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 & Rehabilitation, Clinical Exercise Physiology, or Health & Wellness.

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

1. **Core Courses** (5 courses)

15

- PEES 741 Advanced Research Methods & Design
- PEES 726 Nutrition, Health & Disease
- PEES 711 Advanced Exercise Physiology
- PEES 762 Advanced Exercise/Fitness Assessment
- PEES 700 Seminar in Exercise Science
- **2. Concentration Courses** Choose one concentration area from below: (4 courses)

12

Clinical Exercise Physiology

- PEES 763 Exercise Prescription & Chronic Disease Management
- PEES 764 Perspectives for Special Populations
- PEES 712 Cardiovascular Physiology
- PEES 765 Exercise Testing for Clinical Populations

Health & Wellness Concentration

- PEES 730 Healthy Aging
- PEES 731 Nutrition & Chronic Disease
- PEES 732 Health Promotion Across Lifespan
- PEES 733 Public Health & Physical Activity

Sport Performance & Rehabilitation

- PEES 702 Advanced Methods in Strength & Conditioning
- PEES 710 Applied Biomechanics
- PEES 727 Nutrition & Human Performance
- PEES 713 Rehabilitative Exercise
- 3. **Elective Courses -** choose three of the following courses or Thesis Preparation I and II:

PEES 714 Exercise & Immune Function
PEES 728 Motor Learning
PEES 754 Sport Psychology
PEES 760 Business & Entrepreneurship in the Fitness Industry or
PEES 798 Thesis Preparation I (3 hours)
PEES 799 Thesis Preparation II (6 hours)

4. Additional Program Requirement:

Passing Comprehensive Score Exam (non-thesis students)

TOTAL PROGRAM REQUIREMENTS

36