

Certificate

Laboratory Animal Anesthesia and Handling Techniques Certificate

The Laboratory Animal Science program offers a stand-alone graduate certificate in “Laboratory Animal Anesthesia and Handling Techniques (<https://online.odu.edu/academics/programs/laboratory-animal-anesthesia-handling-techniques-certificate/>).” The Graduate Certificate will include Anesthesia and Surgery and Internship courses for total of 4 credit hours in summer semester. This certificate is available to all US and International applicants.

The Internship course includes attending a one-week, on campus, residential workshop during the second half of July and completing any preparatory and follow-up assignments.

The courses contained within the Graduate Certificate will be transferable into the EVMS School of Health Professions, Laboratory Animal Science Master’s Program.

Admissions

The following elements are requirements to be considered for admission into the program:

- A bachelor degree with GPA of minimum 2.5 is required.
- Successful completion of two semesters each of college-level Biology and Chemistry, and one semester of Mathematics.
 - No more than one (1) prerequisite course will be accepted without a traditional letter grade (e.g. Pass, Advanced Placement, International Baccalaureate, etc.).
 - The courses without a traditional letter grade can only be accepted for intro level prerequisite courses of Biology I, Chemistry I, or Mathematics I.
 - Replacement courses may be accepted for missing prerequisite courses, only with Program Directors’ approval. Replacement course syllabus should be submitted by applicant for consideration.
- Minimum of three months or 500 hours of hands-on experience, as described below is required prior to the start of the first semester.
 - 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 the program to be eligible for LAT and LATG certification through American Association of Laboratory Animal Science (AALAS).
- One Letter of Recommendation, which must verify the minimum hands-on animal experience requirement.
- Personal statement - Your personal statement must detail your experience and explain your goals for taking this certificate.
- In addition to meeting the admissions requirements above, international applicants are required to meet the following: Foreign Transcript(s) Request a course-by-course evaluation of all foreign transcripts showing GPA calculation on a four-point scale. EVMS School of Health Professions does not endorse any particular evaluating and/or credentialing service.
 - You can use the following agencies:

World Education Services (<https://www.wes.org/>) or Educational Credential Evaluators Translation (<https://www.ece.org/>)

- Translation: If the academic institution that you attended does not issue documents in English, the credentialing agency will require that you submit a word-for-word translation of your transcripts. You can contact University Language Services (<https://www.universitylanguage.com/>) to submit your transcript for translation and instruct them to send the translated transcript to the credentialing agency you choose.

- Transcript Evaluation: International students whose native language is not English may contact one of the following credentialing agencies to submit transcripts for official evaluation: WES or ECE. Instruct the credentialing agency to send the official evaluation (and translation) directly to GradCAS. You must provide both a course-by-course evaluation report along with an overall GPA calculation. Evaluations are mandatory even for transcripts from institutions that report grades in English. This provides EVMS with a U.S. credit equivalency and allows the transcripts to be reviewed accurately. WES and ECE are preferred credentialing services. If you wish to select a company other than these, please contact the program first.
- Test of English Foreign Language: International applicants whose native language is not English must take the TOEFL exam and receive a score as follows: Paper-based test: 550; Computer-based test: 213; iBT exam: 80.
 - Please go to the ETS (<https://www.ets.org/>) website to take the TOEFL exam, and request your TOEFL scores be sent directly to GradCAS. ETS reports scores for two years after the test date. If you have previously taken the TOEFL but the two-year period has expired, the program will accept a personal copy if available. Note: If the candidate has received a BS or graduate degree from a college or university in a country where English is the primary language (like the U.S., Canada and UK), applicants could request for the TOEFL requirement to be waived by the Program Director or the Admission Committee.

Prerequisite experience

Applicants are encouraged to include all animal-related experience they have. Experience and skills related to the maintenance of the health and well-being of animals in research or laboratory animal facility settings will be considered as hour-for-hour against experience requirement. Such experience includes procurement, care, use, handling, treatment, surgical or necropsy activities, cage wash operations, clinical pathology, quality assurance and IACUC functions that relate to laboratory animal science, or the direct supervision or training of personnel engaged in these activities, and experience gained as part of an externship, internship, preceptorship or fellowship in a laboratory animal facility.

Experience and skills in a laboratory animal facility that do not affect the health and well-being of laboratory animals - such as office/administration, selling laboratory animals equipment - or in a non-laboratory animal facility - such as veterinary clinics, zoos, pet stores or other similar businesses - will be considered based on a 3-to-1 ratio. Therefore, nine (9) months of such experience will be considered as equal to three (3) months of hands-on experience.

Transfer credits

Transfer of credit may be allowed for coursework taken at a regionally accredited institution of higher learning, such as an accredited member of the Southern Association of Colleges and Schools (<http://www.sacscoc.org/>), for courses in which a grade of B (3.0) or higher was received and for a maximum of 9 transfer credits. Course grades obtained from another institution will not be counted in the GPA. All applicants seeking to transfer credit(s) should contact the program (lasinfo@evms.edu) for special application or credential requirements. Decisions regarding applicability of transfer courses/credits will be made by the program director in consultation with faculty as deemed appropriate.

Technical Standards

The abilities and skills that candidates and students must possess in order to complete the education and training associated with the Master’s of Laboratory Animal Science Program are referred to as “Technical Standards.” These abilities and skills are essential for professionals in animal care facilities and preclinical biomedical research settings which utilize animal models.

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1.0 Observation Skills Technical Standard

1.01 Demonstrate sufficient attention and accuracy in observation skills (visual, auditory and tactile) in the lecture hall, laboratory and/or online settings. Indicators include but are not limited to accurate visualization and discrimination of text, numbers, patterns, graphic illustrations and other imaging texts.

2.0 Communication Skills Technical Standard

2.01 Demonstrate effective communication skills with biomedical research or animal care professionals and with people of varying cultures, ethnicities and personalities.

2.02 Indicators include, but are not limited to, these examples:

1. Clear, efficient and intelligible articulation of spoken English language.
2. Legible, efficient and intelligible written English language.
3. Accurate and efficient English language reading skills.
4. Accurate and efficient, expressive and receptive communication skills.
5. Ability to accurately follow directions (oral and written).

3.0 Critical Reasoning Skills Technical Standard

3.01 Demonstrate critical reasoning skills, including but not limited to intellectual, conceptual, integrative and quantitative abilities.

3.02 Indicators include but are not limited to these examples:

1. Demonstrate ability to measure, calculate, reason, analyze, integrate and synthesize information.
2. Demonstrate ability to acquire, retain and apply new and learned information.

4.0 Motor and Sensory Function Technical Standard

4.01 Demonstrate sufficient motor and sensory function to perform typical animal care or laboratory duties.

4.02 Indicators include but are not limited to these examples:

1. Functional and sufficient sensory capacity (visual, auditory and tactile) to use laboratory equipment and perform procedures.
2. Execute motor movements that demonstrate safety and efficiency in the various learning settings (i.e., classroom, online and laboratories).
3. Physical stamina sufficient to complete the online didactic and some laboratory study, which will include prolonged periods of sitting.

5.0 Behavioral and Social Attributes Technical Standard

5.01 Demonstrate the behavioral and social attributes vital to participation in a professional program and service as a practicing animal care and laboratory professional.

5.02 Indicators include but are not limited to these examples:

1. Possess the emotional health required for full utilization of mental faculties (judgment, orientation, affect and cognition).
2. Ability to develop mature and effective professional relationships with faculty, animal user researchers, the public and other members of the animal care or use team.
3. Possess personal qualities that facilitate effective therapeutic interactions (compassion, empathy, integrity, honesty, benevolence, confidentiality).
4. Demonstrate impartial motives, attitudes and values in roles, functions and relationships.
5. Ability to monitor and react appropriately to one's own emotional needs and responses.
6. Display appropriate flexibility and adaptability in the face of stress or uncertainty associated with clinical encounters and clinical environments.

7. Compliance with standards, policies and practices set forth in the program handbook.

Curriculum Requirements

Term 1 - Summer		4
MLAS 668	Internship	
MLAS 606	Anesthesia & Surgery	
Total Credit Hours		4