

THE UNIVERSITY OF TEXAS AT EL PASO
COLLEGE OF SCIENCE
Department of Biological Sciences

Course #: BIOL 1107: CRN#19007; BIOL 1108: CRN#11802
Course Title: Biodiversity Collections Lab
Credit Hrs: 1
Term: Fall 2016
Course Meetings & Location: Biology B108, Tuesdays & Thursdays 9–11:50 AM
Prerequisite Courses: Instructor Approval
Instructor: Eli Greenbaum, Ph.D.
Office Location: Biology 301 (between Classroom & Biosciences Buildings)
Contact Info: Phone # 747-5553; Fax # 747-5808
E-mail address: egreenbaum2@utep.edu
NOTE: **please do NOT email me on Blackboard**
Emergency Contact: (Cell) 785-393-3583 *emergencies only please*
Office Hrs: Tuesdays 1:00-3:00, Wednesdays 3-4:30 PM; email for other appointment times
Textbook(s), Materials: Required: Simmons, John E. 2015. *Herpetological Collecting and Collections Management*, Third Edition. Society for the Study of Amphibians and Reptiles (SSAR), Salt Lake City, UT, 191 pp. (Available from SSAR for \$20 new - http://www.ssarbooks.com/?page=shop/flypage&product_id=16473)

Lab Coat: available online and the UTEP Bookstore

Course Objectives
(Learning Outcomes):

- (1) scientific research in museum collections, including systematics, evolutionary genetics, ecology, disease, biogeography, natural history, bioinformatics, and conservation biology
- (2) educational role of museums, including public exhibits, presentations, and teaching workshops
- (3) role of curators and collections management, including building collections, ethics of collecting (e.g., endangered species), special considerations for genetic material, regulations, physical conditions of specimens, and integrated pest management
- (4) data management, including the importance of links between specimens, data, metadata, associated photographs, and audio/video recordings
- (5) health and safety concerns for collections, including hazardous chemicals, disaster management plans, etc.
- (6) museum studies as a discipline, including the history of museums, scholarship of museum studies, differences between disparate types of collections (e.g., herbaria vs. insects), and non-academic uses of museum collections
- (7) roles of museums in the future, including digitization of historical collections and web-based platforms to enhance the utility of museums for education and research
- (8) laboratory activities to digitize specimens, improve collections conditions, and update specimen labels
- (9) hands-on experience via citizen science projects on campus to emphasize the link between collections, fieldwork and research
- (10) synthesis of the above information and activities into a group poster aimed at the general public

- Course Activities/Assignments: Students will be expected to participate in two citizen science projects related to: (1) digitization of biodiversity collections; and (2) contributing to biodiversity science. Students will be expected to keep organized documentation during laboratory activities to ensure that their methods and data are documented well. Time constraints might not allow for all scheduled topics to be covered during class time, and in these cases, students are still responsible for material that is posted in PowerPoints on Blackboard. Some topics may not be covered at all.
- Assessment of Course Objectives: Students will be assessed on the course objectives from a pre and post class knowledge assessment, a final poster project (a rubric for grading will be provided), in-class assignments, participation in two citizen science projects and attendance/punctuality.
- Grading Policy: Final grade will consist of 12 of 15 in-class assignments (the lowest three assignment scores will be dropped, 20% of total grade), participation in two citizen science projects (20% of final grade), development of a group poster highlighting the importance of collections for the general public (30% of final grade), improvement in knowledge evaluation taken at the beginning and end of semester (20% of final grade), attendance/punctuality, class participation, and adherence to the civility statement (10% of final grade).. Final grades for the course will be as follows: 90–103: A; 80–89: B; 70–79: C; 60–69: D; < 60: F. **Please note that I do not provide grades of any kind via email OR phone; students must come to office hours to receive grades if they are not present to get them in class.**
- Make-up Policy: Makeup assignments will be offered to students who miss a scheduled assignment because of illness, death in the family or university-sponsored activity, **but written documentation must be provided within 2 weeks of the missed assignment.** Makeup assignments may not conform to the scheduled assignment format.
- Extra Credit: Note that with the exception of bonus participation in citizen science projects, no extra credit will be given for any assignment at any time during the entire duration of this course. Requests for extra credit assignments will be denied—no exceptions.
- Attendance Policy: **Attendance and punctuality are a significant portion of your grade in this course.** Valid excuses for tardiness/missing class include illness, vehicle breakdown, death in the family, or university-sponsored activity, but **all valid excuses must be accompanied by written documentation** within 2 weeks of the missed assignment/activity to receive credit. Students who miss assignments without written documentation will receive a grade of zero. Student attendance/punctuality will be monitored on a regular basis throughout the semester.
- Assigned Videos: Occasionally videos will be assigned for students to watch from websites including CBS News, BBC News, YouTube, New York Times, and other websites with information relevant to class. If videos don't load on the first attempt, it is the student's responsibility to try different web browsers to view the videos. The instructor will monitor these websites prior to class, but if for any reason the website is not working, it is the student's responsibility to bring this to the instructor's attention at least 2 days before a given assignment so that assignments can be modified to eliminate activities that are related to these videos.
- Honors Credit: Honors Credit is not available for this course.
- Academic Integrity Policy: Because of the opportunity for cheating, bathroom visits during exams are not permitted; students who must leave during the exam for any reason will have their exams graded whether completed or not. **Sharing of calculators or use of calculator features of cell phones during exams/group problems will not be permitted.** The UTEP policy on academic honesty can be found at: <http://academics.utep.edu/Default.aspx?tabid=23785>. All students will be expected to adhere to this policy.
- Civility Statement: All students are expected to be actively engaged in class activities during the brief time class meets each week. This means that students should not: (1) converse with classmates during lectures; (2) use cell phones during class (including texting); (3) use laptop computers for any purpose other than note taking or completing class assignments; or (4) otherwise disrupt fellow students from learning and active participation.

- Disability Statement: Students with a disability requiring classroom accommodations, please contact The Center for Accommodations and Support Services (CASS) at 747-5148, or by email to cass@utep.edu, or visit their office located in UTEP Union East, Room 106. For additional information, please visit the CASS website at www.sa.utep.edu/cass. Requested accommodations must be made 5 working days before an examination. All students requesting disability accommodations must request a meeting with the instructor in the first 2 weeks of classes.
- Military Statement: Students in the military with the potential of being called to military service and/or training during the course of the semester, please contact the instructor within the first two weeks of class to arrange in advance for makeup assignments, etc.
- Dropping the Course: Students are cautioned to consider dropping the course if they are performing poorly **BEFORE** the drop deadline (see class schedule for date). Students must drop this class themselves – the instructor will not automatically drop a student if he or she stops attending. However, the instructor reserves the right to drop a student who registers for the course and never attends a class. Also remember that courses may only be repeated a total of 3 times, and a “W” counts as one. The College of Science will remain aligned with the University and not approve any drop requests after the drop date. Note that if a student has an advisor submit a drop request after the drop deadline without permission from the dean, the instructor will be asked to assign a grade by the registrar, and that grade will be F.
- Incomplete Grades: All grades of Incomplete must be accompanied by an Incomplete Contract that has been signed by the instructor of record, student, departmental chair, and the dean. Although UTEP will allow a maximum of one year to complete this contract, the College of Science requests it be limited to one month based upon completion data. A grade of Incomplete is only used in extraordinary circumstances confined to a limited event such as a missed exam, project, or lab. If the student has missed a significant amount of work (e.g. multiple assignments or tasks), a grade of Incomplete is not appropriate or warranted.

Lab Schedule		Topic/Assignment
T	Aug 23	*****LABS DO NOT MEET*****
Th	Aug 25	*****LABS DO NOT MEET*****
T	Aug 30	Objectives & UTEP BC Policies and Procedures/Greenbaum presentation and pre-class evaluation
Th	Sep 01	History of Museums & Museum Studies/Tour Collections and Centennial Exhibits
T	Sep 06	Biological Collections/Vocabulary & Statement of Purpose exercise
Th	Sep 08	Collection considerations/Teaching Collection management plan
T	Sep 13	IPM and Disaster Planning/Teaching Collection IPM & Disaster Plan
Th	Sep 15	Curators & Collecting Ethics/iNaturalist preparation
T	Sep 20	Building Collections/iNaturalist field collecting trip
Th	Sep 22	Collection Data Management/iNaturalist review and evaluation
T	Sep 27	Health & Safety Concerns/HazMat & Lab safety certification
Th	Sep 29	Specimen Condition & Collection Variety/Fluid storage condition reports
T	Oct 04	Specimen Condition & Disease/Study skin storage upgrade
Th	Oct 06	Specimen Condition & Ecology/Skeleton labeling
T	Oct 11	Specimen Condition & Conservation Biology/Shell re-housing
Th	Oct 13	Specimen Condition & Biogeography/Fossil geo-referencing
T	Oct 18	Specimen Condition & Natural History/Digitize Herbarium sheets
Th	Oct 20	Collections Data & Research/WeDig Bio intro and preparation
F	Oct 21	*****DROP DEADLINE*****
T	Oct 25	Collections Data/WeDigBio event participation
Th	Oct 27	Collections Data & Education/WeDigBio wrap up
T	Nov 01	Specimen Condition & Ecology/Cataloging insects
Th	Nov 03	Specimen Condition & Systematics/Fish identification
T	Nov 08	Specimen Condition & Evolutionary Genetics/Genetic resources digitization
Th	Nov 10	Collections Based Education/Centennial exhibit evaluation
T	Nov 15	Sustainability & the Future of Collections/Budget & Development Plan
Th	Nov 17	Non-academic uses of biodiversity collections/Create Art inspired by UTEP-BC specimen
T	Nov 22	Poster group work
Th	Nov 25	*****THANKSGIVING – NO CLASS*****
T	Nov 29	Poster group work
Th	Dec 01	Post class knowledge evaluation and student Poster Presentations
FINAL EXAM:		Not Applicable