Mission & Goals

The mission of the Laboratory Animal Science program is to provide the essential knowledge and skills to produce competent professionals in the laboratory animal field.

To accomplish this, the program focuses on the following five areas:

- Mastery of the laboratory animal science field including animal models, diseases, husbandry practices and methods, and animal care procedures.
- Command of interdisciplinary scientific knowledge including: biotechnology, biostatistics and cryopreservation, which enables graduates to respond to industry trends in laboratory animal science and related fields.
- Application of scientific methodology to solve complex research problems received from industry or research institutions that may benefit from societal health needs.
- Compliance with current regulatory guidelines and ethics involved in animal care, facilities, and safe employment in the field procedures and related equipment.
- Facility management and social competencies (critical thinking, team and communication abilities, intercultural experiences, etc.) which prepare students for the challenges of employment, management and leadership.

Contact Information

Alireza Hosseini, MD Program Director – hosseia@odu.edu

Mario Rodriguez, DVM Veterinary Director – rodrigmc@odu.edu

For more information about the Laboratory Animal Science (M.S.), email VHS-lasinfo@odu.edu or visit evms.edu/las.

Career Prospects

Students in the program earn a Master of Science in Laboratory Animal Science in two or four years, or a certificate in three months. Our objective is to provide the biomedical research community with skilled individuals in laboratory animal science who can fulfill needed positions in academia, industry (biotechnology and pharmaceutical companies) and animal care facilities immediately upon graduation. The program can also improve the standing of those students who desire to advance their training in veterinary medicine for their application to veterinary school.



We are committed to the principles of humane laboratory animal use, defined by the 3Rs of Replacement, Reduction and Refinement. These principles will most effectively be implemented if the animal users are sensitive and receptive to technical and ethical improvements and also have received outstanding, specialized training for the use and care of laboratory animals in biomedical research.





Laboratory Animal Science (M.S.)

Online Master's Program



MACON & JOAN BROCK VIRGINIA HEALTH SCIENCES

EVMS School of Health Professions

AT OLD DOMINION UNIVERSITY



About the Program

Much of modern-day medicine is indebted to irreplaceable animal research. With the need for technically sophisticated, humane and well-considered use of animals in biomedical research, the demand for qualified individuals is very high. The online Laboratory Animal Science (M.S.) program can assist in advancement within this highly competitive industry.

Program courses are designed to build a solid foundation for a successful career in laboratory animal science. These courses focus on all aspects of laboratory animal science, such as diseases, care, husbandry and facility management. The practicum provides students with the opportunity to apply their theoretical knowledge to the actual practice of laboratory animal science.

Educational Format

The online Laboratory Animal Science (M.S.) program allows maximum flexibility for students. It is designed for individuals who may currently be working within the field of laboratory animal science and seeking career advancement, or those looking for opportunities in research laboratories who do not wish to relocate for a traditional master's program.

The program comprises 31 credits in five semesters over two years. Students are required to attend a one-week on-campus internship course during the summer semester. An optional Clinical Reproductive Biology (CRB) track is available during the sixth semester for an additional six credit hours.

Course Curriculum (per semester)

- Comparative Anatomy & Physiology, Applied Biostatistics & Research Design
- Diseases of Lab Animals I, Laboratory Animal Husbandry, Care & Ethics, Journal Club
- Anesthesia & Surgery, Internship
- Facility Management, Diseases of Lab Animals II
- Biotechnology & Diagnostic Techniques Graduate Seminar, Cryopreservation, Lab Animal Behavior & Behavioral Management

Optional CRB Track Courses:

- ☐ Introduction IVF, Laboratory Tech, and Skills Development
- ☐ In Vitro Fertilization Technology

For more information about our part-time, per semester course curriculum, please visit evms.edu/las.

Admission Requirements

Bachelor's or graduate degree with a 2.50 or higher GPA or qualifying GPA from a U.S. accredited college or university or an international equivalent.

Applicants should be advised that a cumulative GPA of 3.0 or higher is a graduation requirement from our program.

Successful completion of two semesters each of college-level biology and chemistry, and one semester of mathematics.

Minimum of three months or 500 hours of hands-on experience in related technical standards that can be found on the program website.

Applicants who desire a future as a laboratory animal technologist are strongly encouraged to continue a full-time experience/employment during the two years of matriculation of the master's program to be eligible for American Association of Laboratory Animal Science (AALAS) LAT and LATG certification.

International students should take the TOEFL or equivalent test and receive a score equal to or greater than 213 or equivalent.

Two letters of reference, one of which must verify the minimum hands-on animal experience requirement.

Personal statement outlining the applicant's academic and professional goals.

Computer and computer services with various specifications as detailed on the program website.

For more information on our **Early Assurance Program**, **certificate**, **part-time option** and to review **all admission requirements**, visit the Admission page on the program website.

Application Process

Please visit **evms.edu/las** to learn more about our application process.