

FOOD SCI+HUMAN NUTRITION-FSHN (FSHN)

Courses

FSHN 115 Health Equity (GT-SS3) Credits: 3 (2-0-1)

Course Description: Exploration of inequities in health and healthcare access. Discussion of identities, oppression, social determinants of health, and the influence on food security and chronic health conditions. Analysis of interventions for promoting health equity in various settings.

Prerequisite: None.

Registration Information: Must register for lecture and recitation. Sections offered as Mixed Face-to-Face or Online. Credit not allowed for both FSHN 115 and FSHN 180A2.

Terms Offered: Fall, Spring, Summer.

Grade Mode: Traditional.

Special Course Fee: No.

Additional Information: 1C, Human Behavior, Culture, or Social Frameworks (GT-SS3).

FSHN 125 Food and Nutrition in Health and Disease Credits: 2 (2-0-0)

Course Description: Basic concepts and principles of nutrition; current and controversial issues in the field; the relationship between nutrition, health, and disease; and tools to evaluate and modify diet.

Prerequisite: None.

Registration Information: Sections may be offered: Online.

Terms Offered: Fall, Spring, Summer.

Grade Modes: S/U within Student Option, Trad within Student Option.

Special Course Fee: No.

FSHN 150 Introduction to Human Nutrition Credits: 3 (3-0-0)

Course Description: Basic nutrition principles and concepts; their application to personal health and interactions with societal and environmental issues.

Prerequisite: None.

Registration Information: Sections may be offered: Online.

Terms Offered: Fall, Spring, Summer.

Grade Mode: Traditional.

Special Course Fee: No.

FSHN 192 First Year Seminar Credit: 1 (0-0-1)

Course Description: Facilitate a successful transition to college for new incoming students by emphasizing personal growth and identifying campus resources.

Prerequisite: None.

Term Offered: Fall.

Grade Mode: Traditional.

Special Course Fee: No.

FSHN 220 Intro to Nutrition for Sports and Fitness Credits: 3 (3-0-0)

Course Description: Introduction to nutrition regarding optimal dietary patterns and nutrient intake for general fitness and various forms of sports activities.

Prerequisite: FSHN 150 or FSHN 350.

Registration Information: Sections may be offered: Online.

Term Offered: Fall.

Grade Mode: Traditional.

Special Course Fee: No.

FSHN 271 Integrative Wellness Coaching I Credits: 3 (3-0-0)

Course Description: Foundational concepts in wellness and wellness coaching. Dimensions and determinants of wellness and the interrelationships. Evidence-based information and skills coaches need to facilitate client behavior change and improve health outcomes, while utilizing self as the client to gain helpful perspective and potential personal benefits.

Prerequisite: FSHN 150.

Registration Information: Sections may be offered: Online and Mixed Face-to-Face.

Term Offered: Fall.

Grade Mode: Traditional.

Special Course Fee: No.

FSHN 272 Integrative Wellness Coaching II Credits: 3 (2-0-1)

Course Description: Coaching structure, process, and ethics/legal considerations. Develop specialized wellness coaching knowledge and techniques through study and practice.

Prerequisite: FSHN 271.

Registration Information: Sections may be offered: Online or Mixed Face-to-Face.

Term Offered: Spring.

Grade Mode: Traditional.

Special Course Fee: No.

FSHN 292 Careers in Nutrition Science Seminar Credit: 1 (0-0-1)

Course Description: Introduction to the various careers in nutrition science. Explore different concentrations in the nutrition science major, research, and other opportunities within the department and prepare students for success in their career goals.

Prerequisite: None.

Restriction: Must not be a: Freshman.

Registration Information: Sophomore standing.

Terms Offered: Fall, Spring.

Grade Mode: Traditional.

Special Course Fee: No.

FSHN 300 Food Principles and Applications Credits: 3 (3-0-0)

Course Description: Application of food preparation theories to modification and evaluation of food products.

Prerequisite: (CHEM 103 or CHEM 107 or CHEM 111) and (FSHN 150).

Terms Offered: Fall, Spring.

Grade Mode: Traditional.

Special Course Fee: No.

FSHN 301 Food Principles and Applications Laboratory Credits: 2 (0-6-0)

Course Description: Techniques and manipulative skills for preparation and evaluation of standard and modified food products.

Prerequisite: FSHN 300, may be taken concurrently.

Terms Offered: Fall, Spring.

Grade Mode: Traditional.

Special Course Fee: Yes.

FSHN 302 Dietetics Management and Leadership Credits: 3 (3-0-0)

Course Description: Foundational knowledge and skills required in the operation of establishments related to dietetics practice. Topics include theories of organization and management, with an emphasis on operations strategies, quality management and cost control, forecasting, human resources, and supply chain management. Study leadership theories and practice applications to specific situations experienced in the health care field.

Prerequisite: FSHN 300 and FSHN 301, may be taken concurrently.

Restriction: Must not be a: Freshman.

Term Offered: Spring.

Grade Mode: Traditional.

Special Course Fee: No.

FSHN 335 Food, Society and Social Media Credits: 3 (3-0-0)

Also Offered As: RRM 335.

Course Description: Explores the cultural power of food and how it is produced, consumed, and "prosumed" across social media. Examines taste, identity, nutrition and behavior as shaped by digital food trends, branding, storytelling, and sensory experience.

Prerequisite: PSY 100 or SOC 100.

Restriction: Must not be a: Freshman.

Registration Information: Sophomore standing. Credit allowed for only one of the following, FSHN 335, RRM 335, or RRM 400.

Terms Offered: Fall, Spring.

Grade Mode: Traditional.

Special Course Fee: No.

FSHN 340 Food as Medicine Credits: 3 (3-0-0)

Course Description: Food consumption patterns, individual foods, and specific food constituents (nutrients and phytochemicals) associated with health benefits.

Prerequisite: FSHN 150 or FSHN 350.

Restriction: Must be a: Undergraduate.

Registration Information: Credit not allowed for both FSHN 340 and FSHN 380A1.

Term Offered: Spring.

Grade Mode: Traditional.

Special Course Fee: No.

FSHN 342A Study Abroad--Italy: Food as Medicine Credits: 3 (0-0-3)

Course Description: Exploration of the function of food consumption patterns and specific food components (nutrients and phytochemicals) and their role in the promotion of health and the prevention of chronic disease. Focus on the health benefits of the Mediterranean diet and its specific constituents consumed in Italy. Evaluation of effects of individual food components to provide health benefits through critical review and examination of scientific studies.

Prerequisite: (BZ 110 and BZ 111 or LIFE 102) and (FSHN 150 or FSHN 350).

Restriction: Must not be a: Freshman.

Registration Information: Sophomore standing. Required field trips. Sections may be offered: Mixed Face-to-Face. Credit not allowed for both FSHN 342A and FSHN 382A.

Term Offered: Summer.

Grade Mode: Traditional.

Special Course Fee: No.

FSHN 350 Human Nutrition Credits: 3 (3-0-0)

Course Description: Focus on the various metabolic pathways through which nutrients pass, the regulation of those pathways, how dysregulation of the pathways can lead to chronic disease, and how these pathways can be targeted for therapeutic opportunities to maximize human health.

Prerequisite: BMS 300, may be taken concurrently or HES 300, may be taken concurrently.

Registration Information: Sections may be offered: Online.

Terms Offered: Fall, Spring, Summer.

Grade Mode: Traditional.

Special Course Fee: No.

FSHN 360 Nutrition Assessment Credits: 2 (2-0-0)

Course Description: Principles of anthropometric, dietary, and biochemical assessment of nutritional status.

Prerequisite: FSHN 350.

Term Offered: Spring.

Grade Mode: Traditional.

Special Course Fee: No.

FSHN 361 Global Nutrition Credits: 2 (2-0-0)

Course Description: Analysis of global nutrition problems relating to hunger, malnutrition, and food security. Current policies, approaches, and research to address these issues in different global contexts.

Prerequisite: FSHN 150.

Restriction: Must not be a: Freshman.

Registration Information: Sophomore standing. Credit not allowed for both FSHN 361 and FSHN 461.

Term Offered: Fall (even years).

Grade Mode: Traditional.

Special Course Fee: No.

FSHN 386A Practicum: Food Service Management Credits: Var[1-2] (0-0-0)

Course Description:

Prerequisite: None.

Terms Offered: Fall, Spring, Summer.

Grade Mode: S/U Sat/Unsat Only.

Special Course Fee: No.

FSHN 386B Practicum: Gerontology Credits: 3 (0-0-9)

Course Description:

Prerequisite: None.

Terms Offered: Fall, Spring, Summer.

Grade Mode: S/U Sat/Unsat Only.

Special Course Fee: No.

FSHN 386C Practicum: School Nutrition Credits: 3 (0-0-9)

Course Description:

Prerequisite: None.

Terms Offered: Fall, Spring.

Grade Mode: S/U Sat/Unsat Only.

Special Course Fee: No.

FSHN 392 Dietetic Practice Seminar Credit: 1 (0-0-1)

Course Description: Pre-professional skills to prepare students for the pursuit of careers in the field of dietetics.

Prerequisite: FSHN 300 and CHEM 245.

Terms Offered: Fall, Spring.

Grade Mode: Traditional.

Special Course Fee: No.

FSHN 420 Advanced Sports Nutrition Credits: 3 (3-0-0)

Course Description: Focuses on evidence-based nutritional approaches to enhance exercise training, performance, and fitness. Fosters an understanding of theory and practice of sports nutrition.

Prerequisite: FSHN 220 or FSHN 350.

Registration Information: Credit not allowed for both FSHN 420 and FSHN 480A1.

Terms Offered: Spring, Summer.

Grade Mode: Traditional.

Special Course Fee: No.

FSHN 428 Nutrition Teaching and Counseling Techniques Credits: 3 (3-0-0)

Course Description: Objectives, principles, and organization of subject matter for nutrition education and counseling.

Prerequisite: FSHN 350.

Term Offered: Spring.

Grade Mode: Traditional.

Special Course Fee: No.

FSHN 435 Lactation Benefits and Promotion Credits: 2 (2-0-0)

Course Description: Lactation benefits, support, promotion, and careers within the field of health and nutrition.

Prerequisite: FSHN 150.

Registration Information: Offered as an online course only. This is a partial semester course.

Term Offered: Summer.

Grade Mode: Traditional.

Special Course Fee: No.

FSHN 444 Nutrition and Aging Credit: 1 (1-0-0)

Course Description: Effect of aging on nutrient needs and impact of nutrition on successful aging and health in the elderly.

Prerequisite: BZ 101 or BZ 110 or LIFE 102.

Registration Information: Offered as an online course only. Credit not allowed for both FSHN 444 and FSHN 459.

Terms Offered: Fall, Spring, Summer.

Grade Mode: Traditional.

Special Course Fee: No.

FSHN 445 Early Childhood Health, Safety, and Nutrition Credits: 3 (0-0-3)

Also Offered As: HDFS 445.

Course Description: Planning, promoting and maintaining healthy life style and safe learning environment for preschool children. Nutrition, first aid and safety, physical activity, identifying and reporting abuse, prevention and management of acute illness and chronic disease and promotion of a high-quality indoor and outdoor environment, targeted for the early childhood education professional.

Prerequisite: HDFS 310.

Registration Information: Completion of 60 credits. Offered as an online course only. Credit not allowed for both FSHN 445 and HDFS 445.

Terms Offered: Fall, Spring, Summer.

Grade Mode: Traditional.

Special Course Fee: No.

FSHN 449 Pathophysiology of Nutrition-Related Diseases Credits: 2 (2-0-0)

Course Description: Foundational knowledge regarding the physiological concepts required to integrate nutrition therapy as part of medical care, by discussing body systems and how disease process interrupts normal functioning.

Prerequisite: (BMS 300 or HES 300) and (FSHN 350, may be taken concurrently).

Restriction: Must be a: Undergraduate.

Term Offered: Fall.

Grade Mode: Traditional.

Special Course Fee: No.

FSHN 450 Medical Nutrition Therapy Credits: 3 (2-2-0)

Course Description: Concepts in medical nutrition therapy, an evidence-based individualized nutrition process to help treat certain medical conditions. Creation of nutrition diagnoses, nutrition prescriptions and nutrition interventions for a variety of diseases and disorders. Intended for students pursuing the registered dietitian nutritionist credential.

Prerequisite: FSHN 449.

Registration Information: Must register for lecture and laboratory.

Term Offered: Spring.

Grade Mode: Traditional.

Special Course Fee: Yes.

FSHN 451 Community Nutrition Credits: 3 (0-0-3)

Course Description: Introduction to the field of community nutrition, with a service learning application. Topics include principles of epidemiology, national nutrition programs and policy, behavior change theory, food insecurity, global food systems, at-risk populations, cultural responsiveness, and the development of nutrition intervention programs. Apply didactic course content to the development of a nutrition intervention with a local community partner.

Prerequisite: FSHN 350, may be taken concurrently.

Term Offered: Fall.

Grade Mode: Traditional.

Special Course Fee: No.

FSHN 453 Biology of Body Weight Regulation Credits: 3 (3-0-0)

Course Description: Genetic, physiological, and psychological regulators of body weight that can contribute to obesity, eating disorders, and various health problems. Investigation beyond the "energy in and energy out" concept into how these factors control when and what a person eats, whether they exercise, and how weight fluctuates.

Prerequisite: FSHN 350.

Restriction: Must not be a: Freshman, Sophomore.

Registration Information: Sections may be offered: Online.

Term Offered: Spring.

Grade Mode: Traditional.

Special Course Fee: No.

FSHN 455 Food Systems--Impact on Health/Food Security Credits: 2 (1-0-1)

Course Description: Conventional and alternative food systems and their impact on nutrition, health, food security, and the environment.

Prerequisite: FSHN 350 or FTEC 447.

Restriction: Must be a: Undergraduate.

Registration Information: Must register for lecture and recitation.

Sections may be offered as Mixed Face-to-Face.

Term Offered: Fall.

Grade Mode: Traditional.

Special Course Fee: No.

FSHN 459 Nutrition in the Life Cycle Credits: 3 (3-0-0)

Course Description: Nutritional aspects associated with each phase of human life cycle including pregnancy, infancy, childhood, adolescence, and early and late adulthood.

Prerequisite: FSHN 350.

Registration Information: Credit not allowed for both FSHN 444 and FSHN 459.

Term Offered: Fall.

Grade Mode: Traditional.

Special Course Fee: No.

FSHN 470 Advanced Human Nutrition and Metabolism Credits: 3 (3-0-0)

Course Description: Influence of nutrition on roles and action of hormones and gene expression on metabolism.

Prerequisite: BC 351 and FSHN 350.

Term Offered: Spring.

Grade Mode: Traditional.

Special Course Fee: No.

FSHN 484 Supervised College Teaching Credits: Var[1-3] (0-0-0)

Course Description:

Prerequisite: None.

Registration Information: A maximum of 10 combined credits for all 384 and 484 courses are counted towards graduation requirements.

Terms Offered: Fall, Spring.

Grade Mode: Instructor Option.

Special Course Fee: No.

FSHN 486A Practicum: Counseling Credits: Var[1-3] (0-0-0)

Course Description:

Prerequisite: FSHN 350.

Terms Offered: Fall, Spring, Summer.

Grade Mode: S/U Sat/Unsat Only.

Special Course Fee: No.

FSHN 486B Practicum: Nutrition Credits: Var[1-3] (0-0-0)

Course Description: Supervised off-campus experience in nutrition.

Prerequisite: FSHN 350.

Terms Offered: Fall, Spring, Summer.

Grade Mode: Instructor Option.

Special Course Fee: No.

FSHN 492 Seminar in Dietetics and Nutrition Credits: 2 (0-0-2)

Course Description: Capstone seminar in nutrition and dietetics.

Prerequisite: None.

Restriction: Must not be a: Freshman, Sophomore, Junior.

Registration Information: Senior standing. Majors in Nutrition Science only.

Terms Offered: Fall, Spring.

Grade Mode: Traditional.

Special Course Fee: No.

FSHN 495A Independent Study: Nutrition Credits: Var[1-18] (0-0-0)

Course Description:

Prerequisite: None.

Terms Offered: Fall, Spring, Summer.

Grade Mode: Instructor Option.

Special Course Fee: No.

FSHN 495B Independent Study: Food Service Management Credits: Var[1-18] (0-0-0)

Course Description:

Prerequisite: None.

Terms Offered: Fall, Spring, Summer.

Grade Mode: Instructor Option.

Special Course Fee: No.

FSHN 496A Group Study in Dietetics and Nutrition: Energy, Weight Management Credit: 1 (1-0-0)

Course Description: Current topics in nutrition and professional skills for the dietetics profession.

Prerequisite: FSHN 350.

Terms Offered: Fall, Spring, Summer.

Grade Mode: Traditional.

Special Course Fee: No.

FSHN 496B Group Study in Dietetics and Nutrition: Sustainable Food Issues Credit: 1 (1-0-0)

Course Description: Current topics in nutrition and professional skills for the dietetics profession.

Prerequisite: FSHN 350.

Terms Offered: Fall, Spring, Summer.

Grade Mode: Traditional.

Special Course Fee: No.

FSHN 496C Group Study in Dietetics and Nutrition: Nutrition and Chronic Disease Credit: 1 (1-0-0)

Course Description: Current topics in nutrition and professional skills for the dietetics profession.

Prerequisite: FSHN 350.

Terms Offered: Fall, Spring, Summer.

Grade Mode: Traditional.

Special Course Fee: No.

FSHN 496D Group Study in Dietetics and Nutrition: Nutrition for Athletes Credit: 1 (1-0-0)

Course Description: Current topics in nutrition and professional skills for the dietetics profession.

Prerequisite: FSHN 350.

Terms Offered: Fall, Spring, Summer.

Grade Mode: Traditional.

Special Course Fee: No.

FSHN 496E Group Study in Dietetics and Nutrition: Food Safety Credit: 1 (1-0-0)

Course Description: Current topics in nutrition and professional skills for the dietetics profession.

Prerequisite: FSHN 350.

Terms Offered: Fall, Spring, Summer.

Grade Mode: Traditional.

Special Course Fee: No.

FSHN 496F Group Study in Dietetics and Nutrition: Service Marketing Credit: 1 (1-0-0)

Course Description: Current topics in nutrition and professional skills for the dietetics profession.

Prerequisite: FSHN 350.

Terms Offered: Fall, Spring, Summer.

Grade Mode: Traditional.

Special Course Fee: No.

FSHN 496G Group Study in Dietetics and Nutrition: Food and Consumer Issues Credit: 1 (1-0-0)

Course Description: Current topics in nutrition and professional skills for the dietetics profession.

Prerequisite: FSHN 350.

Terms Offered: Fall, Spring, Summer.

Grade Mode: Traditional.

Special Course Fee: No.

FSHN 496H Group Study in Dietetics and Nutrition: Public Health and Policy Credit: 1 (1-0-0)

Course Description: Current topics in nutrition and professional skills for the dietetics profession.

Prerequisite: FSHN 350.

Terms Offered: Fall, Spring, Summer.

Grade Mode: Traditional.

Special Course Fee: No.

FSHN 496I Group Study in Dietetics and Nutrition: Special Topics Credit: 1 (1-0-0)

Course Description: Current topics in nutrition and professional skills for the dietetics profession.

Prerequisite: FSHN 350.

Terms Offered: Fall, Spring, Summer.

Grade Mode: Traditional.

Special Course Fee: No.

FSHN 500 Food Systems, Nutrition, and Food Security Credits: 2 (2-0-0)

Course Description: Global and local food systems and their potential influence on nutrition and food security.

Prerequisite: FSHN 350.

Term Offered: Fall.

Grade Mode: Traditional.

Special Course Fee: No.

FSHN 501 Research Methods in Dietetics Credits: 3 (0-0-3)

Course Description: Testing and generating theory. Methods for collecting and analyzing quantitative and qualitative data, critique of research and proposal development.

Prerequisite: None.

Registration Information: Admission to GP-IDEA program in dietetics. Offered as an online course only.

Term Offered: Spring.

Grade Mode: Traditional.

Special Course Fee: No.

FSHN 503 Issues in Dietetics Practice Credits: 3 (0-0-3)

Course Description: Environment in which foodservice, hospitality, and healthcare organizations operate; impact of change on hospitality and healthcare organizations.

Prerequisite: None.

Registration Information: Admission to GP-IDEA program in dietetics. Offered as an online course only.

Terms Offered: Fall, Spring.

Grade Mode: Traditional.

Special Course Fee: No.

FSHN 504 Micronutrients Credits: 3 (0-0-3)

Course Description: Coordination of structure and function related to metabolic needs as a basis for evaluating micronutrient needs in normal or altered metabolic states.

Prerequisite: None.

Registration Information: Admission to GP-IDEA program in dietetics. Offered as an online course only.

Term Offered: Spring.

Grade Mode: Traditional.

Special Course Fee: No.

FSHN 505 Nutrition and Physical Activity in Aging Credits: 3 (0-0-3)

Course Description: Physiological changes during aging and impacts on health and disease; focus on successful aging with emphasis on physical activity and nutrition.

Prerequisite: None.

Registration Information: Admission to GP-IDEA program in dietetics. Offered as an online course only.

Term Offered: Spring.

Grade Mode: Traditional.

Special Course Fee: No.

FSHN 506 Nutrition and Human Performance Credits: 3 (0-0-3)

Course Description: Relationship of specific nutrients and optimal nutrition to physical efficiency and performance.

Prerequisite: None.

Registration Information: Admission to GP-IDEA program in dietetics. Offered as an online course only.

Term Offered: Spring.

Grade Mode: Traditional.

Special Course Fee: No.

FSHN 507 Nutrition Education in the Community Credits: 3 (0-0-3)

Course Description: Principles and practices of teaching individuals and groups to translate nutrition knowledge into action. Emphasis on research and evaluation.

Prerequisite: None.

Registration Information: Admission to GP-IDEA program in dietetics. Offered as an online course only.

Terms Offered: Fall, Spring.

Grade Mode: Traditional.

Special Course Fee: No.

FSHN 508 International Nutrition and World Hunger Credits: 3 (0-0-3)

Course Description: Magnitude, causes, and nature of hunger and under-nuturing; programs and policies to alleviate hunger.

Prerequisite: None.

Registration Information: Admission to GP-IDEA program in dietetics. Offered as an online course only.

Term Offered: Spring.

Grade Mode: Traditional.

Special Course Fee: No.

FSHN 509 Nutrition Counseling and Education Methods Credits: 3 (0-0-3)

Course Description: Application of learning theories and nutrition counseling with individuals and groups in the community and clinical settings.

Prerequisite: None.

Registration Information: Admission to GP-IDEA program in dietetics. Offered as an online course only.

Term Offered: Fall.

Grade Mode: Traditional.

Special Course Fee: No.

FSHN 510 Pediatric Clinical Nutrition Credits: 3 (0-0-3)

Course Description: Physiological, biochemical and nutritional aspects of disease processes relevant to infants and children up to 18 years of age.

Prerequisite: None.

Registration Information: Admission to GP-IDEA program in dietetics. Offered as an online course only.

Term Offered: Fall.

Grade Mode: Traditional.

Special Course Fee: No.

FSHN 511 Maternal and Child Nutrition Credits: 3 (0-0-3)

Course Description: Behavioral, physiological and public health issues impacting dietary and nutritional factors that support growth and development.

Prerequisite: None.

Registration Information: Admission to GP-IDEA program in dietetics; written permission of instructor. Offered as an online course only.

Terms Offered: Fall, Summer.

Grade Mode: Traditional.

Special Course Fee: No.

FSHN 512 Nutritional Aspects of Oncology Credits: 3 (0-0-3)

Course Description: Relationships between nutrition and cancer including the role of nutrition in specific cancers, cancer prevention and patient management.

Prerequisite: None.

Registration Information: Admission to GP-IDEA program in dietetics. Offered as an online course only.

Term Offered: Spring.

Grade Mode: Traditional.

Special Course Fee: No.

FSHN 515 Advanced Health Equity Credits: 3 (1-0-2)

Course Description: Inequities in health and healthcare access, barriers to equity, and strategies for improving health equity at organizational, community, and systemic levels.

Prerequisite: FSHN 530, may be taken concurrently.

Registration Information: Must register for lecture and recitation. Sections offered as Mixed Face-to-Face or Online.

Term Offered: Fall.

Grade Mode: Traditional.

Special Course Fee: No.

FSHN 520 Advanced Medical Nutrition Therapy Credits: 3 (3-0-0)

Course Description: Role of nutrition in etiology and treatment of selected disorders.

Prerequisite: FSHN 551 and FSHN 552.

Restriction: Must be a Graduate.

Registration Information: Graduate standing. Offered as an online course only.

Term Offered: Summer.

Grade Mode: Traditional.

Special Course Fee: No.

FSHN 525 Nutrition Education Theories and Practice Credits: 2 (2-0-0)

Course Description: Important theories, models, and skills used in nutrition education. Examination of topics related to designing, conducting, and evaluating evidence-based materials and programs. Use of current information technologies for communicating with individuals, groups and the public.

Prerequisite: FSHN 350.

Registration Information: Sections may be offered: Online.

Term Offered: Fall.

Grade Mode: Traditional.

Special Course Fee: No.

FSHN 530 Principles of Nutrition Science & Metabolism Credits: 3 (3-0-0)

Course Description: Science of nutrition, including the ingestion and digestion of food, the absorption, transport, and metabolism of macro and micronutrients, energy balance and bodyweight regulation, and relationships to health and risk of disease. Structure, functional roles, and metabolic regulation of carbohydrates, lipids, and proteins during conditions of fasting, feeding, and exercise. The role of vitamins and minerals in cellular and whole body homeostasis.

Prerequisite: BMS 300 or CHEM 245 or FSHN 150 or LIFE 102.

Restriction: Must be a Graduate.

Registration Information: Graduate standing.

Terms Offered: Fall, Spring, Summer.

Grade Mode: Traditional.

Special Course Fee: No.

FSHN 531 Diet, Nutrition, and Chronic Disease Credits: 3 (2-0-1)

Course Description: Principles related to the role of diet and nutrition in obesity, digestive health, type 2 diabetes, cardiovascular disease, and cancer with a focus on current evidence and best practices for prevention.

Prerequisite: FSHN 530.

Registration Information: Graduate standing. Offered as an online course only.

Term Offered: Spring.

Grade Mode: Traditional.

Special Course Fee: No.

FSHN 532 Emerging Issues in Nutrition Credits: 3 (2-0-1)

Course Description: Principles related to emerging areas of nutrition and their role in health promotion. Focus is on current research related to micronutrients and supplements, sports nutrition, food safety and technology, food systems, nutrition and aging, and nutrigenomics.

Prerequisite: FSHN 530.

Registration Information: Graduate standing. Offered as an online course only.

Term Offered: Fall.

Grade Mode: Traditional.

Special Course Fee: No.

FSHN 540 Nutrigenomics and Advanced Lipid Metabolism Credits: 3 (0-0-3)

Course Description: How nutrients regulate gene expressions (nutrigenetics) and how genotype influences an individual's nutrient requirements (nutrigenomics).

Prerequisite: None.

Registration Information: Admission to GP-IDEA program in Dietetics. Offered as an online course only.

Term Offered: Spring.

Grade Mode: Traditional.

Special Course Fee: No.

FSHN 549 Advanced Pathophysiology--Nutrition Diseases Credits: 2 (2-0-0)

Course Description: Foundational knowledge regarding the physiological concepts required to integrate nutrition therapy as part of medical care. Body systems and how disease processes interrupt normal functioning.

Prerequisite: FSHN 530.

Restriction: Must be a Graduate.

Term Offered: Fall.

Grade Mode: Traditional.

Special Course Fee: No.

FSHN 551 Advanced Nutritional Science--Macronutrients Credits: 3 (3-0-0)

Course Description: Macronutrients (carbohydrates, lipids, and proteins) are studied in animal and human models, considering structures, functions, absorption, metabolism, and interactions with other nutrients, from the cellular/molecular/biochemical level through whole-body homeostasis and relationships to health and risk of disease. Regulation of metabolism during conditions of fasting, feeding, and exercise.

Prerequisite: (BC 351 or BC 403) and (BMS 300 or HES 300) and (FSHN 350 or FSHN 530).

Restriction: Must not be a: Freshman, Sophomore, Junior.

Registration Information: Senior standing. Sections offered as Mixed Face-to-Face or Online.

Term Offered: Fall.

Grade Mode: Traditional.

Special Course Fee: No.

FSHN 552 Advanced Nutritional Science--Micronutrients Credits: 3 (3-0-0)

Course Description: Micronutrients (vitamins and minerals) in animal and human models, considering structures, functions, absorption, metabolism, and interactions with other nutrients, from the cellular/molecular/biochemical level through whole-body homeostasis and relationships to health and risk of disease.

Prerequisite: (BC 351 or BC 403) and (BMS 300 or HES 300) and (FSHN 350 or FSHN 530).

Restriction: Must not be a: Freshman, Sophomore, Junior.

Registration Information: Senior standing. Sections offered as Mixed Face-to-Face or Online. Credit not allowed for both FSHN 550 and FSHN 552.

Term Offered: Spring.

Grade Mode: Traditional.

Special Course Fee: No.

FSHN 553 Biology of Body Weight Regulation Credits: 3 (3-0-0)

Course Description: Genetic, physiological, and psychological regulators of body weight that can contribute to obesity, eating disorders, and various health problems. Investigation beyond the "energy in and energy out" concept into how these factors control when and what a person eats, whether they exercise, and how weight fluctuates.

Prerequisite: FSHN 530 or FSHN 551.

Restriction: Must not be a: Freshman, Sophomore.

Registration Information: Junior standing. Sections may be offered: Online.

Term Offered: Spring.

Grade Mode: Traditional.

Special Course Fee: No.

FSHN 561 Global Nutrition Programs Credits: 2 (2-0-0)

Course Description: Analysis of major global nutrition programs and strategies designed to lessen the global burden of nutrition related morbidity and mortality. Current policies, approaches and research trying to address these issues in different global contexts.

Prerequisite: None.

Restriction: Must be a: Graduate, Graduate cooperative program.

Registration Information: Graduate standing.

Term Offered: Fall (odd years).

Grade Mode: Traditional.

Special Course Fee: No.

FSHN 562 Nutrition and Dietetics Research Credits: 3 (3-0-0)

Course Description: Overview of nutrition and dietetics research, methods, important considerations, presentations of research, and the translation of research to practice.

Prerequisite: FSHN 150.

Restriction: Must be a: Graduate.

Registration Information: Graduate standing.

Term Offered: Spring.

Grade Mode: Traditional.

Special Course Fee: No.

FSHN 586 Practicum-Advanced Clinical Nutrition Credits: Var[1-3] (0-0-0)

Course Description:

Prerequisite: None.

Term Offered: Summer.

Grade Mode: S/U Sat/Unsat Only.

Special Course Fee: No.

FSHN 587A Internship: Clinical Dietetics Credits: Var[1-6] (0-0-0)

Course Description: Supervised practice in clinical nutrition.

Prerequisite: None.

Restriction: Must be a: Graduate.

Registration Information: Admission to Master of Science in Food Science and Nutrition, Dietetics Option, Plan B. Written consent of instructor.

Terms Offered: Fall, Spring, Summer.

Grade Mode: S/U Sat/Unsat Only.

Special Course Fee: No.

FSHN 587B Internship: Community Dietetics Credits: Var[1-6] (0-0-0)

Course Description: Supervised practice in community nutrition.

Prerequisite: None.

Restriction: Must be a: Graduate.

Registration Information: Admission to Master of Science in Food Science and Nutrition, Dietetics Option, Plan B. Written consent of instructor.

Terms Offered: Fall, Spring, Summer.

Grade Mode: S/U Sat/Unsat Only.

Special Course Fee: No.

FSHN 587C Internship: Food Service Management Credits: Var[1-6] (0-0-0)

Course Description: Supervised practice in food service management.

Prerequisite: None.

Restriction: Must be a: Graduate.

Registration Information: Admission to Master of Science in Food Science and Nutrition, Dietetics Option, Plan B. Written consent of instructor.

Terms Offered: Fall, Spring, Summer.

Grade Mode: S/U Sat/Unsat Only.

Special Course Fee: No.

FSHN 590 Workshop Credits: Var[1-18] (0-0-0)

Course Description:

Prerequisite: None.

Term Offered: Summer.

Grade Mode: Instructor Option.

Special Course Fee: No.

FSHN 600 Responsible Conduct of Research Credit: 1 (1-0-0)

Course Description: Responsible conduct of research (RCR) including ethical frameworks, publication practices, human and animal research and data management. Case studies and professional codes of conduct will be used to explore conduct of ethical research in humans and animals and how to avoid and manage research misconduct.

Prerequisite: None.

Restriction: Must be a: Graduate, Professional.

Registration Information: This is a partial semester course. Credit not allowed for both FSHN 580A2 and FSHN 600.

Term Offered: Spring.

Grade Mode: S/U Sat/Unsat Only.

Special Course Fee: No.

FSHN 601 Grant Writing in Nutritional Sciences Credits: 2 (2-0-0)

Course Description: Examine each of the processes involved in a grant application. Emphasis on NIH grant mechanisms; translates to all forms of academic grant writing.

Prerequisite: None.

Restriction: Must be a: Graduate, Professional.

Registration Information: Credit not allowed for both FSHN 580A3 and FSHN 601.

Term Offered: Spring (odd years).

Grade Mode: Traditional.

Special Course Fee: No.

FSHN 620 Community Nutrition Planning and Evaluation Credits: 3 (2-0-1)

Course Description: Issues, approaches, and skills needed in the community and public health nutrition field.

Prerequisite: FSHN 350.

Restriction: Must be a: Graduate, Graduate cooperative program, Professional.

Registration Information: Must register for laboratory and recitation. Sections may be offered: Online.

Term Offered: Spring.

Grade Mode: Traditional.

Special Course Fee: No.

FSHN 621 Community Program Evaluation Credit: 1 (1-0-0)

Course Description: Evaluation of community nutrition programs and initiatives.

Prerequisite: FSHN 620.

Restriction: Must be a: Graduate, Professional.

Registration Information: Offered as an online course only. This is a partial semester course.

Term Offered: Summer.

Grade Mode: Traditional.

Special Course Fee: No.

FSHN 628 Advanced Nutrition Counseling Techniques Credits: 2 (2-0-0)

Course Description: Principles, strategies, and techniques for interviewing, assessing, and providing nutrition counseling in community settings.

Prerequisite: FSHN 530.

Restriction: Must be a: Graduate, Graduate cooperative program, Professional.

Registration Information: Sections may be offered: Online.

Term Offered: Fall.

Grade Mode: Traditional.

Special Course Fee: No.

FSHN 629 Special Topics in Nutrition Counseling Credits: 3 (3-0-0)

Course Description: Specialized topics and emerging concepts in nutrition counseling. Explores the intricate relationship between counselors and clients.

Prerequisite: FSHN 530.

Restriction: Must be a: Graduate, Professional.

Registration Information: Sections may be offered: Online.

Term Offered: Spring.

Grade Mode: Traditional.

Special Course Fee: No.

FSHN 630 Integrative Exercise and Nutrition Metabolism Credits: 3 (3-0-0)

Also Offered As: HES 630.

Course Description: Advances in integrative human metabolism under conditions of changing energy flux.

Prerequisite: HES 610 and FSHN 551.

Restriction: Must be a: Graduate, Professional.

Registration Information: Credit not allowed for both FSHN 630 and HES 630.

Term Offered: Spring.

Grade Mode: Traditional.

Special Course Fee: No.

FSHN 640 Selected Topics in Nutritional Epidemiology Credits: 2 (2-0-0)

Course Description: Overview of topics in nutritional epidemiology; study design, interpretation of findings, linkage of data to action.

Prerequisite: (FSHN 350) and (STAT 301 or STAT 307 or ERHS 307).

Restriction: Must be a: Graduate, Graduate cooperative program, Professional.

Registration Information: Sections may be offered: Online.

Term Offered: Fall.

Grade Mode: Traditional.

Special Course Fee: No.

FSHN 650A Recent Developments in Human Nutrition: Topics in Community Nutrition Credits: 2 (0-0-2)

Course Description: Applying principles of public health and community nutrition to evaluate scientific research on current topics of public health significances.

Prerequisite: None.

Restriction: Must be a: Graduate, Graduate cooperative program, Professional.

Registration Information: Sections may be offered: Online.

Term Offered: Fall.

Grade Mode: Traditional.

Special Course Fee: No.

FSHN 650B Recent Developments in Human Nutrition: Functional Foods and Phytochemicals Credits: 2 (2-0-0)

Course Description: Discussion, literature survey, and learning activities focused on functional foods, their bioactive components, and effects on human health and disease.

Prerequisite: None.

Restriction: Must be a: Graduate, Graduate cooperative program, Professional.

Term Offered: Fall (odd years).

Grade Mode: Traditional.

Special Course Fee: No.

FSHN 650C Recent Developments in Human Nutrition: Genomic, Proteomics, and Metabolomics Credits: 2 (2-0-0)
Course Description: Appraisal of literature on human nutritional status.
Prerequisite: FSHN 551.
Restriction: Must be a: Graduate, Graduate cooperative program, Professional.
Term Offered: Spring (even years).
Grade Mode: Traditional.
Special Course Fee: No.

FSHN 660 Women's Nutrition Issues in the Lifecycle Credits: 2 (2-0-0)
Course Description: Nutritional issues associated with each phase of a woman's life cycle including preconception, pregnancy, lactation, childhood, adolescence, menopause, and aging. Gender-inclusive discussion on current nutrition research and interventions to inform nutrition and health practices.
Prerequisite: FSHN 530.
Restriction: Must be a: Graduate, Professional.
Registration Information: Sections may be offered: Online.
Term Offered: Spring.
Grade Mode: Traditional.
Special Course Fee: No.

FSHN 675 Regulation of Energy Intake Credits: 3 (3-0-0)
Course Description: Central and peripheral mechanisms controlling energy intake with emphasis on humans. Current theories, experimental approaches, and new research.
Prerequisite: FSHN 350 and PSY 454.
Restriction: Must be a: Graduate, Graduate cooperative program, Professional.
Term Offered: Spring.
Grade Mode: Traditional.
Special Course Fee: No.

FSHN 684 Supervised College Teaching Credits: Var[1-18] (0-0-0)
Course Description:
Prerequisite: None.
Restriction: Must be a: Graduate, Professional.
Terms Offered: Fall, Spring.
Grade Mode: Instructor Option.
Special Course Fee: No.

FSHN 686A Practicum: Counseling Credits: Var[1-18] (0-0-0)
Course Description:
Prerequisite: FSHN 520.
Restriction: Must be a: Graduate, Professional.
Terms Offered: Fall, Spring, Summer.
Grade Mode: S/U Sat/Unsat Only.
Special Course Fee: No.

FSHN 686B Practicum: Nutrition Credits: Var[1-18] (0-0-0)
Course Description:
Prerequisite: None.
Restriction: Must be a: Graduate, Professional.
Terms Offered: Fall, Spring, Summer.
Grade Mode: S/U Sat/Unsat Only.
Special Course Fee: No.

FSHN 690 Dietetics Graduate Capstone Credits: 3 (3-0-0)
Course Description: Integration and demonstration of expertise in dietetics through the development of an evidence-based project.
Prerequisite: FSHN 530 or FSHN 551.
Restriction: Must be a: Graduate, Professional.
Registration Information: Offered as an online course only. Written consent of instructor. This is a partial semester course.
Term Offered: Summer.
Grade Mode: Traditional.
Special Course Fee: No.

FSHN 692 Graduate Seminar Credit: 1 (0-0-1)
Course Description: Fundamental concepts for giving effective scientific presentations, exposure to a variety of scientific, research, and professional development topics related to nutrition, food science, and dietetics. Engage and participate in weekly seminars with emphasis on development of oral and written communication skills.
Prerequisite: None.
Restriction: Must be a: Graduate, Professional.
Registration Information: Sections may be offered: Online.
Terms Offered: Fall, Spring, Summer.
Grade Mode: Instructor Option.
Special Course Fee: No.

FSHN 695A Independent Study: Food Science Credits: Var[1-18] (0-0-0)
Course Description:
Prerequisite: None.
Restriction: Must be a: Graduate, Graduate cooperative program, Professional.
Terms Offered: Fall, Spring, Summer.
Grade Mode: Instructor Option.
Special Course Fee: No.

FSHN 695B Independent Study: Nutrition Credits: Var[1-18] (0-0-0)
Course Description:
Prerequisite: None.
Restriction: Must be a: Graduate, Graduate cooperative program, Professional.
Terms Offered: Fall, Spring, Summer.
Grade Mode: Instructor Option.
Special Course Fee: No.

FSHN 695C Independent Study: Food Service Management Credits: Var[1-18] (0-0-0)
Course Description:
Prerequisite: None.
Restriction: Must be a: Graduate, Professional.
Terms Offered: Fall, Spring, Summer.
Grade Mode: Instructor Option.
Special Course Fee: No.

FSHN 696A Group Study: Food Science Credits: Var[1-18] (0-0-0)
Course Description:
Prerequisite: None.
Restriction: Must be a: Graduate, Professional.
Terms Offered: Fall, Spring, Summer.
Grade Mode: Instructor Option.
Special Course Fee: No.

FSHN 696B Group Study: Nutrition Credits: Var[1-18] (0-0-0)

Course Description:

Prerequisite: None.

Restriction: Must be a: Graduate, Professional.

Terms Offered: Fall, Spring, Summer.

Grade Mode: Instructor Option.

Special Course Fee: No.

FSHN 696C Group Study: Dietetics Credit: 1 (0-0-1)

Course Description:

Prerequisite: None.

Restriction: Must be a: Graduate, Professional.

Registration Information: Sections may be offered: Online.

Terms Offered: Fall, Spring.

Grade Mode: S/U Sat/Unsat Only.

Special Course Fee: No.

FSHN 696D Group Study: Exercise and Nutrition Credits: Var[1-18] (0-0-0)

Course Description:

Prerequisite: None.

Restriction: Must be a: Graduate, Professional.

Terms Offered: Fall, Spring, Summer.

Grade Mode: Instructor Option.

Special Course Fee: No.

FSHN 698A Research: Dietetics Credits: Var[1-18] (0-0-0)

Course Description:

Prerequisite: None.

Restriction: Must be a: Graduate, Professional.

Registration Information: Admission to the GP-IDEA program in Dietetics. Sections may be offered online.

Terms Offered: Fall, Spring, Summer.

Grade Mode: S/U Sat/Unsat Only.

Special Course Fee: No.

FSHN 698B Research: Nutrition Credits: Var[1-18] (0-0-0)

Course Description:

Prerequisite: None.

Restriction: Must be a: Graduate, Professional.

Terms Offered: Fall, Spring, Summer.

Grade Mode: S/U Sat/Unsat Only.

Special Course Fee: No.

FSHN 698C Research: Food Service Management Credits: Var[1-18] (0-0-0)

Course Description:

Prerequisite: None.

Restriction: Must be a: Graduate, Professional.

Terms Offered: Fall, Spring, Summer.

Grade Mode: S/U Sat/Unsat Only.

Special Course Fee: No.

FSHN 699B Thesis: Nutrition Credits: Var[1-18] (0-0-0)

Course Description:

Prerequisite: None.

Restriction: Must be a: Graduate, Professional.

Terms Offered: Fall, Spring, Summer.

Grade Mode: Instructor Option.

Special Course Fee: No.

FSHN 699C Thesis: Food Service Management Credits: Var[1-18] (0-0-0)

Course Description:

Prerequisite: None.

Restriction: Must be a: Graduate, Professional.

Terms Offered: Fall, Spring, Summer.

Grade Mode: Instructor Option.

Special Course Fee: No.

FSHN 792 Seminar-Research Topics in Nutrition Credit: 1 (0-0-1)

Course Description: Ph.D. seminar in literature review.

Prerequisite: None.

Restriction: Must be a: Graduate, Professional.

Terms Offered: Fall, Spring.

Grade Mode: Traditional.

Special Course Fee: No.

FSHN 795 Independent Study Credits: Var[1-18] (0-0-0)

Course Description:

Prerequisite: None.

Restriction: Must be a: Graduate, Professional.

Terms Offered: Fall, Spring, Summer.

Grade Mode: Instructor Option.

Special Course Fee: No.

FSHN 796 Group Study Credit: 1 (0-0-1)

Course Description:

Prerequisite: None.

Restriction: Must be a: Graduate, Professional.

Terms Offered: Fall, Spring, Summer.

Grade Mode: Instructor Option.

Special Course Fee: No.

FSHN 799 Dissertation-Nutrition Credits: Var[1-18] (0-0-0)

Course Description:

Prerequisite: None.

Restriction: Must be a: Graduate, Professional.

Terms Offered: Fall, Spring, Summer.

Grade Mode: Instructor Option.

Special Course Fee: No.