional information.**

Electronic Communication: UT Arlington has adopted MavMail as its official means to communicate with students about important deadlines and events, as well as to transact university-related business regarding financial aid, tuition, grades, graduation, etc. All students are assigned a MavMail account and are responsible for checking the inbox regularly. There is no additional charge to students for using this account, which remains active even after graduation. Information about activating and using MavMail is available at <http://www.uta.edu/oit/cs/email/mavmail.php>.

Campus Carry: Effective August 1, 2016, the Campus Carry law (Senate Bill 11) allows those licensed individuals to carry a concealed handgun in buildings on public university campuses, except in locations the University establishes as prohibited. Under the new law, openly carrying handguns is not allowed on college campuses. For more information, visit <http://www.uta.edu/news/info/campus-carry/>

Student Feedback Survey: At the end of each term, students enrolled in face-to-face and online classes categorized as "lecture," "seminar," or "laboratory" are directed to complete an online Student Feedback Survey (SFS). Instructions on how to access the SFS for this course will be sent directly to each student through MavMail approximately 10 days before the end of the term. Each student's feedback via the SFS database is aggregated with that of other students enrolled in the course. Students' anonymity will be protected to the extent that the law allows. UT Arlington's effort to solicit, gather, tabulate, and publish student feedback is required by state law and aggregate results are posted online. Data from SFS is also used for faculty and program evaluations. For more information, visit <http://www.uta.edu/sfs>.

Final Review Week: for semester-long courses, a period of five class days prior to the first day of final examinations in the long sessions shall be designated as Final Review Week. The purpose of this week is to allow students sufficient time to prepare for final examinations. During this week, there shall be no scheduled activities such as required field trips or performances; and no instructor shall assign any themes, research problems or exercises of similar scope that have a completion date during or following this week *unless specified in the class syllabus*. During Final Review Week, an instructor shall not give any examinations constituting 10% or more of the final grade, except makeup tests and laboratory examinations. In addition, no instructor shall give any portion of the final examination during Final Review Week. During this week, classes are held as scheduled. In addition, instructors are not required to limit content to topics that have been previously covered; they may introduce new concepts as appropriate.

Emergency Exit Procedures from UH 10: Should we experience an emergency event that requires us to vacate the building, students should exit the room (UH 10) and move toward the nearest exit. Exits in the room are at the back, with the nearest building exit to the north (turning right after leaving the room). When exiting the building during an emergency, one should never take an elevator but should use the stairwells. Faculty members and instructional staff will assist students in selecting the safest route for evacuation and will make arrangements to assist individuals with disabilities.

Students are encouraged to subscribe to the MavAlert system that will send information in case of an emergency to their cell phones or email accounts. Anyone can subscribe at <https://mavalert.uta.edu/> or <https://mavalert.uta.edu/register.php>

Student Support Services: UT Arlington provides a variety of resources and programs designed to help students develop academic skills, deal with personal situations, and better understand concepts and information related to their courses. Resources include [tutoring](#), [major-based learning centers](#), developmental education, [advising and mentoring](#), personal counseling, and [federally funded programs](#). For individualized referrals, students may visit the reception desk at University College (Ransom Hall), call the Maverick Resource Hotline at 817-272-6107, send a message to resources@uta.edu, or view the information at <http://www.uta.edu/universitycollege/resources/index.php>.

The IDEAS Center (2nd Floor of Central Library) offers **free** tutoring to all students with a focus on transfer students, sophomores, veterans and others undergoing a transition to UT Arlington. To schedule an appointment with a peer tutor or mentor email IDEAS@uta.edu or call (817) 272-6593.

The English Writing Center (411LIBR): The Writing Center Offers free tutoring in 20-, 40-, or 60-minute face-to-face and online sessions to all UTA students on any phase of their UTA coursework. Our hours are 9 am to 8 pm Mon.-Thurs., 9 am-3 pm Fri. and Noon-6 pm Sat. and Sun. Register and make appointments online at <http://uta.mywconline.com>. Classroom Visits, workshops, and specialized services for graduate students are also available. Please see www.uta.edu/owl for detailed information on all our programs and services.

The Library's 2nd floor Academic Plaza offers students a central hub of support services, including IDEAS Center, University Advising Services, Transfer UTA and various college/school advising hours. Services are available during the library's hours of operation. <http://library.uta.edu/academic-plaza>

Library Home Page library.uta.edu

Resources for Students and Academic Help

Academic Plaza Consultation Services library.uta.edu/academic-plaza

Ask Us ask.uta.edu/

Library Tutorials library.uta.edu/how-to

Subject and Course Research Guides libguides.uta.edu

Subject Librarians library.uta.edu/subject-librarians

Resources

A to Z List of Library Databases libguides.uta.edu/az.php

Course Reserves pulse.uta.edu/vwebv/enterCourseReserve.do

Study Room Reservations openroom.uta.edu/

Emergency Phone Numbers: In case of an on-campus emergency, call the UT Arlington Police Department at **817-272-3003** (non-campus phone), **2-3003** (campus phone). You may also dial 911. Non-emergency number 817-272-3381
