# Health, Nutrition and Exercise Science

## Program and Application Information

| Department Head: | Dr. Yeong Rhee |
| Graduate Coordinator: | Dr. Bryan Christensen |
| Email: | Bryan.Christensen.1@ndsu.edu |
| Department Location: | Bentson Bunker Fieldhouse |
| Department Phone: | (701) 231-6737 |
| Department Web Site: | www.ndsu.edu/hnes/ |
| Application Deadline: | Ph.D. Exercise Science and Nutrition: January 15 for fall only; M.S. HNES - Exercise/Nutrition Science option: March 1 for fall only; M.S. Dietetics (online), GPIDEA: March 1 for fall only; M.S. HNES - Leadership in Physical Education and Sport option: April 1 Enrollment is limited to 20 students. |
| Degrees Offered: | M.S., MATrg, Ph.D. |
| Test Requirement: | GRE required only for Ph.D. and for M.S. HNES - Exercise/Nutrition Science option |
| English Proficiency Requirements: | TOEFL ibT 100; IELTS 7 |

## Program Description

The Department of Health, Nutrition, and Exercise Sciences (HNES) offers graduate study leading to the Master of Science (M.S.) degree in HNES with options in Exercise/Nutrition Science and Leadership in Physical Education and Sport. The HNES department also offers a Master of Science (M.S.) in Dietetics (on line through the Great Plains Interactive Distance Education Alliance), Master of Science (M.S.) in Advanced Athletic Training (http://www.ndsu.edu/hnes/advanced_athletic_training_post_professional) and a Master of Athletic Training (MATrg) (http://www.ndsu.edu/hnes/athletic_training_professional) degree. A Ph.D. degree in Exercise Science and Nutrition (http://www.ndsu.edu/hnes/phd_in_exercise_science_and_nutrition) is also available.

### Exercise/Nutrition Science Option

The Exercise/Nutrition Science option prepares the graduate for advanced positions with an emphasis in the areas of physical activity, exercise science, nutrition, and health promotion. The department is devoted to researching and understanding the long-term effects of physical activity and nutrition, and translating this research into effective exercise science and wellness programs for children, adolescents, and adults of all ages. This option is appropriate for athletic trainers, nutrition, and exercise science graduates.

### Leadership in Physical Education and Sport Option

The Leadership in Physical Education and Sport (LPES) option is an online program that prepares teachers and coaches to become actively engaged in leadership roles within school systems or professional organizations. This degree prepares students to be master teachers, head coaches, department heads, and activities directors at the interscholastic level; assistant coaches, lecturers, and assistant or lead directors at the intercollegiate level; and to become actively engaged in leadership roles within professional organizations.

Admission requirements are as follows:

1. Cumulative baccalaureate GPA of 3.0 or better on a 4.0 scale.
2. Undergraduate degree in the field of Kinesiology (physical education, coaching, etc.)

A 3.0 is needed to be considered for full acceptance into the LPES program. Applicants with a undergraduate GPA below 3.0 will be considered for conditional acceptance and will have to complete 9 graduate credit hours with grades of at least B to be considered for full standing. Meeting these criteria does not guarantee acceptance.

### Dietetics (On-line)

The Dietetics program prepares registered dietitians to practice at an advanced level or pursue doctoral study. The Great Plains Interactive Distance Education Alliance program in Dietetics provides opportunities for registered dietitians and registration-eligible dietetic graduates to integrate and apply principles from the biomedical sciences, human behavior, and management to design and lead effective food and nutrition programs in a variety of settings. This program is fully online (http://www.ndsu.edu/hnes/dietetics_on_line).

In a multi-institution degree program, students (must be registered dietitians or registration-eligible dietetic graduates):

1. Apply and are admitted to one university;
2. Enroll in all courses at that university; and
3. Graduate or receive a certificate from that university.

Admissions Requirements

In addition to Graduate School admission requirements, the following criteria will be considered at the time of application for admission into graduate study. Admission to a master’s degree program is considered ONLY after all required application materials have been received and reviewed. In order to be considered, the applicant must have a Bachelor of Science degree in an HNES related field from an accredited institution, an overall undergraduate GPA of 3.0 on a 4.0 scale, and have submitted all required materials as listed. The GRE is required for the Ph.D. and the Exercise/Nutrition Science option of the M.S. degree.

During the application process, the applicant must submit an exhibit of his/her written competency through an essay discussing professional philosophy and professional goals.

The Department of Health, Nutrition, and Exercise Sciences reserves the right to obtain additional information about the applicant's professional competence from qualified professionals. Admission decisions are based upon the predicted success of the applicant as a student and professional in the chosen field and are made only after considering all available data.

Financial Assistance

Both research and teaching assistantships may be available. Applications are considered on the basis of scholarship, potential to undertake advanced study and research, and financial need. To be considered for an assistantship, a completed Graduate School application, official transcripts, and three letters of reference must be received by the Graduate School by the program deadline. The department admits students for fall semester only in the Exercise/Nutrition Science option. Graduate assistants teach approximately six credits each semester, receive a financial stipend for their work, and a full tuition waiver for fall, spring, and summer semesters. Assistantships are available contingent upon current funding and faculty need.

Exercise/Nutrition Science Option

Required Courses

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<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>HNES 790</td>
<td>Graduate Seminar (Introduction to HNES )</td>
<td>1</td>
</tr>
<tr>
<td>HNES 710</td>
<td>Introduction to Research Design and Methods in HNES</td>
<td>3</td>
</tr>
<tr>
<td>HNES 777</td>
<td>Scholarly Writing and Presenting in HNES</td>
<td>3</td>
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<tr>
<td>STAT 725</td>
<td>Applied Statistics</td>
<td>3</td>
</tr>
<tr>
<td>HNES 713</td>
<td>Graduate Exercise Physiology (Restricted to students enrolled in the Exercise Science/Nutrition Option)</td>
<td>3</td>
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<tr>
<td>HNES 726</td>
<td>Nutrition in Wellness</td>
<td>3</td>
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Electives

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>HNES 798</td>
<td>Master’s Thesis</td>
<td>6</td>
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</table>

Total Credits: 31

Leadership in Physical Education and Sport Option

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>HNES 700</td>
<td>Research in Physical Education and Sport</td>
<td>3</td>
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<tr>
<td>HNES 701</td>
<td>Leadership and Entrepreneurship</td>
<td>3</td>
</tr>
<tr>
<td>HNES 704</td>
<td>Psychological Foundation of Sport &amp; Physical Activity</td>
<td>3</td>
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<tr>
<td>HNES 705</td>
<td>Analysis of Sport Skill Instruction and Acquisition</td>
<td>3</td>
</tr>
<tr>
<td>HNES 707</td>
<td>Sport in American Society</td>
<td>3</td>
</tr>
<tr>
<td>HNES 711</td>
<td>Physical Education Curriculum</td>
<td>3</td>
</tr>
<tr>
<td>HNES 712</td>
<td>Supervision and Management</td>
<td>3</td>
</tr>
<tr>
<td>HNES 714</td>
<td>Legal Liability in HPER</td>
<td>3</td>
</tr>
<tr>
<td>HNES 731</td>
<td>Governance in Sport</td>
<td>3</td>
</tr>
<tr>
<td>HNES 790</td>
<td>Graduate Seminar</td>
<td>3</td>
</tr>
<tr>
<td>HNES 794</td>
<td>Practicum/Internship</td>
<td>1</td>
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</table>

Total Credits: 31

Dietetics Option

A Dietetics graduate candidate must complete a minimum of 36 credit hours to earn a Master of Science degree, 30 of which are didactic. The remaining 6-credits required to complete the degree must follow one of 3 plans.
Plan A – Thesis [if planning on a terminal degree or only recommended if the student is able to travel to NDSU to meet with the major professor].

Plan B – Comprehensive Study - After consulting with the major advisor and selecting a topic, students will carry out planning and completion of this research-based project in frequent interactions with a supervisory committee. The culmination of this project would be a comprehensive report or a manuscript that could be submitted to a journal.

Plan C – This plan would require 36 credits of coursework. Elective graduate courses totaling six credits will be taken from the electives.

### Required Core Courses

- HNES 710: Introduction to Research Design and Methods in HNES
- HNES 728: Current Issues in Dietetics
- STAT 725: Applied Statistics

### Electives

- ADHM 635: Cost Controls in Hospitality and Food Service Systems
- ADHM 736: Entrepreneurship in Dietetics
- HNES 642: Community Health and Nutrition Education
- HNES 652: Nutrition, Health and Aging
- HNES 655: Sports Nutrition
- HNES 724: Nutrition Education
- HNES 726: Nutrition in Wellness
- HNES 729: Grant Writing for the Health Professional
- HNES 730: Fundamentals of Leadership
- HNES 732: Foodservice Operation Management
- HNES 733: Food Writing for Professionals
- HNES 734: Foodservice Systems within Healthcare
- HNES 740: Maternal and Child Nutrition
- HNES 741: International Nutrition
- HNES 742: Nutrition: A Focus on Life Stages
- HNES 743: Obesity Across the Lifespan
- HNES 745: Community Health Leadership
- HNES 746: Nutrition and Health Disparities
- HNES 747: Understanding Food Culture
- HNES 750: Advanced Human Nutrition: Macronutrients
- HNES 751: Metabolism of Micronutrients
- HNES 752: Phytochemicals
- HNES 755: Advanced Clinical Nutrition
- HNES 756: Pediatric Clinical Nutrition
- HNES 757: Nutritional Aspects of Oncology
- HNES 758: Clinical Aspects of Nutrition Support
- HNES 759: Nutrition and Immunology
- HNES 798: Master's Thesis
- HNES 797: Master's Paper

### Total Credits

36

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**Ardith Brunt, Ph.D.**
Iowa State University, 1999
Research Interests: Nutrition, Gerontology

**Wonwoo Byun, Ph.D.**
University of South Carolina-Columbia, 2012
Research Interests: Physical Activity Epidemiology

**Bryan Christensen, Ph.D.**
University of Kansas, 2000
Research Interests: Biomechanics, Sports Psychology, Strength and Conditioning

**Shannon David, Ph.D.**
Ohio University, 2013
Research Interests: Patient Clinician Relationship, Quantification of Intervention Outcomes

Joe Deutsch, Ph.D.
North Dakota State University, 2007
Research Interests: Physical Education Teacher Education, Coaching

Marty Douglas, Ph.D.
Michigan State University, 2009
Research Interests: Adapted Physical Activity

Kara Gange, Ph.D.
North Dakota State University, 2010
Research Interests: Therapeutic Modalities, Diagnostic Ultrasound

Julie Garden-Robinson, Ph.D.
North Dakota State University, 1994
Research Interests: Nutrition, Food Safety

Nikki German, Ph.D.
North Dakota State University, 2008
Research Interests: Athletic Training

Kyle Hackney, Ph.D.
Syracuse University, 2013
Research Interests: Skeletal Muscle, Sarcopenia, Muscle Inactivity, Ergogenic Aids

Mary Larson, Ph.D.
University of North Dakota, 2008
Research Interests: Health Promotion, Lifestyle Medicine

Jenny Linker, Ph.D.
University of Illinois Urbana-Champaign, 2011
Research Interests: Comprehensive School Physical Activity Programs, Physical Education Teacher Preparation

Katie Lyman, Ph.D.
University of South Florida, 2014
Research interests: Kinesio Tape®, Manual Medicine, Emergency Medicine

Yeong Rhee, Ph.D.
Oklahoma State University, 1999
Research Interests: Chronic Disease Prevention, Immune Function, Functional Foods

Sherri Nordstrom Stastny, Ph.D.
North Dakota State University, 2007
Research Interests: Nutrition, Gerontology

Bradford N. Strand, Ph.D.
University of New Mexico, 1988
Research Interests: Physical Education Curriculum and Instruction, Fitness Education, Sport Sociology

Donna J. Terbizan, Ph.D.
The Ohio State University, 1982
Research Interests: Exercise Physiology, Fitness, Wellness, Exercise Science, Chronic Disease Change