



WESTERN
ILLINOIS
UNIVERSITY

Graduate Certificate in Zoo and Aquarium Studies

Benefits of the Graduate Certificate

- Detailed knowledge about the biology of a special group of animals often kept in captivity. The student selects special courses in mammalogy, marine mammalogy, ornithology, ichthyology, or herpetology to obtain advanced graduate training on that group.
- Background on the basic theories, concepts, and techniques in animal training. The WIU animal training course is co-taught by Ken Ramirez, a world-famous animal trainer at the Shedd Aquarium and Dr. Jeanette Thomas, WIU faculty member in biological sciences.
- Graduate-level training in management skills such as personnel management, budgets, problem solving, time management, organizational structure, negotiation, reward systems, and leadership. This information is tailored to the business operations of a zoo or aquarium.
- Information on policies and regulations that affect the operations of zoos and aquaria.
- Practical hands-on experience at a facility.
- A network of professionals already employed in the field.
- Better access to available jobs at zoos or aquaria.



Additional Benefits of the Graduate Certificate

- Students with a bachelor's degree in a wide variety of fields can be accepted into the program.
- The certificate can be completed in one calendar year.
- Students can join the program during fall, spring, or summer terms. Most courses are held one afternoon per week for 8 weeks.
- Students with a bachelor's degree in biology can apply the credits from the graduate certificate toward a WIU master's degree in biology.
- Zoos and aquaria often hire from a pool of volunteers, so the practicum can lead to full-time employment.
- This certificate is perfect for people who are already employed at a zoo or aquarium and want continuing education and recognition for job advancement.

Invest in Your Future Today

For more information about the
Graduate Certificate in Zoo and Aquarium Studies
please contact:

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You can visit our websites at:
www.wiu.edu/biology/personnel/thomas.shtml
www.wiu.edu/grad/catalog/zooaquastudies.php

Western Illinois University is accredited by The Higher Learning Commission and is a member of the North Central Association.

Western Illinois University is a fully compliant Affirmative Action, Equal Opportunity institution.



Excellence in
Graduate Studies

Careers at Zoos or Aquaria

The roles of modern zoos and aquaria are four-fold: education, entertainment, conservation, and research. Careers at zoos or aquaria are very popular because they are glamorous, personally fulfilling and provide direct contact with captive, often exotic animals such as dolphins, seals, primates, big cats, canids, large birds, or reptiles. Most facilities employ people in exhibits departments, business/administrative offices, animal care/husbandry departments, training programs, visitor service, public relations, education programs, research, facility management, horticulture, or ground maintenance.

Knowledge of basic animal training is essential to succeeding in a position at a zoo or aquarium. Students need to be familiar with the unique biology of special groups of captive animals, such as the “megacharismatic” mammals, birds, and reptiles. Understanding permits, legal restrictions, and government policies required of these facilities is important. Appreciation of the standards of educational programs is essential to the justifications for the existence of these facilities and to the ultimate conservation of animals in the wild.

Pursuing a Career at a Zoo or Aquarium

To succeed in today’s ever-changing workplace, students must continue to develop skills and look for ways to advance. Careers at zoos and aquaria are attractive, so entry into this workforce is highly competitive. All entry-level positions at zoos or aquaria now require a bachelor’s degree. This graduate certificate is designed to give people with a bachelor’s degree in biology, psychology, agriculture, animal science, or recreation, park and tourism administration practical work experience and related coursework that provides competitive edge to employment.

What is a Graduate Certificate?

This graduate certificate is awarded for completion of 18 semester hours of graduate work accredited through Western Illinois University. Included is the “Zoo Practicum,” which awards 3 semester hours of credit for practical experience at a zoo or aquarium. The certificate program does not require a thesis.

Graduate Certificate Requirements

Students must apply to the program through the WIU Department of Biological Sciences. For admittance, the student must have at least a 2.5 overall GPA in his or her bachelor’s program. The graduate certificate requires 15 semester hours of graduate-level coursework, plus a 3-semester hour practicum. To complete the certificate, students must have a 3.0 or higher GPA in these 15 semester hours of coursework and pass the practicum. Coursework must be completed within three years of acceptance into the program.

Required courses (3 semester hours each) include:

- **Practicum at a Zoo and Aquarium** (ZOOL 578). Credit given for experience as a volunteer, intern, or employee of zoo or aquarium. Area facilities include Niabi Zoo in the Quad Cities, Shedd Aquarium, Lincoln Park Zoo, Brookfield Zoo, Wildlife Prairie Park, Peoria Zoo, St. Louis Zoo, Springfield Zoo, or Bloomington Zoo. Students provide verification of performance by a letter of recommendation from a supervisor at the facility. Students must work a minimum of 120 hours at the facility.
- **Biological Studies in Zoos and Oceanaria** (ZOOL 584). Topics include research and design of studies conducted on captive animals. Methods of behavioral observations are described, and students conduct behavioral observations and a time budget on captive animals. Discussions cover policies and housing standards, careers at zoos and aquaria, and obtaining internships, volunteer positions, or employment. Legal requirements for facilities are examined. International policies regarding the sale and trade are also discussed. Students create a behavioral enrichment project and conduct a time-budget study of a captive animal. Students also design a zoo and budget using software.
- **Animal Behavior** (ZOOL 553). Survey of theories of animal behavior, learning, cognition, and methods of studying ethology.
OR
- **Animal Training** (ZOOL 585). Taught by Ken Ramirez, world-famous animal trainer. Topics include methods of training animals, psychology, behavior, and training animals for research. Demonstrations of methods are conducted on live animals at the Shedd Aquarium. Discussions emphasize marine mammals, but also include training of service dogs, horses, and birds. Students train an animal of their choice.

- **Park Maintenance and Operations Management** (RPTA 489G). Explores procedures and problems of recreation area operation with emphasis on planning and management for maintenance efficiency. Topics include planning, scheduling, standards, cost control, vandalism, etc.
OR
- **Organizational Management in Zoos and Aquaria** (ZOOL 583). A team-taught course—led by staff at the Shedd Aquarium—that describes specifics of their business.
OR
- **Management of People and Organizations** (MGT 500). Focuses on the theories and applications of managing people and organizations, including the functions of management, organization behavior, organization theory, and human resource management.

ELECTIVES (3 semester hours each) are selected in consultation with the adviser or department chairperson. Select from additional required courses or one of the following.

- ZOOL 410G Ornithology
- ZOOL 411G Entomology
- ZOOL 412G Mammalogy
- ZOOL 413G Herpetology
- ZOOL 414G Ichthyology
- ZOOL 416G Marine Mammalogy
- ZOOL 430G Animal Physiology
- ZOOL 451G Animal Ecology
- ZOOL 452G Freshwater Biology
- ZOOL 460G Parasitology
- ZOOL 554 Limnology
- ZOOL 561 Fisheries Management
- ANTH 410G Anthrozoology
- BIO 440G Advanced Genetics
- BIO 583 Bioacoustics
- BOT 423G Phycology
- SCED 490G Environmental Science Education for Elementary Teachers
- SCED 491G Biological Science for Elementary Teachers
- SCED 507 Science in the Early Childhood Classroom
- SCED 562 Science Curriculum in the Elementary School
- RPTA 580 Skills in Community Development
- ITT 516 Internet Resources for Education and Training