

Biological Sciences 493
Field Practicum: International Biodiversity Research
Summer Quarters 2007

Instructor: R. Steven Wagner, Ph.D.

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Office Hours: TBA

When: June 18 - 29 + 4 weeks in China (late July – August)

Office: 236H Science

Telephone: (509)963-3105

Where: TBA

Required Materials and Reading:

- Herpetology of China, Ermi Zhou
- Headlamp, shoes appropriate for terrestrial and stream surveys.
- Supplies for Grinnell Field Notebook

Pre-requisites (listed in the University Catalog):

- Permission of instructor
- Enroll concurrently in PSY 498 and Anthro 493

Course Description: The course is a hands-on field based research opportunity for students to learn field survey and research methods to assess biodiversity, natural history, and habitat of ecologically important organisms. The course will require 2 weeks (~3hr per day) of traditional instruction with laboratory and field based identification exercises, library and homework assignments. In China, students will conduct field based surveys and habitat assessments related to amphibians, reptiles, primates and/or any organism of interest. Students will participate in small group collaborative learning teams to design and carry out systematic biodiversity research that will be integrated into components of PSY 498 and ANTH 493.

Learner Outcomes:

- Develop a systematic data collection method for the study of biodiversity and natural history in an international setting.
- Identify amphibian and reptile species.
- Conduct terrestrial and aquatic habitat surveys for estimating species richness and abundance.
- Analyze habitat and species relationships.
- Assess water quality related to aquatic species distribution.
- Demonstrate maturity and a positive attitude during international research when interacting with team members, faculty, park officials, villagers, and tourists.
- Learn about plant and insect surveys relevant to primatological research
- Discuss issues related to biodiversity decline in China.

Assessment: All students are expected to

- Attend and actively participate in all class sessions, day surveys, night surveys, discussions, and participate in small group collaborative learning teams (10 pts/session) *Allowance will be made for one excused sick day, additional missed sessions will require make-up work.*
- Complete two species identification quizzes (10 pts each)
- Complete a detailed Grinnell field notebook for each field day, including species accounts of field observation for animals and plants (200pts)
- Provide an accurate daily summary of team activities (10 pts each)
- Complete an insect, plant or fungi collection which includes different 10 species (50pts)
- Complete homework to analyze species abundance changes and habitat relationships (20pts)
- Write a detailed species account based on the literature related to a Chinese amphibian or reptile (20pts).
- Engage in satisfactory positive daily interactions with rangers, villagers, faculty, students and tourists while in China (50 pts) *Please remember we are guests in China and it is a privilege to be able to conduct research in a setting such as the Huangshan Scenic District.*

Grade Scale:

Points will be converted to a percentage by dividing the total number awarded over the total number available.

90-100 %	80-89 %	70-79 %	60-69 %
A/A-	B+/B/B-	C+/C/C-	D+/D/D-

Academic Misconduct and Disruptive Behavior: Please consult the current Student Handbook for information on the university’s academic misconduct policies. I will not tolerate and will report all occurrences of academic misconduct and disruptive behavior. Examples of misconduct include, cheating on exams and assignments, and presenting the work of other people as your own. I expect you to be respectful of me, Drs. Sheeran and Matheson, other Chinese and American students in the class, park staff at the research site, and others encountered while in China. Disruptive behavior includes fighting, verbal and physical, displays of anger and aggression, excessive cursing and flirting during fieldwork, and excessive complaints about weather, work conditions, other students, tourists, villagers or food that are beyond the control of the instructor. In addition, you will be held the term of CWU Study and Exchange Programs’ “Conditions of Participation and Program Acceptance”. Minor violations that undermine team moral in an international field work setting will result in loss daily interaction points. Major violations will result in expulsion from the field program.

Students with Special Needs: Students who have special needs or disabilities that may affect their ability to access information or material presented in this course are encouraged to contact me and/or the office for ADA Affairs and Student Assistance on campus for additional disability-related educational accommodations.

Two weeks at CWU:

** Note that this schedule includes only activities and readings for BIOL. 493; please consult the syllabi for ANTH 493 and PSY 498 for activity schedules for those courses **

Date	Topic & Assignments	Readings
June 18	Introduction to Course Biology of Amphibians	TBA

June 19	Anth 493 and PSY 498 activities as scheduled on that syllabus	
June 20	Biology of Reptiles	
June 21	Anth 493 and PSY 498 activities as scheduled on that syllabus	
June 22	Specimen Curation Species Identification lab	TBA
June 25	Anth 493 and PSY 498 activities as scheduled on that syllabus	
June 26	Field Survey Methods for Biodiversity: Mark-recapture at Engelhorn Pond Demography Assignment Water Quality Techniques Live specimen identification	Handouts
June 27	Anthro 493 and PSY 498 activities as scheduled on that syllabus	
June 28	Stream Survey Activity-Mosquito Creek Insect Identification Fungi Identification Habitat Relationships and Assessment	TBA
June 29	Species Identification Quiz Equipment Packing	

Four Weeks in Valley of the Wild Monkeys, Huangshan, China:

- Refer to complete field schedule provided by Dr. Matheson in her PSY 498 syllabus
- Work on Field Notebooks and Specimen Collections to turn in by 30 September
- Subjective assessment of positive daily interactions with rangers, villagers, faculty, students and tourists while conducting field research in China (50 pts)