## The Master of Science in Exercise Science (MS)

Lander University offers an online program leading to a Master of Science degree in Exercise Science. This degree equips professionals in physical education, sport, fitness, health and wellness, and healthcare to expand their understanding of the field of exercise science in one of three areas of concentration: Sport Performance and Rehabilitation, or Clinical Exercise Physiology.

The overall program has three student learning outcomes across all areas of emphases:

1. Students will apply scientific and theoretical concepts in the course sequence offered in the Program, deepening their understanding of the discipline of Exercise Science.
2. Students will demonstrate analytical thinking while interpreting, evaluating and reporting published research and design, conduct and analyze their own research study(ies).
3. Students will exhibit expertise in principles and techniques along with the current technologies/methods used in the assessment of physical fitness and health.

**Admission**
All applicants must have earned a baccalaureate degree from a regionally accredited college or university and submit official transcripts of all institutions attended to the Office of Admissions. Graduate students are required to have anatomy and physiology coursework at the undergraduate level prior to admission.

**Degree Requirements**
Completion of 36 credit hours of graduate work.

### Program of Study

The program of study leading to the Master of Science on Exercise Science degree consists of core courses (15 credit hours), courses in a selected concentration area (12 credit hours), and three elective courses (9 credit hours) for a total of 36 credit hours.

| | Credit Hours |
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| 1. **Core Courses** (5 courses)<br>EXSC 700 Seminar in Exercise Science<br>EXSC 711 Advanced Exercise Physiology<br>EXSC 726 Nutrition, Health and Disease<br>EXSC 741 Advanced Research Methods and Design<br>EXSC 762 Advanced Exercise/Fitness Assessment | 15 |
| **2. Concentration Courses** – Choose one concentration area from below: (4 courses)<br>***Clinical Exercise Physiology***<br>EXSC 712 Cardiovascular Physiology<br>EXSC 763 Exercise Prescription and Chronic Disease Management<br>EXSC 764 Perspectives for Special Populations<br>EXSC 765 Exercise Testing for Clinical Populations<br><br>***Sport Performance and Rehabilitation***<br>EXSC 702 Advanced Methods in Strength & Conditioning<br>EXSC 710 Applied Biomechanics<br>EXSC 713 Rehabilitative Exercise<br>EXSC 727 Nutrition and Human Performance | 12 |
| 3. **Elective Courses -** choose three of the following courses or Thesis Preparation I and II:<br>EXSC 714 Exercise and Immune Function<br>EXSC 728 Motor Learning<br>EXSC 754 Sport Psychology<br><br>EXSC 760 Business and Entrepreneurship in the Fitness Industry or<br>EXSC 798 Thesis Preparation I (3 hours)<br>EXSC 799 Thesis Preparation II (6 hours) | 9 |
| **4. Additional Program Requirement:**<br>Passing Comprehensive Score Exam (non-thesis students) | |
| TOTAL PROGRAM REQUIREMENTS | 36 |