

Health, Nutrition and Exercise Science

Department Information

- **Department Head:**
Yeong Rhee, Ph.D.
- **Graduate Coordinator:**
Elizabeth Hilliard, Ph.D.
- **Department Location:**
Bentson Bunker Fieldhouse
- **Department Phone:**
(701) 231-7474
- **Department Web Site:**
www.ndsu.edu/hnes/ (<http://www.ndsu.edu/hnes/>)
- **Application Deadline:**
Exercise/Nutrition Science option: Applications will be reviewed until August 1 for fall and December 1 for spring. Leadership in Physical Education and Sport option: rolling enrollment; enrollment is limited to 32 students
- **Credential Offered:**
M.S.
- **English Proficiency Requirements:**
TOEFL ibt 79; IELTS 6.5; Duolingo 105

The Master of Science (M.S.) in Health, Nutrition, and Exercise Sciences (HNES) 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 Nutrition, Dietetics, and Exercise Science graduates. There are three paths to complete the MS degree in this option (Plan A- Thesis, Plan B- Paper, Plan C- Internship/Capstone).

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.

Admission to a MS- HNES program is considered ONLY after all required application materials have been received and reviewed. The department admits students for fall semester only.

Minimum criteria and application information to be considered for admission for all paths (Plan A- thesis, Plan B- paper, Plan C- Internship/Capstone):

Note-meeting the minimum criteria does not guarantee acceptance in the program. Workload limitations and capacity limits for the program or faculty mentor apply.

- The GRE is **NOT** required for this degree option.
- GPA 3.0 or higher
- Undergraduate major of Dietetics, Exercise Science, or closely related field.
- Application to the NDSU Graduate School which includes: precise statement of purpose, official transcripts, and two professional letters of recommendation.
- In the application, please indicate what degree path (Plan A- Thesis, Plan B- Paper, Plan C- Internship/Capstone) you are primarily considering at this time. This path can change once admitted but provides the HNES department with preliminary information on your plan of study. A description of all the paths are described below.
- Please also note in your application if you are interested in a graduate assistantship position and indicate any previous experience with teaching, research, or other specific skills, abilities, or certifications you possess that would be relevant.

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.

Graduate assistants receive a financial stipend for their work. In addition to the stipend, graduate assistants receive a graduate tuition waiver. Tuition waivers cover base tuition for NDSU graduate credits only. Students are responsible for differential tuition, student fees, and tuition for non-graduate level credits taken or Cooperative Education credits. Assistantships are available contingent upon current funding and faculty need.

Exercise/Nutrition Science Option

Plan A- thesis

The thesis typically includes a problem statement, a review of existing literature relevant to that problem, and the creation and presentation of new knowledge in providing a solution to the problem. Each student assembles a supervisory committee and pass a final oral examination in which the supervisory committee serves as the examining committee. Following a successful defense, the candidate will submit an electronic copy of their thesis to the Graduate School for review. This path is recommended for all students but specifically relevant for those interested in going on to further graduate work (PhD, DPT, MD). Total Credits 30.

Plan B- paper

The Plan B master's student will develop a thorough understanding of existing knowledge and the ability to apply that existing knowledge to a problem of interest. Note that under this degree, the new knowledge being created is limited, and this is the primary difference between the Plan A and Plan B degrees. The precise nature of the individual creative component is defined by the program. Examples of possible creative components include a comprehensive paper or an integrated field experience. Each student would assemble a supervisory committee and pass a final oral examination. Following a successful defense, the candidate will compose an executive summary or assemble other appropriate documentation as defined by the program to be submitted to the Graduate School. This submission to the Graduate School is to be approved by the student's supervisory committee. This path is recommended for all students but is specifically relevant for those who wish to obtain employment directly after completing their degree or who may still be interested in further graduate work but the scope of the next step is not yet defined. Total credits 30.

Plan C-Internship/Capstone

The Plan C is designed for programs in which a well-defined culminating experience is more important than is an individual creative component. Each program will define a culminating experience such as a capstone experience or some other approach to measure the candidate's understanding of the relevant material in the area (certification, internship experience/project). Upon completion of the appropriate course work and culminating experience, the candidate must submit the examination documentation (if required by program) and an Application for Graduate Degree to Graduate School. This path is recommended for all students but is specifically relevant for those who are currently employed full-time in the community and are wishing to advance their current employment status (i.e., no further graduate work). Total credits 30.

Code	Title	Credits
Research Core Requirements		6
HNES 710	Introduction to Research Design and Methods in HNES	
STAT 725	Applied Statistics	
or HDFS 705	Quantitative Methods in Developmental Science	
Exercise Science Core Requirements		6
		(minimum)
Choose six credits from this list:		
HNES 604	Adapted Physical Activity	3
HNES 703	Graduate Biomechanics of Sport and Exercise	3
HNES 704	Psychological Foundation of Sport & Physical Activity	3
HNES 713	Graduate Exercise Physiology	3
HNES 727	Physical Activity Epidemiology	3
HNES 743	Obesity Across the Lifespan	3
HNES 760	Skeletal Muscle Physiology	3
HNES 761	Physiological and Fitness Assessment in Exercise Science	3
HNES 762	Exercise Endocrinology	3
HNES 764	Advanced Cardiovascular Exercise Physiology	3
HNES 777	Scholarly Writing and Presenting in HNES	3
Nutrition Science Core Requirements		6
		(minimum)

Choose six credits from this list:		
HNES 642	Community Health and Nutrition Education	3
HNES 658	Advanced Medical Nutrition Therapy	3-4
HNES 668	Foodservice Systems Management II	1
HNES 726	Nutrition in Wellness	3
HNES 735	Nutrition and Human Performance	3
HNES 750	Advanced Human Nutrition: Macronutrients	3
HNES 754	Assessment in Nutrition and Exercise Science	3
Note- the first 6 credits completed in exercise science core and nutrition science core above will meet minimum requirements. Additional courses after the first 6 credits in each category are used to fill elective courses that are also listed below.		
HNES Electives Requirement		6-9
Select two/three courses from below based on your degree option: Plan A- Thesis 6 credits, Plan B- Paper 9 credits, Plan C-9 credits		
HNES 604	Adapted Physical Activity	3
HNES 703	Graduate Biomechanics of Sport and Exercise	3
HNES 704	Psychological Foundation of Sport & Physical Activity	3
HNES 713	Graduate Exercise Physiology	3
HNES 727	Physical Activity Epidemiology	3
HNES 743	Obesity Across the Lifespan	3
HNES 760	Skeletal Muscle Physiology	3
HNES 761	Physiological and Fitness Assessment in Exercise Science	3
HNES 762	Exercise Endocrinology	3
HNES 764	Advanced Cardiovascular Exercise Physiology	3
HNES 777	Scholarly Writing and Presenting in HNES	3
HNES 642	Community Health and Nutrition Education	3
HNES 658	Advanced Medical Nutrition Therapy	3-4
HNES 668	Foodservice Systems Management II	1
HNES 726	Nutrition in Wellness	3
HNES 735	Nutrition and Human Performance	3
HNES 750	Advanced Human Nutrition: Macronutrients	3
HNES 754	Assessment in Nutrition and Exercise Science	3
HNES 791	Temporary/Trial Topics	3
Culminating Experience		3-6
Plan A - Master's Thesis		6
HNES 798	Master's Thesis	
Plan B - Master's Paper		3
HNES 797	Master's Paper	
Plan C. Internship/Capstone - Select from the following		3
HNES 793	Individual Study	
HNES 794	Practicum/Internship	
HNES 795	Field Experience	
Total credits		30

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

Nathan Dicks, Ph.D.

North Dakota State University, 2019

Research Interests: Exercise Testing; Tactical Population Wellness, Fitness, and Performance

Marty Douglas, Ph.D.

Michigan State University, 2009

Research Interests: Adapted Physical Activity

Julie Garden-Robinson, Ph.D.

North Dakota State University, 1994

Research Interests: Nutrition Education, Chronic Disease Prevention, Food Safety/Science

Kyle Hackney, Ph.D.

Syracuse University, 2013

Research Interests: Skeletal Muscle, Sarcopenia, Muscle Inactivity, Ergogenic Aids, Sports Performance

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 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

Seungmin Kang, Ph.D.

Louisiana State University, 2021

Research Interests: Sport for Development and Peace (SDP), Shared Leadership in SDP, Nonprofit Partnerships, Leadership and Human Resource Development

Kelsey Slater, Ph.D.

Mississippi State University, 2021

Research Interests: Sport for Development, Sport Diplomacy and Sport Communication

Joel White, Ph.D.

University of Northern Colorado, 2009

Research Interests: Sport Marketing and Sport Finance

Matt Drescher, Ph.D.

Indiana State University, 2023

Research Interest: Curricular Design, Healthcare Simulation, Ethics Education, and Advanced Manual Therapy

Joshua Wooldridge, Ph.D.

University of Nevada, Las Vegas, 2023

Research Interest: Musculoskeletal Injury Help-Seeking Behaviors, Health Sciences Research Methods, Tactical Health and Human Performance