

LABORATORY TECHNIQUES IN PALEOANTHROPOLOGY
ANTH 6491
SYLLABUS, FALL 2011

FRIDAY, 10:00 am – 12:00 pm
2110 G. Street, NW, Room 307

INSTRUCTOR: Shannon C. McFarlin, Ph.D.
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Office Hours: Wednesday 9:00-11:00am, or by appointment

COURSE DESCRIPTION:

Through a series of readings and laboratory visits, students will be introduced to a range of laboratory facilities and research approaches in Palaeoanthropology available in the Washington-Baltimore metropolitan area. The class will meet two hours per week. However, on occasion, off-campus visits may last 4 hours or longer, given travel time to and from sites.

LEARNING OBJECTIVES: The following applies for students taking this course for 2 credits

- (1) Students will understand the range of laboratory settings and research opportunities available in the Washington-Baltimore and nearby areas, which are relevant to addressing key research questions in Hominid Paleobiology,
- (2) Students will understand practical constraints and possibilities of major instrumentation available in each laboratory visited, and be able to discuss issues concerning sampling requirements, instrument capabilities and limitations.
- (3) Students will understand the research questions being asked in each laboratory, and be able to contribute to discussions of aims, significance and limitations of the research.
- (4) Students will gain limited hands-on experience and more in depth knowledge (summarized in the form of a written report) of a research protocol used in one of the laboratories visited in the semester.

Note: If you are not taking this course for 2 credits, please inform me on the first day of class.

EVALUATION: The following applies for students taking this course for 2 credits

Attendance to all meetings, and your participation in discussion, comprises 50% of your final course grade. Students are also expected to complete a practicum (ca. 15 hours) in any one of the labs/techniques explored in the class, and write a report on the research/techniques used (6-9 pages in length). Grades will be calculated as follows:

Class participation	50%
Practicum evaluation (by lab supervisor)	25%
Written report	25%

READINGS:

Readings will be assigned to introduce you to the research questions and methodological approaches employed in the laboratory to be visited each week. These readings will be posted to blackboard one week in advance, and are meant to give you some background understanding of the major research questions addressed and techniques employed by those laboratories. You are expected to complete these readings before the visit, so that you are equipped to contribute to discussions and ask questions as they arise.

BLACKBOARD:

Once you are registered for this course, you will automatically have access to the Blackboard site associated with it. Go to <https://blackboard.gwu.edu/> and sign in using your email ID and password. We will use Blackboard to communicate announcements, store important documents and external links to web sites of interest that deal with material covered in the course, and provide a way for you to check your grades as the course progresses.

SCHEDULING CONFLICTS:

It is your responsibility to inform faculty during the first week of class (**no later than September 5th**) of any scheduling conflicts that interfere with your ability to attend a class meeting. We will do our best to accommodate your scheduling needs. However, given the number of laboratories participating in this course and scheduling complexities, we cannot make any guarantees.

RELIGIOUS HOLIDAYS:

It is completely acceptable for you to miss class meeting(s) due to observance of a religious holiday, without penalty. However, it is your responsibility to look ahead on the calendar, and notify the instructor no later than the **first week of the semester (no later than September 5th)** of your intention to be absent from class on the day(s) of religious observance.

ACADEMIC INTEGRITY:

I personally support the GW Code of Academic Integrity, and will address breaches of this code accordingly. It states: "Academic dishonesty is defined as cheating of any kind, including misrepresenting one's own work, taking credit for the work of others without crediting them and without appropriate authorization, and the fabrication of information." It is your responsibility to read and understand this and other stipulations of GW's Code of Academic Integrity, and complete all class work in accordance with this code. For the remainder of the code, see: <http://www.gwu.edu/~ntegrity/code.html>

SUPPORT FOR STUDENTS OUTSIDE OF THE CLASSROOM:

Disability Support Services (DSS). Any student who may need an accommodation based on the potential impact of a disability should contact the Disability Support Services office at 202-994-8250 in the Marvin Center, Suite 242, to establish eligibility and to coordinate reasonable accommodations. For additional information, please refer to <http://gwired.gwu.edu/dss/>

University Counseling Center (UCC). The Counseling Center (UCC) offers 24/7 assistance and referral to address students' personal, social, career, and study skills problems. Services for students include: crisis and emergency mental health consultations; and confidential assessment, counseling services (individual and small group), and referrals. You can reach the UCC at 202-994-5300. For additional information, please refer to <http://gwired.gwu.edu/counsel/CounselingServices/AcademicSupportServices>

SECURITY:

In the case of emergency, if at all possible, the class should shelter in place. If the building that the class is in is affected, follow the evacuation procedures for the building. After the evacuation, seek shelter at a predetermined rendezvous location.

SCHEDULE OF LABORATORY VISITS:

*NOTE: The following provides a provisional schedule for laboratory visits. Scheduling and travel logistics for these class meetings will be finalized one week in advance. Most laboratory visits on the GW campus will be scheduled for Fridays at 10:00am – 12:00pm. Off campus visits will require more time, given transportation to and from sites.

WEEK	DATE	LABORATORY	LOCATION
1	Sept. 2	Introduction to the Course. Discussion of lab visits and the schedule.	GW: BB, Room 307
2	Sept. 9	Laboratory for Evolutionary Neuroanatomy (Dr. Sherwood)	GW: Ross, Room 124
3	Sept. 16	Finite Element Analysis and Motion Capture Analysis (Dr. Richmond)	GW: BB, Room 106
4	Sept. 23	Primate Cognition Lab (Dr. Subiaul)	GW: 2115 G St, #204
5	Sept. 30	TBA; (DUE: One paragraph summarizing your practicum plan)	
6	Oct. 7	TBA	
7	Oct. 14	Primate Endocrinology Lab (Dr. Bernstein)	GW: Bell, B-05
8	Oct. 21	Primate Behavioral Ecology (Dr. Murray)	TBA
9	Oct. 28	Johns Hopkins University Center for Functional Anatomy & Evolution: Mammalian Paleontology (Dr. Rose); Biomechanics, Skeletal analysis and Human Growth and Development (Dr. Ruff); and Geometric Morphometrics and Craniofacial Integration (Dr. DeLeon)	OFF CAMPUS: Johns Hopkins University, Baltimore
10	Nov. 4	TBA	
11	Nov. 11	Paleoenvironments and Paleoecology (Dr. Bobe)	GW: BB, Room 106
12	Nov. 18	Hard Tissue Research Lab (Dr. McFarlin)	GW: Lisner, 130
13	Nov. 25	<i>THANKSGIVING BREAK – NO MEETING</i>	
14	Dec. 2	TBA	
15	Dec. 9	TBA	
Monday	Dec. 19	Written Report Due	

Tentative list of research visits / talks to be scheduled:

- Howard University: Neuroscience labs, Dr. Diogo's Lab for Research on comparative vertebrate and evolution
- Smithsonian's Museum Support Center in Suitland, VA (Archeobiology and Analytical Chemistry Labs, and Skeletal Biology and Archaeological Collections)
- Smithsonian NMNH: CT and 3-D Scanning Facilities; Human Origins Program
- GWU: Systematics and Comparative Morphology (Dr. Wood)