# 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: rolling enrollment; enrollment is limited to 32 students.

- Credential Offered: M.S.
- 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 (online). The HNES department also offers a Master of Science (M.S.) in Dietetics (online 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. Completion of a Bachelor's degree from an accredited university in field closely related to Nutrition, Dietetics, or Exercise Science.
- 3. 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, coaches, and sport leaders 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, sports management, 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 6 graduate credit hours with grades of at least B to be considered for full standing. Meeting these criteria does not guarantee acceptance.

## 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**

#### 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 as described on the next tab. Each candidate is required to 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.

#### Plan B- paper/portfolio

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, a portfolio, or an integrated field experience. Each candidate 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 College is to be approved by the student's supervisory committee

Code	Title	Credits
Required Courses		
HNES 710	Introduction to Research Design and Methods in HNES	
HNES 713	Graduate Exercise Physiology (Restricted to students enrolled in the Exercise Science/Nutrition Option)	
HNES 726	Nutrition in Wellness	
HNES 777	Scholarly Writing and Presenting in HNES	
HNES 790	Graduate Seminar (Introduction to HNES)	
STAT 725	Applied Statistics	
Electives (9 credits for Plan A students; 12 credits for Plan B students)		
HNES 798	Master's Thesis	
or HNES 797	Master's Paper	
Total Credits		31

## Leadership in Physical Education and Sport Option

Code	Title	Credits
HNES 700	Research in Physical Education and Sport	3
HNES 701	Leadership and Supervision	3
HNES 704	Psychological Foundation of Sport & Physical Activity	3
HNES 705	Analysis of Sport Skill Instruction and Acquisition	3
HNES 707	Sport in American Society	3
HNES 711	Physical Education Curriculum	3
HNES 712	Principles of Management	3
HNES 714	Legal Liability in HPER	3
HNES 731	Governance in Sport	3
HNES 790	Graduate Seminar	3
HNES 794	Practicum/Internship	1
Total Credits		31

#### 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