Health, Nutrition and Exercise Science

Department Information

• **Department Head:**
  Yeong Rhee, Ph.D.

• **Graduate Coordinator:**
  Kyle Hackney, Ph.D.

• **Department Location:**
  Bentson Bunker Fieldhouse

• **Department Phone:**
  (701) 231-7474

• **Department Web Site:**
  www.ndsu.edu/hnes/

• **Application Deadline:**
  Exercise/Nutrition Science option: Applications completed by March 15 will be given priority for fall. Leadership in Physical Education and Sport option: April 1; Enrollment is limited to 20 students. M.S. Dietetics (online), GPIDEA: March 1 for summer/ fall and October 15 for spring.

• **Degrees Offered:**
  M.S.

• **Test Requirement:**
  GRE required only Exercise/Nutrition Science option

• **English Proficiency Requirements:**
  TOEFL iBT 79; IELTS 6.5

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.

M.S. in Health, Nutrition and Exercise Sciences

Option in Exercise/Nutrition Science

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.

Admission requirements are as follows:

1. Cumulative baccalaureate GPA of 3.0 or better on a 4.0 scale.
2. Graduate Record Examination (GRE).
3. Completion of a Bachelor’s degree from an accredited university in field closely related to Nutrition, Dietetics, or Exercise Science.
4. A faculty has agreed to be the applicant’s mentor.

Accelerated BS/MS in Dietetics and Nutrition

This is a combined program for undergraduate dietetics students. Students apply for the dietetics program in the spring of their second (sophomore) year and then apply for the accelerated M.S. program in the fall of their third (junior) year. Students in this option will earn a B.S. in Dietetics, an M.S. in Exercise/Nutrition Science, and complete the required 1200 hours of supervised practice to sit for the national Registration Exam for Dietitians. The program is designed to be completed in 5 years. Students who are interested should contact the College of Human Development and Education Academic Advisor located in EML 270 for more information.

Option in Leadership in Physical Education and Sport

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 an 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.

M.S. in 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.

Ph.D. in Exercise Science and Nutrition

The Department of Health, Nutrition and Exercise Sciences (HNES) offers a doctoral program in Exercise Science and Nutrition. Exercise Science and Nutrition includes the study of energy systems, nutrient intake, behavior motivation, and the physiology and mechanics of movement. Faculty are scholars in community nutrition, nutrition across the lifespan, clinical nutrition, exercise science, biomechanics, and physical activity and health. Prevention and treatment of obesity, improving physical activity, and building community-based health enhancements across the lifespan are strengths of the HNES faculty. Graduates of this program will have a strong understanding of both Exercise Science and Nutrition that will enable them to assume positions of leadership in research and teaching in community, government, university or other professional agencies and organizations.

Admission requirements are as follows:

1) Cumulative baccalaureate GPA of 3.0 or better on a 4.0 scale.
2) Graduate Record Examination (GRE).
3) Completion of a Bachelor’s or Master’s degree from an accredited university in field closely related to Nutrition, Health, Dietetics, Kinesiology, or Exercise Science.
4) A faculty has agreed to be the applicant's mentor.

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 M.S. option in Exercise/Nutrition Science.

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 Ph.D. program and the MS Exercise/Nutrition option. Graduate assistants 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

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<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>HNES 790</td>
<td>Graduate Seminar (Introduction to HNES)</td>
<td>1</td>
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<tr>
<td>HNES 710</td>
<td>Introduction to Research Design and Methods in HNES</td>
<td>3</td>
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<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>
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<tr>
<td>HNES 713</td>
<td>Graduate Exercise Physiology (Restricted to students enrolled in the Exercise Science/Nutrition Option)</td>
<td>3</td>
</tr>
<tr>
<td>HNES 726</td>
<td>Nutrition in Wellness</td>
<td>3</td>
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**Electives**

- HNES 798 Master's Thesis 6

**Total Credits** 31

### Leadership in Physical Education and Sport Option

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<th>Code</th>
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<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 Supervision</td>
<td>3</td>
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<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>
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<tr>
<td>HNES 711</td>
<td>Physical Education Curriculum</td>
<td>3</td>
</tr>
<tr>
<td>HNES 712</td>
<td>Principles of Management</td>
<td>3</td>
</tr>
<tr>
<td>HNES 714</td>
<td>Legal Liability in HPER</td>
<td>3</td>
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<tr>
<td>HNES 731</td>
<td>Governance in Sport</td>
<td>3</td>
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<tr>
<td>HNES 790</td>
<td>Graduate Seminar</td>
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<tr>
<td>HNES 794</td>
<td>Practicum/Internship</td>
<td>1</td>
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**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.**

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<thead>
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<tbody>
<tr>
<td>HNES 710</td>
<td>Introduction to Research Design and Methods in HNES</td>
<td>3</td>
</tr>
<tr>
<td>HNES 728</td>
<td>Current Issues in Dietetics</td>
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</tr>
<tr>
<td>STAT 725</td>
<td>Applied Statistics</td>
<td>3</td>
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**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
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<tr>
<th>Course Code</th>
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<tbody>
<tr>
<td>HNES 730</td>
<td>Fundamentals of Leadership</td>
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<tr>
<td>HNES 732</td>
<td>Foodservice Operation Management</td>
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<td>HNES 733</td>
<td>Food Writing for Professionals</td>
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<tr>
<td>HNES 734</td>
<td>Foodservice Systems within Healthcare</td>
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<td>HNES 740</td>
<td>Maternal and Child Nutrition</td>
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<td>HNES 741</td>
<td>International Nutrition</td>
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<tr>
<td>HNES 742</td>
<td>Nutrition: A Focus on Life Stages</td>
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<td>HNES 743</td>
<td>Obesity Across the Lifespan</td>
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<td>HNES 745</td>
<td>Community Health Leadership</td>
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<td>HNES 746</td>
<td>Nutrition and Health Disparities</td>
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<tr>
<td>HNES 747</td>
<td>Understanding Food Culture</td>
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<tr>
<td>HNES 750</td>
<td>Advanced Human Nutrition: Macronutrients</td>
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<td>HNES 751</td>
<td>Metabolism of Micronutrients</td>
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<td>HNES 752</td>
<td>Phytochemicals</td>
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<tr>
<td>HNES 755</td>
<td>Advanced Clinical Nutrition</td>
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<tr>
<td>HNES 756</td>
<td>Pediatric Clinical Nutrition</td>
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<tr>
<td>HNES 757</td>
<td>Nutritional Aspects of Oncology</td>
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<tr>
<td>HNES 758</td>
<td>Clinical Aspects of Nutrition Support</td>
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<tr>
<td>HNES 759</td>
<td>Nutrition and Immunology</td>
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<tr>
<td>HNES 798</td>
<td>Master’s Thesis</td>
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<tr>
<td>or HNES 797</td>
<td>Master’s Paper</td>
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Total Credits: 36

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

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, Patient Oriented Outcomes

Joe Deutsch, Ph.D.
North Dakota State University, 2007
Research Interests: Physical Education Teacher Education, Youth Sport 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 Education, Chronic Disease Prevention, Food Safety/Science

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

Elizabeth Hilliard, Ph.D.
North Dakota State University, 2018
Research Interests: Breastfeeding Support and Promotion in the Workplace, and Infant and Child Feeding Practices

Ryan Kota, Ph.D.
Florida State University, 2018
Research Interests: Sport Consumer Involvement, Sport Consumption Behaviors of Ethnic Minority Groups, Motives of Sport Consumption

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®, Emergency Medicine, Electromyography

Ryan McGrath, Ph.D.
University of Idaho, 2015
Research Interests: Frailty and Health, Epidemiology of Aging, Physical Activity and Health for Aging Adults and Persons with Disabilities, Disability Prevention

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

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

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