Graduate Studies in

Exercise and Nutrition Science

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Graduate Studies in Exercise and Nutrition Science

• Master of Science

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The M.S. in exercise and nutrition science is a 36-hour program combining the disciplines of exercise science and nutrition. Students with a background in exercise science, nutrition or other allied health or science areas will have advanced educational opportunities in either a wellness (working with healthy individuals) or clinical track. Students will choose a thesis or practicum option as their culminating experience. For more information, look online at exns.lipscomb.edu.

Key Strengths
• Program flexibility—four core courses, with electives designed to meet professional and educational goals
• Thesis or practicum option
• Interdisciplinary curriculum
• Opportunities for research or networking with local organizations for practical experience
• Certification opportunities through ACSM or other professional organizations
• R.D. internship available (students must satisfy all prerequisites and be accepted into internship appointment)

Career Opportunities
• Exercise and fitness practitioner
• Wellness/fitness facility manager or administrator
• Community health departments and agencies
• Cardiac or pulmonary rehabilitation programs
• Health care facilities
• Food science and technology (with completion of R.D. [Registered Dietitian] requirement)
• Wellness Counseling

Admission Policies and Procedures
Applicants to graduate programs must submit the following:

1. Application Form. Each applicant must complete an application form. The application form is available at www.gradstudies.lipscomb.edu/, then click on “Admissions,” then “Apply Today.” The application can be completed online or downloaded in a PDF version.

2. Application Fee. Each application should be accompanied by a $50 nonrefundable application fee ($75 for international students).

3. Standardized exam score. Each applicant must submit scores from the Graduate Record Examination. For more information on the GRE, visit www.ets.org/ and click on “GRE.” A minimum combined score of 288 current score (800 prior score) is required on the new GRE format. Students who have already earned a master’s level degree may apply to the program without submitting a standardized test score.
4. **References.** Two letters of reference are required as follows: one from a college or university administrator or professor and one from a professional supervisor/employer, or personal reference.

5. **Official Transcript(s).** Each applicant must submit an official transcript, showing degree conferral when appropriate, from all schools attended.

6. **Health Form.** Each applicant must submit a completed health form signed by a health care provider. (To print a copy of the health form, visit www.lipscomb.edu/healthcenter/forms.)

7. **FERPA.** The Family Educational Rights and Privacy Act affords students certain rights of access to educational records; even if you are independent of your parents, you must submit this form prior to enrollment.

8. **Resume.** A resume detailing the applicant’s work and academic experience is required.

9. **TOEFL.** The Test of English as a Foreign Language is required for international students. (See section titled International Students for more information.)

All application items should be submitted to the graduate studies in exercise and nutrition science office no later than 15 days before the beginning of the semester or term in which the student plans to enroll. Items should be mailed to: Graduate Studies in Exercise and Nutrition Science, Lipscomb University, One University Park Drive, Nashville TN 37204-3951.

**Transfer of Courses**

Although all graduate credit hours may be transferred from another accredited institution, a maximum of six hours will be counted toward the M.S. in exercise and nutrition science degree. The director or appropriate faculty member of the graduate program will evaluate the course(s) being proposed for transfer and make a determination of suitability. No course with a grade below a “B” will be considered for transfer.

**Documentation**

Students are required to provide satisfactory documentation of personal identification for off-site learning experiences required in many programs of graduate study at Lipscomb University. Failure to provide proper credentials will result in failure to complete the desired course of study. For complete policy, see section entitled Required Documentation for Off-Site Learning Experiences in the opening section of this catalog.

**Student Classifications**

Students are admitted to graduate courses in one of five categories:

1. **Graduate Student:** one who has satisfied all admissions requirements. (Average of 2.75 on undergraduate work, GRE acceptable scores.) A student with an incomplete admission file will be accepted to the program at the discretion of the program director but will be placed on an academic hold which will prevent registration for the following semester. Once the proper admissions documents have been received, the hold will be removed and the student will be allowed to register for the following semester.

2. **Conditionally Admitted Student:** one who has been admitted conditionally, at the discretion of the program director, without satisfying all admission requirements. Students admitted with the following criteria may be required to complete a minimum of nine hours of graduate work with a grade of “B” or above.
   a. From an unaccredited school or with a substandard GPA or GRE/MAT score.
   b. A transfer student with a graduate GPA between 2.50 and 2.99. The transfer student must be in good standing at the previous institution attended.
   c. As a student who has not completed a bachelor’s degree program. The transfer student must be in good standing at the previous institution attended.

3. **Non-Degree Student:** one who has been admitted to graduate studies and has met all admission requirements except GPA or GRE. The student may take up to nine semester hours for graduate credit. Those hours may be applied toward a master’s degree if the student makes a grade of “B” or better in the courses taken for credit and if all admission requirements (GPA and entrance test score) are met and the student is formally admitted to a graduate program as a degree-seeking student.

4. **Visiting Student:** one who is currently enrolled as a student in good standing at the post-bachelor’s level at another graduate school, wishes to take courses at Lipscomb and desires to have transcript evidence of course work done at Lipscomb provided for the school of primary enrollment.
5. **Probationary Student**: one who has been readmitted to a graduate program following academic suspension from the program.

Admission to a program does not imply admission to candidacy for the master’s degree. Only those students who meet the requirements for “Graduate Student” described above are eligible for candidacy.

### Academic Policies

#### Course Load

A student enrolled for nine hours is considered a full-time student. A student enrolled for six hours is considered a half-time student. A student enrolled for less than six hours is considered a part-time student. No student will be permitted to enroll for more than 12 hours per semester without special approval from the director of the graduate program.

#### Academic Standing

1. **Good Academic Standing**: To remain in good academic standing, the M.S. in exercise and nutrition science student must maintain a cumulative 3.00 GPA and a 3.00 GPA on the most recent 12 semester hours of work.

2. **Probation**: Should the student’s cumulative graduate GPA fall below 3.00, he or she will be placed on academic probation. A student on academic probation will not be allowed to enroll for more than six hours during any term the probation applies.

   The probationary student is required to achieve a 3.00 cumulative GPA by the time the student has completed the next nine hours of course work. A course(s) may be repeated to achieve the requisite GPA. If the requisite GPA is attained, the academic probation status will be removed.

3. **Suspension**: If the requisite GPA is not attained, the student will be suspended from graduate studies at Lipscomb for the following semester, after which the student may apply for readmission. The student may be required to appear before the graduate committee.

   Failing grades will provide no credit toward the degree but will be included in figuring scholarship level, unless replaced with a higher grade by repeating the course(s). A 3.00 GPA must be maintained to be eligible for financial assistance.

4. **Appeals**: Appeals to suspension decisions should be made in writing to the vice provost for academic development and graduate studies. Appeals must be received no later than 4:30 p.m. on the Monday of the week before classes begin for the term during which the student wishes to be readmitted.

### Degree Completion Requirements

#### Residency

No period of formal residency is required for a degree in a master’s program.

#### Statute of Limitations

All requirements for the M.S. in exercise and nutrition science degree must be completed within a seven-year period from the time of initial matriculation.

#### Candidacy

Admission to a program does not imply admission to candidacy for the master’s degree. During the course of pursuing the M.S. in exercise and nutrition science degree, the student must be admitted to “candidacy.” For admission to candidacy the student must satisfy the following:

1. Complete all required undergraduate deficiencies if admitted on condition.
2. Complete at least 12 hours of graduate work.
3. Maintain a 3.00 GPA on all courses taken toward the requirements for the degree with no incomplete grades.
4. File a degree plan/application for candidacy in the graduate program office which meets all requirements and is approved by the administrator of the graduate program and the dean of the college. The degree plan must be filed during the second semester of graduate work in the Program.

After admission to candidacy and approval of the degree plan, any changes in the degree plan must be approved by the administrator of the graduate program and the dean of the college. The application for candidacy must be filed before the beginning of the student’s last semester in the program. No student will be allowed to graduate in the same semester in which the application for candidacy is filed.
Minimum Credits
The M.S. in exercise and nutrition science requires 36 semester hours. This requirement does not include hours accumulated to satisfy academic deficiencies.

Minimum GPA
The minimum cumulative grade-point average for all graduate education programs is 3.00 for all graduate courses taken for graduate credit while pursuing the degree. No grade below a “C” is acceptable. Such grades will not apply toward degree completion.

Graduation
Students must register for GN 999X the semester in which all course work will be completed for graduation. Students who do not file their intent to graduate form in the registrar’s office by the end of the first week of their last semester may be delayed in graduating.

Graduate students receiving degrees are hooded during the May and December commencement exercises.

Appeals
Any exceptions to the above stated requirements would require approval via the appeal process established by the graduate academic leadership team.

Comprehensive Examinations
A successfully written comprehensive examination over the material covered is required of all non-thesis (practicum option) candidates for the M.S. in exercise and nutrition science by the first week in Nov. for Dec. graduation and the first week in April for May graduation and the second week in June for Aug. graduation. Thesis candidates are required to successfully present/defend the results by July 15, for Aug. graduation, Nov. 15, for Dec. graduation and April 15, for May graduation. Students must turn in the completed thesis by July 27, for Aug. graduation; Dec. 15, for Dec. graduation and April 25, for May graduation. Students complete the comprehensive examination in the semester before they intend to graduate. The purpose of the examination is to assess each student’s ability to apply principles covered in the M.S. degree program and to analyze, synthesize and evaluate information related to the content of the degree program.
**Thesis**
Students who choose the thesis option are required to register for EXNS 5423 (Thesis I) and EXNS 5433 (Thesis II). Thesis I is taken after completion of 18 hours of coursework. Thesis option students are required to both present and defend the thesis. These students do not have to take comprehensive exams.

Thesis option students will take 30 hours of course work (typically 10 courses) and six hours of thesis work to complete the degree requirements. The thesis option students must accrue 36 hours to complete the M.S. in exercise and nutrition science.

**Practicum**
Students who choose the practicum option are required to register for EXNS 530V after meeting with the practicum director. The practicum is required of all non-thesis option students and can be taken for three to six hours of credit (300-600 hours of practicum experience). The student must have taken a minimum of 18 graduate hours before he or she is eligible to register for the Practicum. If a student selects a three credit hour Practicum (300 clock hours), that student must take 33 hours of course work (typically 11 courses) to complete the degree requirements. If a student chooses the six credit hour Practicum (600 clock hours), that student will take 30 hours of course work (typically 10 courses) to complete the degree requirements. In either case, the practicum option students must accrue 36 credit hours to complete the M.S. in exercise and nutrition science. The practicum option requires students to take comprehensive exams.

**Financial Information**

**Tuition and Fees for 2015-16**

*Basic charges* per semester:
- Tuition per semester hour of graduate credit .......... $930
- Tuition to audit without credit ........ 50% of regular tuition

*Special Fees*
- Application fee ............ $50 ($75 for international students)
- Application for Graduation ........................................ $195
- Returned check fee ...................................................... $30
- Thesis fee (includes printing and binding) ............. $50
- TouchNet (monthly payment) ...................................... $60
- Withdrawal fee .......................................................... $195
- Thesis continuation fee ............................................. $350

*Effective May 1, 2015*

**Master of Science in Exercise and Nutrition Science (36 hours)**

The M.S. in exercise and nutrition science is designed to prepare students academically and professionally for many career opportunities in a health, exercise science or nutrition field.

The following core courses are required for this degree (15 hours):
- EXNS 5003 Advanced Exercise Physiology (3)
- EXNS 5013 Exercise and Nutrition Strategies I (3)
- EXNS 5063 Biostatistics (3)
- EXNS 5103 Research Design and Data Analysis (3)
- EXNS 5203 Advanced Nutritional Biochemistry (3)

Students select from the following courses based on interest and professional goals (21 hours):
- EXNS 5023 Exercise and Nutrition Strategies II (3)
- EXNS 5033 Anatomical Kinesiology and Biomechanics (3)
- EXNS 5043 Exercise and Sports Nutrition (3)
- EXNS 5053 Exercise Testing and Electrocardiography (3)
- EXNS 5113 Applied Exercise Physiology (3)
- EXNS 5213 Health Promotion and Disease Prevention (3)
EXNS 5223  Nutrition and Genetics (3)
EXNS 5233  Nutrition and Exercise in Obesity Treatment (3)
EXNS 5243  Program Planning in Exercise and Nutrition Science (3)
EXNS 5253  Nutrition Across the Life Span (3)
EXNS 530V  Practicum (3-6)
EXNS 5403  Special Topics in Exercise and Nutrition Science (3)
EXNS 541V  Independent Study (1-3)
EXNS 5423  Thesis I (3)
EXNS 5433  Thesis II (3)

Other elective courses outside the EXNS program
Students who have not previously transferred credit from the dietetic internship or another graduate school may apply up to six hours from the Lipscomb Graduate business and/or psychology programs toward the EXNS degree:

BU 6303  Introduction to Health Services Management (3)
BU 6313  Health Services Issues (3)
BU 6323  The U.S. Health Care System (3)
BU 6803  Sports Management (3)
BU 6813  Marketing, Fundraising and Public Relations in Sports (3)
BU 6823  Sports Law and Risk Management (3)
PSG 5903  Introduction to Counseling Skills (3)

Note: Graduate business and/or psychology program tuition applies if the student takes these courses.

Course Descriptions

Required Courses

EXNS 5003  Advanced Exercise Physiology (3)
The study of acute and chronic adaptation of the body’s structures and functions during and after physical activity.

EXNS 5013  Exercise and Nutrition Strategies I (3)
The study of exercise and nutrition strategies for optimal wellness in healthy populations. Prerequisite: EXNS 5003.

EXNS 5063  Biostatistics (3)
The study of statistical methods and concepts appropriate for biomedical research and health related subjects. Topics will include descriptive and inferential statistics including parametric and nonparametric hypothesis testing methods, sample size, statistical significance and power, vital statistics, demographic methods, survival curve analysis, relative risk, odds ratio, chi square modeling, and analysis of variance.

EXNS 5103  Research Design and Data Analysis (3)
The study of qualitative and quantitative methods for designing and analyzing appropriate research projects in exercise and nutrition science.

EXNS 5203  Advanced Nutritional Biochemistry (3)
The study of the biochemistry of digestion, absorption and metabolism of foods and specific nutrients. Special emphasis is given to the interrelationship of metabolic pathways and the impact of biochemistry on health and disease.

Elective Courses

EXNS 5023  Exercise and Nutrition Strategies II (3)
The study of exercise and nutrition strategies for optimal wellness in diseased populations. Prerequisite: EXNS 5013.

EXNS 5033  Anatomical Kinesiology and Biomechanics (3)
The study of the structure of human movement from an anatomical and biomechanical perspective.

EXNS 5043  Exercise and Sports Nutrition (3)
The study of nutrition requirements for optimal performance in exercise and sports.

EXNS 5053  Exercise Testing and Electrocardiography (3)
Study and applications of commonly used graded exercise tests on the treadmill and cycle ergometer. This course will also provide an understanding of the resting and exercise electrocardiogram. Prerequisite: EXNS 5003.
EXNS 5113 Applied Exercise Physiology (3)
Students will apply the principles learned from advanced exercise physiology. Topics include: training for anaerobic power; ergogenic aids to enhance performance; hypobaric exercise performance; exercise and thermal stress; body composition, energy balance and weight control; exercise and aging. Prerequisite: EXNS 5003.

EXNS 5213 Health Promotion and Disease Prevention (3)
The study of the role of exercise and nutrition in promoting health and preventing disease in the general population.

EXNS 5223 Nutrition and Genetics (3)
The study of the role of genetics in human nutrition and metabolism, with emphasis on the use of genetic testing in nutrition therapy.

EXNS 5233 Nutrition and Exercise in Obesity Treatment (3)
The study of exercise and nutrition therapies for treating obesity across the lifespan.

EXNS 5243 Program Planning in Exercise and Nutrition Science (3)
The study of the design, management and evaluation of exercise and nutrition programs to improve health and wellness and to treat disease.

EXNS 5253 Nutrition Across the Life Span (3)
The study of nutrition needs at different stages of life, including pregnancy, infancy, childhood, adolescence and aging.

EXNS 530V Practicum (3–6)
Supervised practice in the field of exercise and nutrition science. May be repeated for credit. Maximum six hours applied toward the degree.

EXNS 5403 Special Topics in Exercise and Nutrition Science (3)
An in-depth discussion of special topics that are of interest to students and faculty. Topics must not be covered in depth in other courses. Titles will be announced in the course schedule.

EXNS 541V Independent Study (1–3)
Advanced study and/or research in a specific area of exercise and nutrition science. Offered on demand.

EXNS 5423 Thesis I (3)
Students will identify a thesis advisor and committee, propose the thesis topic and write the first three chapters of the thesis document (Introduction, Literature Review, Methodology and IRB approval).

EXNS 5433 Thesis II (3)
Students will collect and analyze thesis data, finalize written document and present/defend the document to the thesis committee. Prerequisite: EXNS 5423.

EXNS 5800 Thesis Continuation (0)
Thesis students requiring additional semester(s) to complete thesis work must enroll in this course. May be repeated. Course graded as satisfactory or unsatisfactory. Prerequisites EXNS 5423 and EXNS 5433.

EXNS 5900 Comprehensive Examination (0)
This course is required for practicum option students. Course graded as satisfactory or unsatisfactory.

Exercise and Nutrition Science Faculty

Ruth Henry, B.S. (Lipscomb University), M.S., D.A. (Middle Tennessee State University), Professor of Exercise Science; Vice Chair, Nutrition and Kinesiology Department

Nancy H. Hunt, B.S. (University of Tennessee), M.Ed. (Middle Tennessee State University), M.S. (Western Kentucky University), Registered Dietitian, Associate Professor of Nutrition

Kent D. Johnson, B.A., M.Ed. (Harding University), M.S. (University of Arizona), Ph.D. (University of Southern Mississippi), Professor of Exercise Science; Kinesiology Research Director

Anne M. Lowery, B.S. (Lipscomb University), M.S. (Auburn University), Assistant Professor of Dietetics

Autumn C. Marshall, B.S. (Lipscomb University), M.S. (Texas A & M University), Ph.D. (Auburn University), Professor of Nutrition; Chair, Nutrition and Kinesiology Department

Karen Robichaud, B.S. (Lipscomb University), M.S., Ph.D. (Middle Tennessee State University), Director of Graduate Studies in Exercise and Nutrition Science, Assistant Professor of Exercise Science

Matt Ruiz, B.S. (Lipscomb University), M.S. (Springfield College), Ph.D. (University of Minnesota), Associate Professor of Exercise Science