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Human Nutrition and Dietetics

Nutrition is an exciting and expanding field that is expected to grow at a faster rate compared to other careers (US Bureau of Labor Statistics). The study of human nutrition exemplifies the intricate relationships between diet, health, and disease. The Human Nutrition & Dietetics (HND), under the School of Human Sciences, is an ACEND® accredited Didactic Program in Dietetics (DPD) designed to provide graduates with the necessary core knowledge requirements to become a registered dietitian nutritionist (RDN).

To become an RDN or LND, the following steps must be taken:

- Complete a bachelor's degree at a university accredited by the Accreditation Council for Education in Nutrition and Dietetics (ACEND®). Once the registrar's office confirms the student graduated, a Verification of Completion Form* will be issued confirming the knowledge requirements for Registered Dietitian Nutritionists have been met. This document allows the graduate to apply for supervised practice (step 2) through the match process.
- 2. After graduation, 1000 hours of supervised practice (also called dietetic internship DI) through an ACEND® accredited Dietetic Internship, Coordinated Program in Dietetics or an Individualized Supervised Practice Pathway (ISPP) offered through an ACEND® accredited program.
- 3. Effective January 1, 2024: The Commission on Dietetic Registration (CDR) now requires a minimum of a master's degree to be eligible to take the credentialing exam to become a registered dietitian nutritionist (RDN).
- Successful completion of a national examination administered by the <u>Commission on Dietetic</u> Registration (CDR).
- 5. To maintain the credential, an RDN must complete continuing professional educational requirements.

(Note: Illinois requires licensure of dietitians. <u>This site</u> provides a listing of all states in the US that require licensure.)

*In order to receive a Verification Statement (step 1 above), HND DPD students are required to graduate with at least a 2.85 (on a 4.0 scale) cumulative GPA and a 3.0 in HND courses. Students' academic performance will be monitored each semester to ensure requirements are being met. A corrective plan will be put in place for at risk students, which may include career counseling into another health related major within the school. Note: A student can meet the requirements for the Bachelor of Science degree in Human Nutrition and Dietetics but not meet the requirements to obtain a verification statement. Also, a graduate who receives a Verification Statement but does not obtain supervised practice is eligible to take the registration exam to become a Nutrition and Dietetics Technicians, Registered (NDTRs).

The SIU Carbondale DPD program is fully accredited by the Accreditation Council for Education in Nutrition and Dietetics (ACEND), 120 South Riverside Plaza, Suite 2190, Chicago, Illinois 60606-6995, Phone (312) 899-5400.

Additional information regarding this major can be found at https://schoolofhumansciences.siu.edu/. Students planning to apply to medical based schools (i.e. medical school, dental school, physician assistant, occupational therapy, physical therapy, nursing or nurse practitioner) after completing a major in dietetics should develop their programs of study in close consultation with the pre-medical advisors on campus.

Bachelor of Science (B.S.) in Human Nutrition and Dietetics Degree Requirements

Degree Requirements	Credit Hours
University Core Curriculum Requirements	39
Requirements for Major in Human Nutrition and Dietetics	72-73
PSYC 102, MATH 108, UNIV 101	(7)
PLB 115 or ZOOL 115	(3)
CHEM 140A and CHEM 140B	(3) + 5
PHIL 104	(3)
MICR 201	4
QUAN 402, MATH 282, ABE 318, or PSYC 211	3-4
PHSL 201, PHSL 208, PHSL 301	8
HND 100, HND 101, HND 320, HND 321, HND 356, HND 400, HND 410, HND 425, HND 470, HND 472, HND 475, HND 480, HND 486	(2) + 32
AH 105	2
HTEM 206, HTEM 256, HTEM 360	(3) + 6
MKTG 304	3
PSYC 323	3
REC 465	3
Electives	11-12
Total	120

Nutrition Minor

The Nutrition minor in Human Nutrition and Dietetics is an interdisciplinary course of study, and would be beneficial to students who are pursuing an undergraduate degree in health-related fields and preprofessional programs such as premed and nursing. The minor consists of 17 credit hours, including 11 hours of core courses and 6 hours of elective courses in the areas of community nutrition, medical/clinical nutrition, and sports nutrition. The minor provides students with a strong fundamental knowledge of the science of nutrition and the complex interaction between foods and our bodies. The minor does not allow students to become Registered Dietitians.

Courses taken at other institutions may apply toward the minor only if those courses are acceptable for transfer credit by the School of Human Sciences. No more than 2 transfer courses can count toward the minor.

A minor in Nutrition requires a minimum of 17 credit hours, including 11 credit hours of core courses and 6 credit hours of electives. Other relevant courses may be substituted with School Director or designated faculty approval.

Nutrition Minor Requirements

Degree Requirements	Credit Hours
Core Courses: HND 101, HND 320, HND 410, HND 475	11
Select two electives from the following: HND 321, HND 356, HND 445, HND 480, HND 486	
Total	17

Human Nutrition and Dietetics Courses

HND100 - Careers in Dietetics Overview of the diverse career options in dietetics from the perspective of guest speakers, readings, and assignments. Required courses and skills that characterize the dietetic professional will be reviewed. Restricted to HND major or consent of instructor. Credit Hours: 1

HND101 - Personal Nutrition (University Core Curriculum) This course integrates nutrition and promotion of health through prevention of disease and will answer questions found daily in the media regarding nutrition. Topics emphasized are functions of basic nutrients, impact of culture, gender, ethnicity, social environments and lifestyle on nutrition and health. Credit Hours: 2

HND206 - Food Service Sanitation (Same as HTEM 206) Basic sanitation principles and application in food service. Employee sanitation training, sanitation standards and safety regulations in the food service will be part of the course. Upon completion of the course, students will be eligible for the sanitation certificate national exam. Grade of C or better required. Credit Hours: 1

HND215 - Introduction to Nutrition (Same as ANS 215) An up-to-date study of basic principles of nutrition including classification of nutrients (physical and chemical properties) and their uses in order to provide the student a working knowledge of nutrition in today's environment. Credit Hours: 2

HND247A - The School Lunch Program-Food Purchasing Credit Hours: 1

HND247B - The School Lunch Program-Quantity Food Production Credit Hours: 1

HND247C - The School Lunch Program-Nutrition Practices in the School Lunchroom Credit Hours:

HND256 - Nutrition, Culture, and Diversity This course will focus on differences in cultural beliefs about health and illness, eating patterns, food practices, health disparities, and nutrition-related health problems of various ethnic and racial groups. Differing religious practices will also be explored. Effective and appropriate communication strategies for each cultural group will be discussed. Culture, diversity, multiculturalism, cultural blindness, cultural sensitivity, health disparities, and cultural competency will be defined. Credit Hours: 3

HND300 - Wining and Dining in the Ancient World Since the beginning of time, food and drink have been basic needs for every human being. This course will take you back in time to explore ancient dietary customs and symbolism, including how materials for food and drink were gathered, processed and

prepared, and their influence on health. We will explore fermentation as a processing and preservation method and examine evidence of the impact of fermentation on the agricultural revolution and the dawn of civilization. Credit Hours: 3

- **HND320 Foundations of Human Nutrition** This course introduces students to the scientific principles of human nutrition from a biochemical and a physiological perspective. Students will attain knowledge of the function of nutrients in the body, the anatomy and physiology of digestion and absorption; the function of macro-nutrients and micro-nutrients, as well as minerals; the relationship between foods, food substances, and diseases such as heart disease, diabetes, cancer, and obesity. Prerequisites: HND 101, CHEM 140A or CHEM 200 and 201 with a minimum grade of C. Credit Hours: 3
- **HND321 Nutrition Care Process in Practice** Application of the nutrition care process to assess nutrition status, formulate nutrition diagnosis, create intervention strategies such as meal plans, foster counseling skills, and monitor health outcomes. Prerequisite: HND 320 or equivalent. Restricted to HND major. Credit Hours: 3
- **HND356 Experimental Foods** Experimental approach to the study of food science including factors influencing the interrelationships of ingredients and their effects on physical, chemical, and sensory characteristics of food. Prerequisites: HND/HTEM 206 or sanitation certification, HND/HTEM 360. Lab fee: \$30. Credit Hours: 3
- **HND360 Quantity Food Production** (Same as HTEM 360) Basic principles of foodservice management and its application to volume food production, menu development, food safety, procurement, kitchen equipment, customer service, marketing and finance will be covered during the semester. A basic cooking lab will provide hands-on experience in food preparation. \$30 Lab fee. Prerequisite: HTEM 202 and HTEM 206 with grades of C or better or concurrent enrollment. Restricted to 2nd Year standing or higher. Credit Hours: 4
- **HND371 Field Experience** Opportunity for supervised learning experiences in the student's major. Restricted to food and nutrition majors only, 2nd Year status. Special approval needed from internship coordinator. Credit Hours: 2
- **HND390 Special Studies in Human Nutrition and Dietetics** Enables students to pursue personal research interests in the human nutrition and dietetics area. Restricted to students with 3rd Year and 4th Year standing only. Special approval needed from the department. Credit Hours: 1-4
- **HND400 Career Development** Review of the post-baccalaureate accredited Internship Program application process. Not for graduate credit. Prerequisite: HND 100. Restricted to 4th Year standing. Credit Hours: 1
- **HND410 Nutrition and Wellness Education** This course explores research, theories and practices that influence human health behavior. Educational principles associated with behavior change including health literacy, assessing populations at risk, and designing effective health communication strategies are examined. Theories to explain human behavior, such as the Health Belief Model, Social Cognitive Theory, Transtheoretical Model, and Social Ecological Model will be studied, particularly as they relate to health education programming and how individual behavior is influenced. Prerequisite: HND 321. Credit Hours: 3
- **HND420 Recent Developments in Nutrition** Critical study of current scientific literature in nutrition. Prerequisite: HND 320. Credit Hours: 3
- **HND425 Biochemical Aspects in Nutrition** (Same as ANS 425) The interrelationship of cell physiology, metabolism and nutrition as related to energy and nutrient utilization, including host needs and biochemical disorders and diseases requiring specific nutritional considerations. Prerequisite: ANS 215 or HND 320, CHEM 140B, PHSL 201 and 208. Credit Hours: 3
- **HND445 Nutrition for Sport and Exercise** This course presents the metabolic and physiologic basis for macronutrient and micronutrient requirements during training, competition/performance, and recovery. The course begins with a brief overview of nutrition and exercise metabolism, followed by examination of nutritional requirements for sport and exercise, and concluding with a discussion of the practical aspects of nutrition related to athletes and exercise enthusiasts. Restricted to 3rd Year or 4th Year or Graduate Standing or permission of instructor. Credit Hours: 3

HND461 - Service Organization and Management (Same as HTEM 461) Managerial aspects of the hospitality industry as related to provision of quality service. Organizational structures, management techniques, decision-making abilities, ethics, leadership, and human resource issues are examined. Prerequisite: HTEM 202, HTEM 380 with a grade of C or better. Restricted to 3rd Year standing or consent. Credit Hours: 3

HND470 - Medical Nutrition Therapy I This is the first in a 2-course sequence of the study of pathophysiology and principles of medical nutrition therapy for various disease states. Application of Nutrition Care Process, nutrition screening and assessment, and medical record documentation. Prerequisite: HND 320, HND 321, AH 105, CHEM 140B, PHSL 201 and 208. Restricted to HND students. Credit Hours: 3

HND472 - Medical Nutrition Therapy II The continued study of pathophysiology and principles of medical nutrition therapy for various disease states. Application of Nutrition Care Process, nutrition screening and assessment, and medical record documentation. Prerequisite: HND 470. Restricted to HND majors. Credit Hours: 3

HND475 - Nutrition Through the Life Cycle This course will review nutrition during major phases of the life cycle. It will include units on: women's health during the preconception period pregnancy and lactation; infancy; childhood; adolescence; and older adults (65+). Students will complete life cycle projects and case studies for each phase of life throughout the course. Prerequisite: HND 320. Restricted to HND major. Credit Hours: 3

HND480 - Community Nutrition This course will provide a general foundation of Community Nutrition and how the Registered Dietitian/Community Nutritionist works in a community setting. This course will cover areas such as determining needs for nutrition education/intervention, public policy, supplemental nutrition programs, funding and grant writing. Prerequisite: HND 475. Restricted to HND major. Credit Hours: 3

HND485 - Advanced Nutrition This course applies advanced principles of biochemistry and physiology to expand on basic nutrition information and explains the role of nutrients from cellular and mechanistic aspects. Prerequisite: HND 320, 425. Credit Hours: 3

HND486 - Food and Culture in Global Nutrition This course addresses the nature and scope of major nutrition issues, emphasizing the global perspective of the health, food, and nutritional status of various cultures and nutritional aspects of specific infectious and chronic diseases. The course will also study the correlation between health disparities and the availability and accessibility of the food system. The Legislative and regulatory food system policies, using current and emerging issues in global and public health nutrition, will also be discussed. Credit Hours: 3

HND490 - Practicum in Sport Nutrition and Wellness This is an opportunity to gain field experience in wellness and sports nutrition and collaborate with peers to share experiences and work through a variety of problems. It is a "capstone" course: one that brings together the theory, knowledge, and skills that you've gained through completion of the Nutrition curriculum that you may apply in a live setting. The goal of this course is to expose students to a variety of situations they may encounter in a wellness and/or sports nutrition profession. Restricted to 4th Year standing or instructor approval. Credit Hours: 3

HND495 - Nutrition and Obesity This course will examine the multifactorial etiology of obesity, its corresponding health consequences, and the role of diet in prevention and treatment of obesity and its related comorbidities. At the end of this course, students will be able to (i) understand basic physiological and metabolic concepts underlying the development of obesity; (ii) discuss the health consequences of obesity across the lifespan; and (iii) describe the nutrition-related approaches for prevention and treatment of obesity. Prerequisite: HND 425 or concurrent enrollment. Credit Hours: 3

Human Nutrition and Dietetics Faculty

Banz, William J., Professor, Ph.D., University of Tennessee, 1995.

Green, Brenda Harsha, Instructor, M.S., Southern Illinois University, 2000.

Hasin, Afroza, Clinical Assistant Professor, Ph.D., Southern Illinois University, 2016.

McGuire, Maggie, Associate Lecturer, M.S., Southern Illinois University, 2016. **Null, Dawn C.,** Assistant Professor, Ph.D., Southern Illinois University, 2012.

Emeriti Faculty

Ashraf, Hea-Ran L., Professor, Emerita, Ph.D., Iowa State University, 1979.
Endres, Jeannette M., Professor, Emerita, Ph.D., St. Louis University, 1972.
Roth, Sara Long, Professor, Emerita, Ph.D., Southern Illinois University Carbondale, 1991.
Welch, Patricia, Professor, Emerita, Ph.D., Southern Illinois University, 1982.

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