MWFB Museum Science Internship Program

Overview

The Museum of Wildlife and Fish Biology (MWFB) offers several internships for UC Davis undergraduate and graduate students. Interns are involved with all facets of museum science including specimen preparation, curation, science outreach and education, specimen-based research, and wildlife biological surveys. All interns work closely with museum staff and are required to maintain good Academic Standing. Internships are limited to University of California Davis students.

Specimen preparation and curatorial interns require a 160 hour commitment that can be completed over 3-4 quarters. The minimum commitment is 4hrs/week (40hrs/quarter) over 4 quarters. You may commit more time per quarter and finish your 160 hrs in less than 4 quarters. You can always volunteer more than 40hrs/quarter and more than 4 quarters.

Remora Internship

This program was designed to afford interested students and graduating seniors the opportunity to see what museum science is all about before committing to a formal MWFB internship. As a Remora Intern you will ‘attach’ yourself to a host MWFB Staff or Student Intern and observe museum science in action. It gives you the opportunity to shadow your host for one or more visits, a minimum of two hours per visit. Space is limited in our labs and all Remora Intern visits are made by appointment only. There is a minimum of one two-hour visit and unlimited return visits, provided a host is available.

Activities for Remora Interns include observation of specimen preparation in the lab, specimen curation and installation in the museum, accompanying an MWFB field biologist for avian surveys, bluebird nestbox monitoring, and/or chick banding. Questions can be asked by the Remora but no formal training is given. However, if your host is working on a task where they could use a couple of extra hands, you might be asked to assist as needed. If you are interested you may return for multiple Remora visits. This has proven to be an excellent way to find students well-fitted to museum work. Remora Interns that successfully completed multiple visits will be first on the wait list of formal MWFB internships.
Five Mechanisms for Formal Internships

1. **Volunteer internship.** Commitment is min. of 4 hours/week. This allows the most flexibility and is not recorded on transcripts.

2. **Direct Study, WFC-99, 192 or 199 variable units.** Each unit of academic credit earned in Direct Study requires 4 hours/week committed to internship activities. Students may receive up to 12 units per quarter. Requires a commitment of 4hrs/wk/unit and 3-5 page essay detailing your experience during your internship and approval of MWFB supervisor and curator. All Direct Study proposals must be approved by either the MWFB Curator or Collections Manager. After approval, you request the CRN from the WFCB office staff student advisor. They will give you a Direct Study CRN Request Form. Use the verbatim text in the “Intern Description” section below to fill out the CRN Request Form. Have the Dept. Chairperson and your MWFB supervisor sign the form, and then submit it to the WFCB office for the CRN.

3. **Transcript Notation.** Receive permanent notation of this internship on your UCD transcripts. Requires minimum commitment of 4 hrs/wk and MWFB supervisor’s approval. Sign up for this with Internship and Career Center (ICC) on-line at Aggie Job Link. At the end of the quarter you will submit hours for approval and complete a short questionnaire and be evaluated by your supervisor.

4. **Direct Study/Transcript Notation Combo.** You may sign up for both Direct Study (WFC-99, 192 or 199) and Transcript Notation at the same time. Paid interns may NOT receive academic credit or transcript notation.

5. **Paid Internships. Student Assistant (Levels 1-3) and Work Study.** The MWFB has limited funds for paid internships and may be able to hire students who qualify for Work Study. Please see the Financial Aid Office to inquire about your eligibility for Work Study. Paid interns may NOT receive academic credit or transcript notation.
Types of Internships

The following is a list of the different types of internship positions available at the MWFB. Curatorial and Specimen Preparation internships require a minimum 160 hour commitment. All MWFB internships require good academic standing. All interns are expected to assist with public outreach events.

1. Curatorial
   • incoming specimen (all vertebrate taxa) cataloging and accessioning (data truthing, tag writing, data entry, installation)
   • organizing collection/updating taxonomy
   • skull/skin matching
   • specimen curation/stabilization
   • loan processing

2. Specimen Preparation
   • bird specimen preparation, including: traditional study skins, freeze dried, wings, skeletons
   • mammal specimen preparation, including: traditional study skins, skeletons, pickled
   • herpetological specimen preparation: pickled

3. Skeletal Specimen Preparation
   • birds: skeletons with skulls
   • mammals: skulls, skeletons with skulls

4. Education Outreach
   • public events docent
   • tour docent
   • tour lesson plan development
   • science education display development
   • specimen loan kit development

5. Dermestid Beetle Husbandry

6. Osteoscribe
   • birds and mammal skeletons

7. Field Work
   • biodiversity surveys (mammals, birds, herps, fish)
   • vertebrate field methods
   • nestbox monitoring/banding

8. Remora Internship
   • observe museum staff or intern host, 2-hour minimum visit
DESCRIPTION: Vertebrate Specimen Curation

WFC-99, 192 or 199 DIRECT STUDY: Museum Curatorial Assistant Internship

Course plan:
Topics to be covered are vertebrate study skin and osteological specimen curation including; organization, inventory, stabilization, accessioning, and cataloging. Students will have hands-on practice in the museum and preparatory lab with vertebrate taxonomy, anatomy, morphology, identification and natural history. General principles of museum science will be covered. Field guides, taxonomy lists and natural history texts will be used and reference materials. Students will benefit in their careers as wildlife biologists by learning general vertebrate anatomy, identification, taxonomy, biogeography and natural history through specimen curation.

Grading:
Students must complete 4 hours/week per unit of credit and comply with the meticulous standards required by the Museum of Wildlife and Fish Biology. By the end of the quarter, students must become proficient in specimen curation and have a clear understanding of general museum science and current taxonomy. A Final Report comprised of six short answer essay questions is due the first day of finals. The Final Report details their internship experience and how it has benefited their academic career and how it has influenced their future academic and career plans.

TRANSCRIPT NOTATION: Museum Curatorial Assistant Internship

Responsibilities and duties:
Duties will include vertebrate study skin and osteological specimen curation including; organization, inventory, stabilization, accessioning and cataloging. Students will have hands-on practice in the museum and preparatory lab with vertebrate taxonomy, anatomy, morphology, identification and natural history. General principles of museum science will be covered. Field guides, taxonomy lists and natural history texts will be used and reference materials.

Learning objectives:
By the end of the quarter, students must become proficient in specimen curation and have a clear understanding of general museum science and higher taxonomy. Students will benefit in their careers as wildlife biologists by learning general vertebrate anatomy, identification, taxonomy, biogeography and natural history through specimen curation.

Supervisor’s Expectations:
Interns are expected to perform all tasks with extreme care and precision. Interns are instilled with the work ethic that all tasks should be executed meticulously and accurately. Interns must have neat, legible penmanship and exceptional organization skills.
DESCRIPTION: Vertebrate Specimen Preparation

WFC-99, 192 or 199 DIRECT STUDY: Museum Specimen Preparator Internship

Course plan:
Topics to be covered are vertebrate study skin and osteological specimen preparation and curation. Students will have hands-on practice in the museum and preparatory lab with vertebrate taxonomy, anatomy, morphology, identification and natural history. General principles of museum science will be covered. Field guides, taxonomy lists and natural history texts will be used as reference materials.

Grading:
Students must complete 4 hours/week per unit of credit and comply with the meticulous standards required by the Museum of Wildlife and Fish Biology. By the end of the quarter, students must become proficient in specimen preparation and have a clear understanding of general museum science and current higher taxonomy. A Final Report comprised of six short answer essay questions is due the first day of finals. The Final Report details their internship experience and how it has benefited their academic career and how it has influenced their future academic and career plans.

TRANSCRIPT NOTATION: Museum Specimen Preparator Internship

Responsibilities and duties:
Duties will include vertebrate study skin and osteological specimen preparation and curation. Students will have hands-on training in the museum and preparatory lab with vertebrate taxonomy, anatomy, morphology, identification and natural history. General principles of museum science will be covered. Field guides, taxonomy lists and natural history texts will be used and reference materials.

Learning objectives:
By the end of the quarter, students must become proficient in specimen preparation and have a clear understanding of general museum curation. By learning general vertebrate anatomy, identification and taxonomy through specimen preparation and curation students will benefit in their careers as wildlife biologists.

Supervisor’s Expectations:
Interns are expected to perform all tasks with extreme care and precision. Interns are instilled with the work ethic that all tasks should be executed meticulously and accurately.
DESCRIPTION: Education and Outreach

WFC-99, 192 or 199 DIRECT STUDY: Education and Outreach Internship

Course plan:
Topics to be covered are wildlife and fish natural history and conservation as interpreted with vertebrate museum specimens covering; public speaking, basic museum science, the role of museums in the 21st Century, importance of specimens and interpretation with them, communicating complex concepts to the layperson, methods of audience engagement, docent/tour guide techniques, and educational displays and exhibits. Students will have experiential practice in the museum, on and sometimes off campus with tour guiding and interpretation at private and public events. Lesson plan basics will be explored through creating tour guide dialogs and outreach specimen loan kits. General principles of museum science will be covered. Field guides, taxonomy lists and natural history texts will be used and reference materials. Students will benefit in their careers as wildlife biologists or science educators by exposure to vertebrate anatomy, identification, taxonomy, biogeography and natural history through educating with specimens in and outside of the museum setting.

Grading:
Students must complete 4 hours/week per unit of credit and comply with the meticulous standards required by the Museum of Wildlife and Fish Biology. By the end of the quarter, students will demonstrate: (1) confidence and mastery of public speaking, (2) understanding of museum science, (3) knowledge of vertebrate natural history, and (4) have a clear understanding of general museum science and the natural history of California vertebrates. A Final Report comprised of six short answer essay questions is due the first day of finals. The Final Report details their internship experience and how it has benefited their academic career and how it has influenced their future academic and career plans.

Transcript Notation: Education and Outreach Internship

Responsibilities and duties:
Duties will include: (1) attending MWFB public functions, on and sometimes off campus; (2) verbally interpreting the role of museums in the 21st Century, the importance of specimens, education displays, and specimen-based research to the general public, students, and researchers; (3) leading tours of the MWFB for the general public, K-12 groups and UC Davis undergraduates, grad students, staff and faculty; and (4) design and development of science education displays, loan kits, and tour lessons/programs as required.

Learning objectives:
Students will gain confidence and master public speaking by interning as a docent in our intimate setting. By the end of the internship, students will be proficient and knowledgeable of Museum of WFB history, mission, research programs, holdings, basic museum science and operations, and have a basic understanding of the natural history of California vertebrates. Students will also be able to host tours of the main collections room, unassisted by MWFB staff.

Supervisor’s Expectations:
Students must be punctual, reliable and proficient in public speaking. Students must maintain a presentable tidy appearance and provide a welcoming educational experience to the target audience. Interns will gain a command of the subject matter and be able to field basic questions while being aware of how to address sensitive biological issues.
DESCRIPTION: Dermestid Beetle Husbandry Internship

TRANSCRIPT NOTATION:  Dermestid Beetle Husbandry Internship

Responsibilities and duties:
Duties will include dermestid beetle colony husbandry (misting, temperature/humidity control, air circulation regulation, food preparation*, food cycling) of the Museum of Wildlife and Fish Biology beetle colony. Osteological specimen material handling, processing, and post-colony osteological specimen curation will be covered in the Museum of Wildlife and Fish Biology preparatory lab.  *Interns will be asked to prepare (measure, catalog, flense and eviscerate) vertebrate specimens as food for the colony.

Learning objectives:
By the end of the quarter, students must become proficient in dermestid beetle colony husbandry. They must be able to evaluate, adjust and provide proper environmental conditions, food sources, and habitat to sustain a healthy colony.

Supervisor’s Expectations:
Interns are expected to perform all tasks with extreme care and precision. Interns are instilled with the work ethic that all tasks should be executed meticulously and accurately. Museum of WFB vertebrate osteological material (which is the food source for the dermestids) must be handled with the utmost care to ensure that no bones are misplaced or damaged during their defleshing by the dermestids and handling between tanks and labs. All skeletons and skulls are to remain complete unless otherwise noted.