

**Zoology 405: Introduction to Museum Studies
in the Natural Sciences
Fall 2012 - Wednesdays 1:20-3:50**

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Classes will meet in Noland Hall, Room 443 Wednesdays 1:20-3:50. We will take a number of “field trips” to other collections on campus. Although we will often meet at Noland and travel as a group, please see the Notes on the syllabus for specific information on the place of each class meeting.

Course Objective: This 2-credit course** will provide a general background of natural history museum work including, history, collections, field collecting, specimen preparation, ethics, laws and education. It will also introduce students to a variety of natural science, humanities (as they apply to natural science), and library collections located on the UW-campus. As part of the overall course requirements, all students will prepare and conduct an independent project of their choice and design. During the last week of class, students will give a short in-class presentation summarizing their research.

Readings: You are not required to purchase a book or reader for this class. Instead, you will be able to read on-line or print the weekly readings from the course’s Learn@UW site. All readings should be completed by the Wednesday under which they are listed at Learn@UW. Readings will be added no later than two weeks prior to the week they are to be completed. It is your responsibility to check the site periodically to ensure that you have the most up-to-date materials.

The readings have been selected from a number of different sources and have been provided to you through your password-protected access to Learn@UW. Per copyright laws, you do not have permission to duplicate and distribute the readings. All readings are traceable to the source from which they came, so that you are able to find them if need be. Chapters, listed under the heading “CC”, come from David Carter and Annette K. Walker. Care & Conservation of Natural History Collections. Reed, 1999.

Assignments – Written: You are responsible for completing four (4) homework assignments. All assignments are to be given to Ms. Halverson Monahan by 1:25 pm on the due date. You may turn them in when you arrive for class, or if you wish to send them electronically **before** class, you can deposit them in the Dropbox at Learn@UW. Please proof-read your assignments before submitting them. **Punctuation, spelling and grammar will be taken into account when grading papers!** The UW Writing Center (<http://writing.wisc.edu/>) has excellent facilities to help you improve your writing skills. All assignments must be double-spaced and a maximum of 2 pages (exception: final paper).

Assignments – Discussion: Although you must always come to class prepared and ready to contribute, you will be graded based on your participation in discussions held during the weeks of November 21st and November 28th. The discussion on November 21st is an on-line discussion. You must watch a video and then post original responses to two questions and post two comments in reply to responses made by your classmates, for a total of at least four posts. The discussion on November 28th will be held in class.

Projects: All students must organize and complete a semester project. For all students, project ideas must be approved by Ms. Halverson Monahan by September 26th (Week 4). A **brief**, verbal progress report must be given on October 10th (Week 6) and a **brief** written outline of activity and progress should be prepared before class on October 31st (Week 9). The progress reports will not be graded, but failure to submit them will affect your final paper grade. If you are not interning, your final paper should be approximately 5 pages. Please note that participating in an internship requires a more significant paper (in substance and length).

**** 3 Credit Option:** Students who opt to take the course for three credits must intern at one of the following museums: Arboretum, Archives, Geology, Herbarium, Insect Research Collection or Zoological for 3 regularly scheduled hours per week (for a total of 40 hours) to gain hands-on practice in one or more of the areas discussed. At the end of the semester, participating students will report their 1-credit internship experience (and additional outside research) in a paper and a short in-class presentation. *The internship will require a significant amplification of the independent project and paper described above.* The decision to participate in an internship project must be made by the second week of class. For some museums, internship space is limited. In such instances, participation will be on a first-come first-served basis. Ms. Halverson Monahan will coordinate all internships, so please contact her if you have questions. **Grading:** If you are participating in the internship project, the additional 1-credit grade will be based upon your participation and effort, as assessed by your internship supervisor (50%); the Project Paper (30%); and the Project Presentation (20%).

Exams: There will be two exams: a midterm during week eight and a final which focuses on the second half of the course, but will be comprehensive in nature. Please proof-read your exams before submitting them; in grading punctuation, spelling and grammar will be noted.

Course Requirements (For everyone, the first two credits are graded as follows):

- Attendance, engagement, and participation - 15%
- Assignment 1 (Due October 3rd) – 5%
- Assignment 2 (Due October 17th) – 5%
- **Midterm Exam (October 24th) - 15%**
- Assignment 3 (Due November 7th) – 5%
- Assignment 4 (Due November 14th) – 5%
- Discussion 1 (November 21st) – 5%
- Discussion 2 (November 28th) – 5%
- Project Paper (December 12th) - 15%
- Project Presentation (December 12th) - 10%
- **Final (Friday, December 21st – 5:05pm to 7:05pm in 443 Noland) – 15%**

Grading:

Your final grade will be based on how well you complete the course requirements.

Tentative grading scale (based on final percentage):

90-100 A 88-89 AB 80-87 B 78-79 BC 70-77 C 60-69 D <60 F

NOTE: Incompletes will *not* be given. If you feel that you need additional accommodations to complete the assigned tasks, please contact Ms. Halverson Monahan.

Date & Site	Due	Lecture	Lab/Activity
September 5 443 Noland		Week 1: Introduction - Museum Studies - Introduction to Course - Diversity (types) of museums- Public, University, Private - Personnel Descriptions - UWZM Tour	Introduction and course mechanics (BERRES) Introduction to museums & tour (HALVERSON MONAHAN)
September 12 443 Noland (going to the UW –Madison Arboretum)	<i>Internship contract due</i>	Week 2: Field Work - Techniques and Uses of Living Collections - Introduction to the UW Arboretum, it's collections and types of research conducted there - Permits and data collection protocols - Combining land care with research and use - Explore Longenecker Gardens (classic arboretum), the Native Plant Garden (examples of southern WI native plant communities) and Curtis Prairie	Tour the UW Arboretum and discuss living collections (HERRICK & HANSON)
September 19 443 Noland (going to Lake Wingra)	<i>Visit books on reserve</i>	Week 3: Field Work - Collection of Fishes - Methods of catching fishes for study - Examine fish and discuss types of fishes in Wisconsin - Discussion of initial preparation for preservation	Collect fishes in the field (LYONS)
September 26 443 Noland	<i>Project topic approval</i>	Week 4: Preparation of Natural History Specimens- Fluids and Tissues - Fluid Preservation: labeling, fixation and storage - Tissue preparation methods and preservation	Demonstration of fluid specimen preparation (MAYER)
October 3 Foyer of Birge Hall, outside room 160	<i>Assignment 1 (Library Exercise)</i>	Week 5: Preparation of Natural History Specimens- Plants - Methods of field collection and preparation for museum collections - Preservation of vascular and non-vascular plants - Tour the Wisconsin State Herbarium	Tour the Wisconsin State Herbarium (CAMERON, WETTER & COCHRANE)
October 10 Lobby of Russell Labs	<i>Verbal progress report</i>	Week 6: Preparation of Natural History Specimens- Insect Preservation - Preparation and Preservation of Insects: fluid fixation and insect pinning - NOTE: Please read all chapters paying particular attention to chapters 7-12 (see Learn@UW)	Demonstration of insect pinning and tour the UW Insect Research Collection (YOUNG & KRAUTH)
October 17 443 Noland	<i>Assignment 2 (Ethical Collecting)</i>	Week 7: Preparation of Natural History Specimens- Mammals and Birds - Preparation of mammals & birds (skins & skeletons) for museum collections - Rough preparation techniques	Demonstration of vertebrate preparation (HOLAHAN)

October 24 443 Noland	<i>Exam</i>	Week 8: Mid-term Exam (Through week 7)	Exam- 443 Noland
October 31 443 Noland, then Social Science	<i>Brief, written progress report</i>	Week 9: Use of Collections – Research - Use of museum specimens in modern research - Zoological (Berres) - Biological Anthropology (Hawks)	Discuss various research techniques (Berres) (Hawks)
November 7 Memorial Library, room 126	<i>Assignment 3 (Repatriation)</i>	Week 10: Museum Concerns – Preservation, Environments & IPM - Preventative conservation vs. remedial conservation - Museum Environments: measurement and mitigation - Integrated Pest Management (IPM)	Tour the GLS Preservation Department (ROLICH & GATHRIGHT)
November 14 123 Noland	<i>Assignment 4 (Museums in a digital world)</i>	Week 11: Use of Collections - Exhibition Development - Examples of exhibits in small museums - Phases of exhibition development - Build an exhibit	Tour UWZM and Birge Hall Exhibits (ELLIOT & FRIEDRICH)
November 21 443 Noland	<i>Discussion 1 (on-line)</i>	Week 12: Museum Concerns - Laws and Ethics - Show “The Art of the Steal”	(HALVERSON MONAHAN)
November 28 Weeks Hall, outside the Geology Museum	<i>Discussion 2</i>	Week 13: Use of Collections – Educational Programming - Education and exhibits - Education and outreach - Teacher Preparation	Tour the geology displays and discuss museum education (NORSTED)
December 5 Memorial Library, 9 th floor lobby		Week 14: Summary – History & Development of Natural Science Museums - Comparisons of museums and libraries - Visit the rare book and manuscript collection - Introduction to books from the early period of museums and cabinets	Demonstration at the Special Collections in Memorial Library (REEDER)
December 12 163 Noland	<i>Presentation & Paper due</i>	Week 15: Presentations of Papers The class may run long; please make arrangements to stay late on this day.	(STUDENTS)
December 21 443 Noland	<i>Exam</i>	FINAL EXAM	5:05PM to 7:05PM