

# DIETETICS - GRADUATE PROGRAM

## Interinstitution Graduate program

Participating institutions: Iowa State University; Colorado State University; Kansas State University; Michigan State University; Montana State University; North Dakota State University; Oklahoma State University; South Dakota State University; University of Kansas Medical Center; University of Nebraska.

Dietetics is an interinstitutional distance education program offered through the Web. The student selects a home institution, which grants the degree. After admission at the home institution, the student takes courses from each of the ten institutions: Iowa State University, Colorado State University, Kansas State University, Michigan State University, Montana State University, North Dakota State University, Oklahoma State University, South Dakota State University; Kendra Kattelman, University of Kansas Medical Center, and University of Nebraska.

At Iowa State University, Dietetics is a specialization within the Master of Family and Consumer Sciences degree program (MFCS-Diet) that consists of 36 credits. This is a non-thesis option and a special project or creative component is required. Students typically complete the program in 6-8 semesters while employed full-time. Admission is limited to those who are Registered Dietitians or Registration-eligible Dietitians. A computer with minimum specifications, web access, and an email address are required for completing the program.

The department cooperates in the interinstitution Master of Family and Consumer Sciences program to offer a specialization in Dietetics. 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. 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 Graduate College 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 511: Research Methods

(3-0) Cr. 3. F.S.

*Prereq: Enrollment in GP-IDEA MFCS in Dietetics*

An overview of diverse research approaches focusing on methods for collecting and analyzing quantitative and qualitative data. www only. Only one of DIET 511 or FCEDS 511 may count toward graduation.

### DIET 524: Financial Management and Cost Controls

(3-0) Cr. 3. SS.

*Prereq: enrollment in GP-IDEA MFCS in Dietetics*

Overview of the fundamental knowledge of financial management, managerial accounting, and operational cost controls for dietetics professionals. Topics include a review of managerial accounting concepts for not-for-profit organizations and for-profit organizations based on the Uniform System of Accounts, value and risk analysis, budgeting, asset management, franchising and management contracts, cost-volume-profit analyses, and operational applications for financial performance.

### DIET 526: Obesity Across the Lifespan

(3-0) Cr. 3. F.

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.

### DIET 530: Nutrition in Wellness

(3-0) Cr. 3. S.

*Prereq: enrollment in GP-IDEA MFCS in Dietetics*

Addresses wellness promotion through nutrition. Nutritional risk and protective factors will be examined in relation to public health and individual nutrition. www only.

### DIET 532: Maternal and Child Nutrition

(3-0) Cr. 3. Alt. SS., offered even-numbered years.

*Prereq: enrollment in GP-IDEA MFCS in Dietetics*

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. www only.

**DIET 538: Nutrition: A Focus on Life Stages**

(3-0) Cr. 3. F.Alt. SS., offered odd-numbered years.

*Prereq: enrollment in GP-IDEA MFCS in Dietetics*

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. www only.

**DIET 540: Nutrition and Physical Activity in Aging**

(Cross-listed with GERON). (3-0) Cr. 3. F.

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.

**DIET 544: Pediatric Clinical Nutrition**

(3-0) Cr. 3. F.

*Prereq: enrollment in GP-IDEA MFCS in dietetics*

Examines the physiological, biochemical and nutritional aspects of disease processes relevant to infants and children up to 18 years of age. Discussion of medical nutrition therapy for a variety of medical conditions in this population including inborn errors of metabolism, food hypersensitivity, obesity, and diseases of the major organ systems. www only.

**DIET 546: Phytochemicals**

(3-0) Cr. 3. Alt. F., offered even-numbered years.

*Prereq: enrollment in GP-IDEA MFCS in Dietetics*

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. www only.

**DIET 547: Functional Foods in Chronic Disease Prevention**

(3-0) Cr. 3. Alt. F., offered odd-numbered years.

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.

**DIET 554: Statistics**

(3-0) Cr. 3. Alt. F., offered irregularly.Alt. S., offered irregularly.Alt. SS., offered irregularly.

*Prereq: enrollment in GP-IDEA MFCS in Dietetics*

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. www only. Only one of DIET 554 or Stat 401, 495, 542 may count toward graduation by students in the GPIEDA Dietetics program.

**DIET 558: Advanced Nutrition: Macronutrients**

(3-0) Cr. 3. SS.

*Prereq: BBMB 404 or BBMB 420 or equivalent; enrollment in GP-IDEA MFCS in Dietetics*

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. www only. Only one of DIET 558 or NUTRS 501 may count toward graduation.

**DIET 560: Advanced Medical Nutrition Therapy**

(3-0) Cr. 3. SS.

*Prereq: enrollment in GP-IDEA MFCS in Dietetics*

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. www only. Only two of DIET 560 or NUTRS 561, 564 may count toward graduation.

**DIET 565: International Nutrition and World Hunger**

(3-0) Cr. 3. F.

*Prereq: enrollment in GP-IDEA MFCS in Dietetics*

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. www only.

**DIET 566: Nutrition Counseling and Education Methods**

(Cross-listed with FS HN). (2-2) Cr. 3. F.

*Prereq: FS HN 361 and FS HN 362*

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.

**DIET 568: Entrepreneurship Theory and Practice**

(3-0) Cr. 3. Alt. SS., offered odd-numbered years.

*Prereq: enrollment in GP-IDEA MFCS in Dietetics*

Definition and discussion of entrepreneurship and its importance to economic and business environment. www only.

**DIET 569: Dietary and Herbal Supplements**

(3-0) Cr. 3. SS.

*Prereq: Enrollment in GP-IDEA MFCS in Dietetics*

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.

**DIET 570: Nutrition and Human Performance**

(3-0) Cr. 3. S.

*Prereq: enrollment in GP-IDEA MFCS in Dietetics*

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. www only.

**DIET 571: Leadership in Dietetics**

(3-0) Cr. 3. SS.

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.

**DIET 572: Current Issues and Trends**

(3-0) Cr. 3. F.S.

*Prereq: enrollment in GP-IDEA MFCS in Dietetics*

Overview of current topics, issues, and trends in dietetics practice. www only.

**DIET 573: Healthcare Administration**

(3-0) Cr. 3. Alt. SS., offered even-numbered years.

*Prereq: enrollment in GP-IDEA MFCS in Dietetics*

A comprehensive review of today's health care institutions and their response to the economics, social, ethical, political, legal, technological, and ecological environments. www only.

**DIET 574: Nutrition and Immunology**

(3-0) Cr. 3. Alt. S., offered odd-numbered years.

Principles and issues related to nutrition and immunology. Impact of nutrients and nutritional status on immune responses. Impact of disease states on nutritional status.

**DIET 595: Grant Writing for the Professional**

(Cross-listed with FS HN). (3-0) Cr. 3. SS.

*Prereq: enrollment in GP-IDEA MFCS in Dietetics*

Grant writing, identifying external funding, managing grants, preparing manuscripts for peer-reviewed publication, and preparing papers and poster for presentation at professional meetings.

**DIET 597: Nutritional Aspects of Oncology**

(Cross-listed with FS HN, NUTRS). (3-0) Cr. 3. Alt. S., offered even-numbered years.

*Prereq: B.S. in nutrition, dietetics, biology, or related discipline.*

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.

**DIET 598: Clinical Aspects of Nutrition Support**

(3-0) Cr. 3. S.

*Prereq: Enrollment in GPIDEA - Dietetics program*

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.

**DIET 599: Creative Component**

Cr. arr. Repeatable. F.S.SS.

*Prereq: Enrollment in GPIDEA MS Dietetics*

For non-thesis option only.