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**Biology 372/ 373**

**Field Biology**

**Spring 24**

**Kylie Stover**

Office: Dobbs 202 **Class Time (Dobbs 127)**

Email: kylie.stover@reinhardt.edu MWF 8-8:50 am

Lab M 12:30-3:15 pm

**Visiting Hours:**

Monday 9am – 12pm

Tuesday 12:30 – 3:30 pm

**Web Resources**

Class web site: <https://reinhardtuniversity.instructure.com/> Students should regularly monitor Canvas for notes, handouts, reading assignments, and grades. A list of web resources is available at the end of this syllabus.

**Catalog Course Description**

This course investigates the physical features, flora and fauna of selected regions around the world. It is designed for use in courses that involve national and international travel. The course includes both lecture and laboratory instruction.

**Current Course Description**

This course integrates classroom instruction and intensive field experiences to provide advanced training in field techniques useful in biodiversity assessment and research. Frequent travel to field sites where students will gain hands-on experience collecting and observing organisms will be a large portion of the course. BIO 202 OR BIO 280 is a required prerequisite to BIO 372. This course is a major elective for the Biology B.S. degree. This course includes both lecture and laboratory instruction.

\*This course will include a major field component. Students should be in good physical condition. Students should expect to be exposed to adverse weather conditions, rough terrain, swift waters, biting and stinging insects, venomous animals, and other natural phenomena that pose a risk to human health. Students not willing to undertake these conditions should probably not take this course.

**Student Learning Outcomes**

1. Students will be able to identify and classify unique ecoregions, ecosystems, and associated floral and faunal communities in the Appalachian and Piedmont regions of Georgia. (G II. 1, 2, & 3; U1, U2, & U3)
2. Students will be able to understand, discuss and critique scholarly literature pertinent to the ecology and biodiversity of Georgia. (G II: 1 & 2; U2, U3, & U4)
3. Describe the impacts of anthropogenic disturbances to ecosystems and organisms of north Georgia (G II: 1, 2 & 3, G III: 5, IV: 7, 8 & 9; U2, U3, U4, U5, & U6)
4. Students will demonstrate an ability to distinguish between the various groups of living organisms. (G II: 1 & 2; U1, U2, U3, & U4)
5. Describe and implement field sampling, data collection, and curation of specimens (G II: 2, 3, & 4)
   1. Learn field safety procedures and become familiar with hazards common to field biologists
   2. Become familiar with the equipment used by wildlife biologists
   3. Learn to take and maintain appropriate field notes and read a map
   4. Learn safe handling techniques for a variety of wildlife species
   5. Become familiar with the use of field guides to identify animals in the field

\* General Education (G) and University (U) outcomes are represented by the corresponding numbers.

**Text and Required Materials**

You are required to buy a write-in-the rain field journal. Almost all needed materials are available from the library in the form of field guides. Students are encouraged to buy copies of the field guides we use for their future reference and enjoyment.

Students will need other materials for the field work component of this course:

**Required:**  **Optional:**

Field backpack Polarized Sunglasses

Field notebook Rain jacket

Field journal Quick dry pants

Snorkel and mask Long pants (lots of poison ivy)

**Personal attire/ gear students may want:**

Sturdy hiking boots, knee pads, insect repellent, sunscreen, hat, towels, personal medications, camping gear.

**Evaluation and Grading**

Students will be evaluated based on attendance, class participation, homework assignments, lab participation and assignments, quizzes, reflections, and a scientific proposal.

**Lab:** Lab will consist of weekly meetings and trips to different ecosystems to target specific organism. Lab will not always be held at the same time, and we will work on scheduling labs for things like overnight camping as the class progresses. When not traveling, we will work on preservation and identification of collected specimens.

**Research Proposal:** Students will be required to complete a research proposal that includes a title page, a description of the literature review framework, statement of problem, objective and hypotheses, methodology, importance, broader impacts, timeline, a budget and justification, along with a works cited.

**Field Notes:** Students will be required to keep a field notebook and journal. Since taking notes and recording observations is the basis of all biological investigations, this is a very important skill to master. Students will keep a field notebook of our excursions and will turn it in at the end of the semester. Students will also keep a formal field journal where your notes are fleshed out.

**Field Collections:** Students will collect and preserve plants and animals throughout the region, suing approved protocols and based on permit availability. These will become part of Reinhardt University teaching collections or be placed in regional natural history museums.

**Participation:** Students are expected to fully participate in all activities to the best of their abilities. Lack of attendance, failure to participate in field activities, and unsafe behaviors will result in reduced participation grades.

**Reflections:** Students will be asked to write reflections of trips as a way of showing connections to major concepts in biology, particularly conservation, evolution, and anthropogenic interactions.

**Grading Structure:**

Attendance/Participation - 40%

Research Proposal - 20%

Field Notes - 20%

Field Collections - 10%

Reflection - 10%

**Grading Scale:**

A = 90 - 100%

B = 80 - 89%

C = 70 - 79%

D = 60 - 69%

F = below 60%

**Course Policies, Course Expectations, and Student Responsibilities**

BIO 372 and its corequisite lab are worth 4 credit hours. This means that over 12 weeks, based on University criteria, students will spend a minimum of 188 minutes per week in lectures, class discussions, and examinations (37.6 hours for the semester) and 125 minutes or more in laboratory work (25 hours for the semester). Instructional time includes a 3-hour final exam. Homework, preparation for exams and quizzes, and other out-of-class work will require around 350 minutes (6 hours) per week (87.5 hours for the semester).

**Attendance:** Attendance is mandatory and will be taken at every class. This is a *fast paced class*, and each class will cover a lot of material. Missing one class means you miss a lot. Please notify me in advance if possible, if you will be absent for any reason. **You must let me know before class time if you will be absent on test or field day**. Only University approved excuses will be accepted (ie. Dr. visits, deaths, University activities) with documentation. Make-up work must be completed within one week of missing class.

**Assignments and Homework:** It is the responsibility of the student to check on due dates for assignments and homework. Homework assigned in class has a due-date of one week, unless otherwise noted.

**Communication:** ***Email is the official form of communication for this class.*** It is the responsibility of the student to check for updates from the instructor on a regular basis. Emails concerning class cancelations or changes in schedule will be posted at least 1 hour prior to class start time. Reminders about class activities and updates will be sent regularly as well. Changes that are announced in class will also be announced through email as well.

**Academic Integrity:** Reinhardt men and women are expected to adhere to the highest standards of academic integrity, and to abide by the Reinhardt Honor Code. Also, all students are expected to be familiar with the Reinhardt policy on academic dishonesty stated in the University Catalog and in the Student Handbook. Plagiarism (using the ideas and phrases of others without crediting them, therefore claiming those ideas and phrases as your own) will not be tolerated in this course or on this campus. To avoid such academic dishonesty, you must use a citation (in text) for all ideas drawn from your reading and research, including research in encyclopedias and online, even when you have restated those ideas in your own words.

Consequences for cheating or plagiarizing:

a) The professor will give a zero for any observed form of academic dishonesty.

b) The Office of the Vice President for Academic Affairs will be notified of actions taken against students who violate the academic integrity policy, which may result in further consequences, including designation of “academic warning” on your official transcript, academic suspension, or expulsion for academic reasons.

***Cell phones, smart watches, and other electronic devices are not allowed during test, quizzes, or exams- this is considered cheating.***

**Accessibility:** The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. This legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. Reinhardt University is committed to providing reasonable accommodations for all persons with disabilities. Therefore, if you are seeking classroom accommodations under the Americans with Disabilities Act, you are required to register with the **Academic Support Office (ASO)**. ASO is located in the basement of Lawson Building. To receive academic accommodations for this class, please obtain the proper ASO letters. *Accommodations will be honored if possible in this course, but understand that many may not be available due to the nature of the course.*

**Inclement Weather, Natural Disasters, and Unforeseen Events:** In the event of inclement weather or other natural disaster, which demands that class be canceled, all planned activities for that class day will be postponed until the next time the class meets. If events warrant a re-evaluation of the syllabus, the instructor reserves the right to change the terms of the syllabus with proper notice and discussion with the class. All such changes will be announced in class, through Canvas, and email.

Note: This syllabus is subject to change at the discretion of the instructor. If large changes occur, a new syllabus will be distributed on the course website and through email notification. Some changes, such as change of date, will only be announced in-class or through email.

**Book Resources:**

\*Ambrose, J., Kirkman, L., and Edwards, L. 2013. *The Natural Communities of Georgia*. UGA Press.

Reid, F. 2006. *Peterson Field Guide to Mammals of North America: Fourth Edition*.

Powell, R., Conant, R., Collins, J. 2016. *Peterson Field Guide to Reptiles and Amphibians of Eastern and Central North America, Fourth Edition*.

Page, L., Burr, B. 2011. *Peterson Field Guide to Freshwater Fishes, Second Edition*.

Dunn, J., and Alderfer, J. 2006. *National Geographic field guide to the birds of North America*.

Elliot, M., Gibbons, W., Camp, C., and Jensen, J. 2008. *Amphibians and Reptiles of Georgia*. UGA Press.

\*Delorme Georgia Atlas and Gazetteer.

\*Indicates resources that may be valuable investments for students to purchase their own copies.

**Web Resources:**

Plants

Georgia Native Plant Society <https://gnps.org/georgias-native-plants/search-native-plants/>

Native & Naturalized Plants of the Carolinas and Georgia <http://www.namethatplant.net/index.shtml>

Fish

Fishes of Georgia <http://fishesofgeorgia.uga.edu/>

Herps

Reptiles and Amphibians of Georgia and South Carolina <http://srelherp.uga.edu/index.htm>

Birds

Common Birds of Georgia <http://www.fernbank.edu/Birding/common_birds.htm>

Cornell Birds <http://www.birds.cornell.edu/Page.aspx?pid=1478>

The Audubon Society <http://www.audubon.org/bird-guide>

Birds of Georgia List <https://en.wikipedia.org/wiki/List_of_birds_of_Georgia_(U.S._state)>

Mammals

Mammal List of Georgia <https://en.wikipedia.org/wiki/List_of_mammals_of_Georgia_(U.S._state)>

Ecosystems

The Natural Communities of Georgia <https://www.naturalcommunitiesofgeorgia.com/>

Other Resources

iNaturalist <https://www.inaturalist.org>

Georgia Invasive Species Task Force <https://www.gainvasives.org/>

UGA Center for Invasive Species and Ecosystem Health <https://www.bugwood.org/>

Aquatic Fauna In Peril: A Southeastern Perspective <http://sherpaguides.com/southeast/aquatic_fauna/index.html>

**Participation grade form**

Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Safety**

Uses safe practices 50 30 10 5 0

**Attitude**

Handles field conditions 30 20 15 10 0

Gets along with others 30 15 10 5 0

Demonstrates interest in subject 50 20 15 10 0

Considerate of others (no late nights,

noisy behavior, etc.) 50 25 5 2 0

**Participation**

Looks out for the safety of others 30 10 5 2 0

Actively seeks involvement 30 15 3 2 0

Asks questions and makes observations 20 10 3 2 0

Work ethic (field prep and cleanup,

considerate, etc.) 50 40 30 0 0

**Punctuality** 30 10 5 0 0

**Prepared** 30 10 5 0 0

Total possible 400

\*\*I reserve the right to change this form at any time.