EVSE 5309 section 001 / BIOL 3356 section 001
Environmental Systems – Biological Aspects
Spring 2015

Instructor(s): Dr. Jason Baker

Office Number: LS 337

Office Telephone Number: none

Email Address: geneshifter@uta.edu

Office Hours: Monday at 5:30pm until class time

Section Information: EVSE 5309 section 001 / BIOL 3356 section 001

Time and Place of Class Meetings: LS 424 6-8:50pm

Description of Course Content: An introduction to the biological components of environmental systems. Population dynamics, species interactions, community structure, biodiversity, bioenergetics, nutrient cycling and human impacts are reviewed. Focus will be on natural processes and their engineering applications.

Student Learning Outcomes:

BIOL 3356 -- Students will be able to describe and explain ecological concepts and apply them to environmental issues. Students will be able to analyze and synthesize primary scientific literature in environmental biology.

EVSE 5309 -- Students will be able to describe and explain ecological concepts and apply them to environmental issues. Students will be able to analyze and synthesize primary scientific literature in environmental biology. Students will be able to criticize current understanding in environmental biology and propose future research.

These outcomes will be assessed using embedded questions in course exams and through an analysis of research papers written by students.

Required Textbooks and Other Course Materials: Mackenzie, A., A.S. Ball, and S.R. Virdee. 2001. Instant Notes in Ecology, 2nd ed. BIOS Scientific Publishers, Inc., Oxford, UK, ISBN 1 85996 257 2

Descriptions of major assignments and examinations: There will be a midterm exam and a final exam. Both will be closed-book essay exams. You will need to bring a "blue book" for each exam. Each exam will consist of 6 essay questions, 4 of which must be chosen to answer.

Each student shall write a research paper on an environmental problem with significant biological content. Paper topics must be approved by the instructor. For BIOL 3356, papers must be at least 10 pages of typed, double-spaced text, excluding references and illustrations. For BIOL 5309, papers must be at least 12 pages. Printed papers must be turned in by the deadline; electronic submissions will not be accepted. Papers must also have a one-page Executive Summary written in non-technical language suitable for a general reader. Graduate students taking EVSE 5309 must also prepare an oral presentation of 15-20 minutes on the topic of their research paper.

To facilitate writing of the research papers, each student will be assigned to a Writing Circle. Writing Circles are small groups of people who interact together to support each others' writing by reading, reviewing, discussing and editing each others' work in progress. During the semester, all or part of several class sessions will be devoted to the activities of the Writing Circles. Milestones in the writing process -- such as preparation of a preliminary reference list, outline, and rough draft – will have deadlines in order to keep the class on schedule. Students will be expected to meet these deadlines, attend class regularly, and participate actively in their Writing Circle. Full credit for class participation requires attending all writing circle meetings to have face to face interactions with members and with the course instructor. Scoring of participation will not penalize a single absence heavily, but will penalize multiple absences. As a further resource on writing your papers, a book entitled "Writing Papers in the Biological Sciences" is on reserve at the Science and Engineering Library.

The Final Version of the paper, with Executive Summary is due on the last day of class, May 4, 2015. Late papers will be penalized. A penalty of 5% will be deducted for late papers submitted after the due date up until the time of the Final Exam. A penalty of 10% will be deducted for late papers submitted after the time of the Final Exam.

Attendance: Students are expected to attend all classes and participate actively in all Writing Circle activities. Grading for Writing Circle milestones and participation will be influenced by attendance.

Other Requirements: Admission to the EES graduate program or permission of the instructor is required for EVSE 5309. Prerequisite courses for EVSE 3356 are BIOL 1441, 1442 and 2343 or equivalent. In order to access electronic course materials you will need to provide a current e-mail address that you plan to check regularly. You will need to bring a "blue book" for each exam.

Grading: **Grading Policy**:
For graduate students enrolled in EVSE 5309:

Exams	40%
Writing Circle milestones and participation	20%
Research paper and executive summary	30%
Oral presentation	10%

For undergraduate students enrolled in BIOL 3356:

Exams	50%
Writing Circle milestones and participation	20%
Research paper and executive summary	30%

Each exam will consist of 6 essay questions, 4 of which must be chosen to answer. The grade for Writing Circles will be scored based on providing required materials by the due dates, quality of the materials prepared, and assessment of participation by instructor and peer assessment.

Make-up Exams: There will be no make-up exams unless an unanticipated and severe problem prevents attendance on the scheduled date, or unless 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 will be required for make-up exams. Make-up exams will be given only at times scheduled by the Biology Department for this purpose.

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/).

Americans with Disabilities Act: The University of Texas at 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)*. 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 that disability. Any student requiring an accommodation for this course must provide the instructor with official documentation in the form of a letter certified by the staff in the Office for Students with Disabilities, University Hall 102. Only those students who have officially documented a need for an accommodation will have their request honored. Information regarding diagnostic criteria and policies for obtaining disability-based academic accommodations can be found at www.uta.edu/disability or by calling the Office for Students with Disabilities at (817) 272-3364.

Academic Integrity: Students enrolled in this course 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.*
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> *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 as they see fit in their courses, including (but not limited to) 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.

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 www.uta.edu/resources.

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., through the following August) 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.

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.

Student Feedback Survey: At the end of each term, students enrolled in classes categorized as "lecture," "seminar," or "laboratory" shall be 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 enters the SFS database anonymously and is aggregated with that of other students enrolled in the course. UT Arlington's effort to solicit, gather, tabulate, and publish student feedback is required by state law; students are strongly urged to participate. For more information, visit http://www.uta.edu/sfs.

Final Review Week: 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: Should we experience an emergency event that requires us to vacate the building, students should exit the room and move toward the nearest exit, which is located on south side of building. Go to stairwell to the right as you exit the classroom near classroom #420. 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 handicapped individuals.

Course Schedule

Date	Topic
Jan. 26	Introduction and The Physical Environment
Feb. 2	The Physical Environment
Feb. 9	The Physical Environment; **Paper Topics Due**
Feb. 16	Populations; Assignment of Writing Circles; Instructions on papers and scientific literature
Feb. 23	Populations; **Preliminary Literature List Due**; Discussions in Writing Circles
Mar. 2	Populations; **Outline / Prospectus Due**; Discussions in Writing Circles
Mar. 16	Populations; Ecosystems & Communities
Mar. 23	**First Midterm Exam** (1½ hr); Ecosystems & Communities
Mar. 30	Ecosystems & Communities
Apr. 6	Ecosystems & Communities; **Reviews of Rough Drafts Due**; Discussions in Writing Circles
Apr. 13	Applications; **D Reviews of Rough Drafts and Draft Executive Summaries Due**; Discussions in Writing Circles
Apr. 20	Applications; **Revised Drafts Due**; Discussions in Writing Circles
Apr. 27	Applications; Discussions in Writing Circles
May 4	**Final Version of Paper and Executive Summary Due**; Student Presentations

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Subject Guides ..... http://libguides.uta.edu
Subject Librarians..... http://www.uta.edu/library/help/subject-librarians.php
Database List..... http://www.uta.edu/library/databases/index.php
Course Reserves..... http://pulse.uta.edu/vwebv/enterCourseReserve.do
Library Catalog ..... http://discover.uta.edu/
E-Journals..... http://liblink.uta.edu/UTAlink/az
Library Tutorials ..... http://www.uta.edu/library/help/tutorials.php
Connecting from Off- Campus..... http://libguides.uta.edu/offcampus
Ask A Librarian ..... http://ask.uta.edu