Exercise Science and Nutrition

Program and Application Information	
Program Coordinator:	Dr. Bryan Christensen
Department Phone:	701-231-6737
Department Web Site:	www.ndsu.edu/hnes/phd_in_exercise_science_and_nutrition/
Application Deadline:	January 15
Degrees Offered:	Ph.D.
English Proficiency Requirements:	TOEFL ibT 79 IELTS 6.5

Program Description

The Department of Health, Nutrition and Exercise Sciences (HNES) offers a doctoral program in Exercise Science and Nutrition. Exercise Science and Nutrition are traditionally separate disciplines that strive to improve human health or human performance. Combined, the two form a strong and natural approach to improve well-being. Exercise Science and Nutrition includes the study of energy systems, nutrient intake, metabolism, 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.

Program Objectives

The purpose of the program is to train doctoral students in Exercise Science and Nutrition. The program requires coursework and activities that will produce professionals with strong skills in research, teaching, grant writing, and service who will be competitive and productive in their careers. These professionals 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.

Students will:

1. Acquire ability, knowledge, and research skills in Exercise Science and Nutrition
2. Conduct original research in Exercise Science and Nutrition
3. Gain experience with classroom teaching
4. Be prepared as professionals in Exercise Science and Nutrition

Career Opportunities

A doctorate in Exercise Science and Nutrition offers a wide array of career opportunities. Graduates of the program can expect to work for governmental and human service agencies, for-profit and not-for-profit research organizations, as well as in university-level education and research positions. A unique and attractive aspect to this degree is that it can prepare students to work in either nutrition or exercise science academic units upon graduation. Graduates of this program are equipped to meet the needs of changing regional, national, and global populations as related to their health and well-being.

Admission Requirements

Of the qualified PhD applicants we receive, we expect to admit up to five students per year, based on the capacity of our current faculty. In addition to the core faculty members in HNES who will advise students and participate in this program, there are faculty inside and outside of the department whose research interests mesh well with the program.

Applicants with a Master’s degree:

- Completion of a Master's degree from an accredited university in a field closely related to Nutrition, Health, Dietetics, Kinesiology, or Exercise Science.
- Cumulative graduate GPA of 3.00 or higher.
- GRE exam scores in the upper 50th percentile for the Verbal, Quantitative, and Writing portions are given priority admission.
- At least one graduate course in statistics and one course in research methods, with grades of B or higher in each.
- A completed thesis or research paper.
- Agreement to be advised by current HNES graduate faculty member.

Applicants without an earned Master’s degree:

- Completion of a Bachelor's degree from an accredited university in a field closely related to Nutrition, Health, Dietetics, Kinesiology, or Exercise Science.
- Cumulative undergraduate GPA of 3.0 or higher.
- GRE exam scores in the upper 50th percentile for the Verbal, Quantitative, and Writing portions are given priority admission.
- At least one statistics course or research methods course with grades of B or higher.
- Agreement to be advised by current HNES graduate faculty member.

Financial Assistance

Graduate Assistantships are available for up to 20 hours a week based on faculty need and available funding. Assistantships are renewable on a yearly basis dependent upon student performance. Assistantship awards also include full tuition remission regardless of residency. Students are typically provided shared offices, computers, and access to printers, and support staff. Assistantships typically begin the week before fall semester classes and continue through finals week of spring semester. Summer is not included in most assistantship awards.

Student's Entering with a Master's Degree

60 credits minimum

Research Core		15
STAT 725	Applied Statistics (6 additional credits in statistics, of which at least 3 must be from STAT department)	
HNES 710	Introduction to Research Design and Methods in HNES	
or HNES 777	Scholarly Writing and Presenting in HNES	
3 additional credits in research methodology for (PSY, HDFS or HNES)		
Required HNES Core		19
HNES 726	Nutrition in Wellness	
HNES 727	Physical Activity Epidemiology	
HNES 743	Obesity Across the Lifespan	
HNES 754	Assessment in Nutrition and Exercise Science	
HNES 790	Graduate Seminar (4.0 credits; 1.0 credits/semester required for each of the first two years enrollment)	
HNES 794	Practicum/Internship (Research Practicum)	9
Choose three courses from one of the following options:		9
Exercise Science		
HNES 703	Graduate Biomechanics of Sport and Exercise	
HNES 713	Graduate Exercise Physiology	
HNES 760	Skeletal Muscle Physiology	
HNES 761	Physiological and Fitness Assessment in Exercise and Nutrition Science	
Nutrition		
HNES 652	Nutrition, Health and Aging	
HNES 655	Sports Nutrition	
HNES 721	Health Promotion Programming	
HNES 724	Nutrition Education	
Electives (maximum of 3.0 credits Independent Study)		4
HNES 794	Practicum/Internship (Teaching Practicum- May be waived with significant evidence of teaching experience based on committee approval.)	3-6
HNES 899	Doctoral Dissertation	10-15

Students Entering with a Bachelor's Degree

90 credits minimum

Research Core		21
STAT 725	Applied Statistics (6 additional credits in statistics, of which at least 3 must be from STAT department)	
HNES 710	Introduction to Research Design and Methods in HNES	
6 additional credits in research methodology for (PSY, HDFS or HNES)		
Required HNES Core		30
HNES 726	Nutrition in Wellness	

HNES 727	Physical Activity Epidemiology	
HNES 743	Obesity Across the Lifespan	
HNES 754	Assessment in Nutrition and Exercise Science	
HNES 790	Graduate Seminar (6.0 credits; 1.0 credits/semester required for each of the first three years enrollment)	
Choose One Of The Following Two Options		12
HNES 703	Graduate Biomechanics of Sport and Exercise	
HNES 713	Graduate Exercise Physiology	
HNES 760	Skeletal Muscle Physiology	
HNES 761	Physiological and Fitness Assessment in Exercise and Nutrition Science	
Nutrition		
HNES 652	Nutrition, Health and Aging	
HNES 655	Sports Nutrition	
HNES 721	Health Promotion Programming	
HNES 724	Nutrition Education	
HNES 794	Practicum/Internship (Research)	9-12
Electives (maximum of 6.0 credits Independent Study)		20
HNES 794	Practicum/Internship (Teaching-May be waived with significant evidence of teaching experience based on committee approval.)	3-6
HNES 899	Doctoral Dissertation	10-15

Thomas C. Barnhart, Ph.D.
University of New Mexico, 1978
Research Interests: Recreation Management, Playground Safety

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
Rearch Interests: Athletic Training

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

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

Kara Gange, Ph.D.
North Dakota State University, 2010
Rearch Interests: Athletic Training

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

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

Kyle Hackney, Ph.D.

Syracuse University, 2013
Research Interests: Skeletal Muscle Physiology

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

Jenny Linker, Ph.D.
University of Illinois Urbana-Champaign, 2011
Research Interests: 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: Trace Elements, Chronic Disease, 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