

DIETETICS - GRADUATE PROGRAM

INTERINSTITUTION GRADUATE PROGRAM

Iowa State University offers a master's degree in Family and Consumer Sciences with a specialization in Dietetics. This is an interinstitutional online program offered through the Great Plains Interactive Distance Education Alliance (or GPIDEA). The student selects a home institution (Iowa State), which ultimately grants the degree. After admission to Iowa State, the student takes courses from Iowa State and the other participating institutions: Colorado State University, North Dakota State University, Oklahoma State University, South Dakota State University, University of Kansas Medical Center, and University of Nebraska-Lincoln.

The Master of Family and Consumer Sciences-Dietetics is designed for the Registered Dietitian or Registration-eligible Dietitian. The 36-credit program is non-thesis and seeks to develop research skills, stimulate independent thought, and provide up-to-date knowledge in foods, nutrition, and foodservice/business management. A special project, called a creative component, is required as part of the 36 required credits. This program prepares individuals to integrate and apply the principles from the biomedical sciences, human behavior, and management to design and lead effective food and nutrition programs in a variety of settings. Students may build a program of study from offerings of the partner institutions such as human nutrition, nutrient metabolism, biostatistics, health promotion/disease prevention, foodservice systems management, food science, lifespan nutrition, wellness, entrepreneurship, nutrition education, nutritional assessment and food safety. The online program is tailored for credentialed, practicing dietetics professionals who seek to enhance their knowledge in a specific area of dietetics practice or retool for new career opportunities in dietetics practice.

Admission procedures: Admission to the MFCS-Diet program requires exactly the same procedures as admission to the Graduate College. See the Graduate College Admission section of this catalog.

Registration: Students choosing to receive their degree from Iowa State University complete all the admissions, registration, and fee payment processes through ISU.

Courses primarily for graduate students, open to qualified undergraduates:

DIET 5110: Research Methods

Credits: 3. Contact Hours: Lecture 3.

An overview of diverse research approaches focusing on methods for collecting and analyzing quantitative and qualitative data. (Typically Offered: Fall, Spring)

DIET 5120: Nutritional Epidemiology

Credits: 3. Contact Hours: Lecture 3.

Important issues related to designing, conducting, and interpreting research on the role of diet or physical activity in the development of disease (& health) in human populations. Offered odd-numbered years. (Typically Offered: Spring)

DIET 5260: Obesity Across the Lifespan

Credits: 3. Contact Hours: Lecture 3.

Exploration of the affects that obesity has on public health, the healthcare system, and society in general. Overview of strategies to prevent obesity across the lifespan. (Typically Offered: Fall)

DIET 5300: Nutrition and Wellness

Credits: 3. Contact Hours: Lecture 3.

Addresses wellness promotion through nutrition. Nutritional risk and protective factors will be examined in relation to public health and individual nutrition. (Typically Offered: Spring)

DIET 5310: Nutrition Therapy for Eating Disorders

Credits: 3. Contact Hours: Lecture 3.

Repeatable.

An online study of eating disorders management and nutrition care. Topics include eating disorders medical complications, clinical care guidelines, basic pharmacology, clinical nutrition education, nutrition care planning, psychology of eating disorders, team collaboration, and therapeutic modalities for nutrition counseling. (Typically Offered: Fall)

DIET 5320: Maternal and Child Nutrition

Credits: 3. Contact Hours: Lecture 3.

Critical examination of behavioral, physiological, and public health issues impacting dietary and nutritional factors that support normal growth and development. Content focuses on early stages of the life cycle: gestation, lactation, infancy, preschool, school age, and adolescence. Offered even-numbered years. (Typically Offered: Summer)

DIET 5340: Nutrition Education in the Community

Credits: 3. Contact Hours: Lecture 3.

Principles and practices of teaching individuals and groups to translate nutrition knowledge into action. Emphasis on research in and evaluation of nutrition education. (Typically Offered: Spring)

DIET 5380: Nutrition: A Focus on Life Stages

Credits: 3. Contact Hours: Lecture 3.

Explores influence of normal physiological stresses on nutritional needs throughout the life span. Evaluates dietary intake and identification of appropriate community nutrition services in on-line discussions. Specific considerations, such as the influence of age and cultural heritage, are incorporated.

DIET 5400: Nutrition and Physical Activity in Aging

(Cross-listed with GERON 5400).

Credits: 3. Contact Hours: Lecture 3.

WWW only. Basic physiologic changes during aging and their impacts in health and disease. The focus will be on successful aging with special emphasis on physical activity and nutrition. Practical application to community settings is addressed. (Typically Offered: Fall)

DIET 5410: Food Culture

Credits: 3. Contact Hours: Lecture 3.

Survey of topics that affect how we perceive food in the modern world. Food is examined as a badge of cultural identity, focus of media scrutiny and promotion, symbol of religion, and driver of technology. Offered even-numbered years. (Typically Offered: Spring)

DIET 5440: Pediatric Clinical Nutrition

Credits: 3. Contact Hours: Lecture 3.

Pediatric Clinical Nutrition. (Typically Offered: Fall)

DIET 5460: Phytochemicals

Credits: 3. Contact Hours: Lecture 3.

Overview of phytochemicals (non-nutritive biologically active compounds) from fruits, vegetables, cereals and oilseeds. Covers recent findings of chemistry, physiological functions, and potential health implications of phytochemicals. Offered odd-numbered years. (Typically Offered: Fall)

DIET 5470: Functional Foods in Chronic Disease Prevention

Credits: 3. Contact Hours: Lecture 3.

Examination of nutritional science, food science, regulatory principles, and nutrient metabolism to understand and explain functional foods, nutraceuticals, and dietary supplements. Additionally students will evaluate the biochemical basis, technologies, legal requirements, and clinical assessment in the marketplace. Offered odd-numbered years. (Typically Offered: Fall)

DIET 5480: Nutrition and Physical Activity Assessment

Credits: 3. Contact Hours: Lecture 3.

Introduction to a variety of nutrition and physical activity assessment tools. Opportunity to discuss the strengths and weaknesses of different tools and gain experience collecting, analyzing, and interpreting nutrition and physical activity data. Offered odd-numbered years. (Typically Offered: Spring)

DIET 5510: Advanced Nutrition: Nutrigenomics, Nutrigenetics & Advanced Lipid Metabolism in Human Nutrition

Credits: 3. Contact Hours: Lecture 3.

Exploration and integration of topics and ideas that are at the forefront of the field of nutritional science. Examination of topics that are new and/or controversial and have implications that range from the cellular/molecular/biochemical level up to clinical/educational level. Emphasis on the integrative and complex nature of human nutrition research from basic science to clinical studies to population studies and dietary recommendations. (Typically Offered: Spring)

DIET 5540: Statistics

Credits: 3. Contact Hours: Lecture 3.

Tools used to make statistical decisions. Major emphasis on explanation and understanding of important concepts involved; basic theme is understanding of data and methods used to analyze such data. Offered irregularly. (Typically Offered: Fall, Spring, Summer)

DIET 5550: Public Health Nutrition

Credits: 3. Contact Hours: Lecture 3.

Examines U.S. public health and nutrition concerns in diverse U.S. populations, examines nutritional status in communities, looks at health communication, and considers nutrition policies and community-based nutrition interventions. Students explore roles of dietitians, nutritionists, and others in developing and delivering nutrition policies and interventions in U.S. communities. (Typically Offered: Fall, Spring)

DIET 5560: Micronutrients in Human Nutrition

Credits: 3. Contact Hours: Lecture 3.

Interrelationships of micronutrients in terms of biochemistry, physiology, genetics, and nutrition. Emphasis on developing understanding of how the coordination of structure and function is related to metabolic needs of the cell and its response to the environment. This integrated approach forms the basis for evaluating the micronutrient needs of humans in both normal and altered metabolic states. (Typically Offered: Spring, Summer)

DIET 5580: Advanced Human Nutrition: Macronutrients

Credits: 3. Contact Hours: Lecture 3.

Integration of the molecular, cellular and physiological aspects of macronutrients and energy metabolism in mammalian systems. Dietary energy, carbohydrates, fiber, lipids, proteins, their interactions, metabolic consequences, and major research methodologies. (Typically Offered: Summer)

DIET 5600: Advanced Medical Nutrition Therapy

Credits: 3. Contact Hours: Lecture 3.

Pathophysiology of selected acute and chronic disease states and their associated medical problems. Specific attention directed to medical nutrition needs of patients in the treatment of each disease state. (Typically Offered: Summer)

DIET 5650: International Nutrition and World Hunger

Credits: 3. Contact Hours: Lecture 3.

Identification and assessment of malnutrition in low-income countries. Social, cultural, political, economic, and geographic determinants of malnutrition. Protein-energy malnutrition, vitamin and mineral deficiencies. Intervention approaches; international efforts and local sustainability. (Typically Offered: Fall)

DIET 5660: Nutrition Counseling and Education Methods

Credits: 3.

Application of counseling and learning theories with individuals and groups in community and clinical settings. Includes discussion and experience in building rapport, assessment, diagnosis, intervention, monitoring, evaluation, and documentation. Literature review of specific counseling and learning theories. (Typically Offered: Fall, Spring)

DIET 5680: Entrepreneurship Theory and Practice

Credits: 3. Contact Hours: Lecture 3.

Definition and discussion of entrepreneurship and its importance to economic and business environment. Offered odd-numbered years. (Typically Offered: Summer)

DIET 5690: Dietary and Herbal Supplements

Credits: 3. Contact Hours: Lecture 3.

Develop skills to partner with patients in making dietary supplement decisions. Explore the safe, efficacious use of botanicals and supplements in nutritional support of aging, maternal health and wellness. Discussions on supplementation in the prevention and treatment of chronic disease include: arthritis, cancer, cardiovascular, diabetes, digestive, liver and renal disorders. (Typically Offered: Summer)

DIET 5700: Nutrition and Human Performance

Credits: 3. Contact Hours: Lecture 3.

Develop an understanding of nutrition based on knowledge of the biochemical and physiological process and functions of specific nutrients in meeting nutritional requirements. Emphasis on the relationship of optimal nutrition and physical efficiency and performance. (Typically Offered: Spring)

DIET 5710: Foundation of Leadership in Dietetics

Credits: 3. Contact Hours: Lecture 3.

Using leadership theories to develop the fundamental concepts and skills to bridge the gap between theory and practice. Students will be able to successfully evaluate classic and contemporary leadership theories, investigate current leadership trends and identify positive applications in the dietetics community. (Typically Offered: Summer)

DIET 5720: Current Issues or Trends

Credits: 3. Contact Hours: Lecture 3.

Overview of current topics, issues, and trends in dietetics practice. (Typically Offered: Fall, Spring)

DIET 5740: Nutrition and Immunology

Credits: 3. Contact Hours: Lecture 3.

Principles and issues related to nutrition and immunology. Impact of nutrients and nutritional status on immune responses. Impact of disease states on nutritional status. Offered odd-numbered years. (Typically Offered: Spring)

DIET 5760: Diabetes Medical Nutrition Therapy

Credits: 3. Contact Hours: Lecture 3.

An in-depth study of diabetes management with emphasis in nutrition care. Topics will include diabetes pathophysiology, clinical care guidelines, basic pharmacology, clinical nutrition education and counseling strategies, and nutrition care planning.

DIET 5970: Nutritional Aspects of Oncology

Credits: 3. Contact Hours: Lecture 3.

Understanding of basic cancer biology and methodology used to study nutrition and cancer relationships. Using current research as a basis, the role of nutrition in specific cancers will be explored. Students will learn about sources of information for cancer prevention programs, and how to apply this information to clinical patient management. Offered odd-numbered years. (Typically Offered: Spring)

DIET 5980: Clinical Aspects of Nutrition Support

Credits: 3. Contact Hours: Lecture 3.

Specialized nutrition assessment and support. Review of energy expenditure and substrate utilization in specific disease states. Current Methods for the initiation and management of enteral and parenteral nutrition therapy including access, metabolic and mechanical complications. Evaluation of nutrition support methodology in selected disease states. (Typically Offered: Spring)

DIET 5990: Creative Component

Credits: 1-30. Repeatable.

For non-thesis option only. (Typically Offered: Fall, Spring, Summer)