

HUMAN ENVIRONMENT AND DESIGN

898*. **Master's Project**
 Fall, Spring, Summer. 1 to 4 credits.
 May reenroll for a maximum of 8 credits.
 R: Open only to graduate students in the Department of Human Environment and Design. Master's degree Plan B project. Participation in a project in apparel and textiles, interior design and human environment, or merchandising management.
 QA: HED 890

899*. **Master's Thesis Research**
 Fall, Spring, Summer. 1 to 7 credits.
 May reenroll for a maximum of 20 credits.
 R: Open only to graduate students in the Department of Human Environment and Design.
 QA: HED 899

900*. **Decision Processes in Design and Management**
 Spring. 3(3-0)
 R: Human Environment: Design & Management
 Theoretical analysis and application of decision processes appropriate to the design and management of human environments. Philosophy and methods of productive user participation in environmental change.

901*. **Professional Issues, Grants & Publications**
 Fall. 3(3-0)
 R: 6 and above
 Development of critique and comment related to professional issues. Strategies and techniques related to successful grantsmanship and the design and dissemination of academic communication.

902*. **Research Seminar Development**
 Spring. 1(1-0)
 R: 6 and above Human Environment: Design and Management
 Student, faculty, and guest presentations of selected topics related to advanced study in human environment and design. Critical analysis of presented research methodology, statistical procedures, and interpretation of results.

903*. **Doctoral Research Presentation**
 Spring. 2(2-0)
 P: HED 902 or concurrently; approval of department. R: 6 and above Human Environment: Design and Management
 Synthesis and application of research findings through delivery of a research presentation.

HUMAN MEDICINE HM

501. **Preceptorship Training**
 Fall, Spring, Summer. 1 to 8 credits.
 May reenroll for a maximum of 24 credits. Interdepartmental with the Department(s) of Family Practice.
 R: One year of graduate-professional program in College of Human Medicine.
 Field experience in primary care.
 QA: HM 500

511*. **Infectious Disease and Immunology**
 Fall. 3(-)
 R: Open only to graduate-professional students in College of Human Medicine. Not open to first year students.
 Basic sciences applied to clinically relevant situations. Problem-based small group experiences.

512*. **Development and Behavior**
 Fall. 2(-)
 R: Open only to graduate-professional students in College of Human Medicine. Not open to first year students.
 Basic sciences applied to clinically relevant situations. Problem-based small group experiences.

513*. **Neurological and Musculoskeletal Domain**
 Fall. 5(-)
 R: Open only to graduate-professional students in College of Human Medicine. Not open to first year students.
 Basic sciences applied to clinically relevant situations. Problem-based small group experiences.

514*. **Major Mental Disorders**
 Fall. 2(-)
 R: Open only to graduate-professional students in College of Human Medicine. Not open to first year students.
 Basic sciences applied to clinically relevant situations. Problem-based small group experiences.

515*. **Cardiovascular Domain**
 Fall. 4(-)
 R: Open only to graduate-professional students in College of Human Medicine. Not open to first year students.
 Basic sciences applied to clinically relevant situations. Problem-based small group experiences.

525*. **Pulmonary Domain**
 Spring. 2(-)
 R: Open only to graduate-professional students in College of Human Medicine. Not open to first year students.
 Basic sciences applied to clinically relevant situations. Problem-based small group experiences.

526*. **Renal and Urinary Domain**
 Spring. 2(-)
 R: Open only to graduate-professional students in College of Human Medicine. Not open to first year students.
 Basic sciences applied to clinically relevant situations. Problem-based small group experiences.

527*. **Digestive Domain**
 Spring. 3(-)
 P: Block I. R: Open only to graduate-professional students in College of Human Medicine. Not open to first year students.
 Basic sciences applied to clinically relevant situations. Problem-based small group experiences.

528*. **Metabolic and Endocrine and Reproductive Domain**
 Spring. 3(-)
 P: Block I. R: Open only to graduate-professional students in College of Human Medicine. Not open to first year students.
 Basic sciences applied to clinically relevant situations. Problem-based small group experiences.

529*. **Dermatologic and Allergy Domain**
 Spring. 1(-)
 P: Block I. R: Not open to first year students. Open only to graduate-professional students in College of Human Medicine.
 Basic sciences applied to clinically relevant situations. Problem-based small group experiences.

531. **Clinical Skills I**
 Fall. 2(1-2)
 R: Graduate Professional students in College of Human Medicine.
 Basic principles of doctor-patient relationship, core interviewing techniques. Exposure to clinical arena.

532. **Clinical Skills II**
 Spring. 2(1-2)
 P: HM 531 R: Graduate-professional students in College of Human Medicine.
 Adult screening physical examination and its integration with data-gathering skills.

533. **Clinical Skills III**
 Summer. 1(1-2)
 P: HM 532 R: Graduate-professional students in College of Human Medicine.
 Age specific screening examinations and integration with data-gathering skills.

535*. **Hematopoietic and Neoplasia Domain**
 Spring. 2(-)
 P: Block I. R: Not open to first year students. Open only to graduate-professional students in College of Human Medicine.
 Basic sciences applied to clinically relevant situations. Problem-based small group experiences.

536*. **Comprehensive Domain**
 Spring. 3(-)
 R: Not open to first year students. Open only to graduate-professional students in College of Human Medicine.
 Basic sciences applied to clinically relevant situations. Problem-based small group experiences.

543. **Human Development and Behavior in Society**
 Summer. 5(4-2)
 R: Graduate-professional students in College of Human Medicine.
 Social science basis of medicine including social and cultural influences on health and behavior. Overview of normal growth and development throughout the life span.

571. **Integrative Clinical Correlations I**
 Fall. 2(2-0)
 P: ANT 551, BCH 521, PSL 501 or all concurrently. R: Graduate-professional students in College of Human Medicine.
 Correlation of the principles of the basic biological and behavioral sciences with the disciplines of clinical medicine using case presentations.

572. **Integrative Clinical Correlations II**
 Spring. 2(2-0)
 P: HM 571, ANT 552, ANT 562, MPH 552, PTH 542 or all concurrently. R: Graduate-professional students in College of Human Medicine.
 Correlation of the principles of the basic biological and behavioral sciences with the disciplines of clinical medicine using case presentations.

573. **Integrative Clinical Correlations III**
 Summer. 1(2-0)
 P: HM 543, HM 572, PHD 523, PHM 563, RAD 553 or all concurrently. R: Graduate-professional students in College of Human Medicine.
 Correlation of the principles of the basic biological and behavioral sciences with the disciplines of clinical medicine using case presentations.

581. **Mentor Program**
 Fall, Spring, Summer. 1(0-2) May reenroll for a maximum of 3 credits.
 R: Graduate-professional students in College of Human Medicine.
 Dimensions of being a physician: skills needed to perform the job with patients and other medical workers. Current trends in the fields.

591. **Special Problems in Human Medicine**
 Fall, Spring, Summer. 1 to 34 credits.
 May reenroll for a maximum of 36 credits.
 R: Graduate-professional students in College of Human Medicine.
 Work under the direction of a faculty member on an experimental, theoretical, or applied program that requires a broad, interdisciplinary approach.

HUMAN MEDICINE

691*. **Research Clerkship**
 Fall, Spring, Summer. 2 to 6 credits in increments of 2 credits. May reenroll for a maximum of 6 credits.
 P: HM 690 or approval of community research director R: Grad Prof Students in College of Human Medicine
 Students will be engaged in basic, behavioral or clinical research projects with a written outcome
 QP: HM 690 QA: HM 690

HUMAN NUTRITION AND FOODS HNF

150. **Introduction to Nutrition and Food Science**
 Fall, Summer. 3(3-0)
 Interdepartmental with the Department(s) of Food Science.

Nutrition needs in life stages from a human ecological perspective. Domestic and international factors affecting the availability of a safe, nutritious food supply. Relationships of food choices to health and disease.
 QA: HNF 102 FSC 101

200. **Physical and Chemical Properties of Foods**
 Fall. 3(2-2)
 P: CEM 141 or concurrently. R: NONE
 NONE NONE NONE
 Interrelationships between basic physical and chemical principles and food preparation: composition, methods of preparation, meal planning, evaluation, quality standards and comparative analysis.
 QP: CEM 141 QA: HNF 200

220*. **Basic Skills in Dietetic Practice**
 Spring. 2(1-2)
 P: CPS 100 or CPS 130 or CPS 131; HNF 150 or HNF 311; STT 200 or C: STT 201 or R: Not open to freshmen. Open only to students in the Department of Food Science and Human Nutrition.
 Evaluation and communication of scientific and consumer information. Sources of reliable food and nutrition information. Statistics. Nutritional epidemiology, nutrient composition, and computer diet analysis.
 QP: HNF 102 ORHNF 200ORFSC 101 QA: HNF 290

300*. **Experimental Approaches to Foods**
 Spring. 3(2-3)
 P: HNF 200, CEM 143. R: Open only to students with credit in FSC 401.
 Effects of various treatments on chemical and physical properties of carbohydrates, proteins, lipids and other constituents of foods. Effects of changes in chemical and physical properties on functional and sensory attributes of foods.
 QP: HNF 200 CEM 143 QA: HNF 300

311*. **Principles of Human Nutrition**
 Spring. 3(3-0)
 P: BCH 200. R: None None None None
 A human ecological approach to identification, function and food sources of nutrients required by humans. Normal metabolism. Effects of deficiencies or excesses of specific nutrients on metabolism.
 QP: BCH 200 QA: HNF 411

350*. **Food and the Consumer**
 Fall. 3(3-0)
 P: HNF 200; EC 200 or EC 201; MTA 302 or concurrently.
 Introduction to consumer behavior relative to food and food services. Food consumption and expenditure trends. Factors influencing food consumption and expenditures. Consumer advocacy and consumerism.
 QP: HNF 200 EC 201MTA 302ORCONCURRE

375*. **Community Nutrition**
 Spring. 3(3-0)
 P: HNF 150 or HNF 311.
 Dietary and anthropometric assessment of population groups. Policies, programs and resources available to address community nutritional needs.
 QP: HNF 102 QA: HNF 375

379*. **Basic Nutritional Counseling**
 Spring. 3(2-3)
 P: HNF 150 or HNF 311. R: Not open to freshmen. Open only to students in Department of Food Science and Human Nutrition.
 Interviewing. Medical records and dietary history. Assessment of nutritional status. Planning, implementing, and evaluating nutritional programs. Quality assurance. Professional ethics.
 QP: HNF 102 ORHNF 411 QA: HNF 379

400*. **Art and Science of Food Preparation**
 Spring. 1(1-3)
 P: HNF 200.
 Art and science of food preparation in relation to cost, health, and historical, regional, ethnic, and religious customs. Product evaluation using sensory techniques.
 QP: HNF 200 QA: HNF 406L

404*. **Food Product Development**
 Fall. 4(3-3)
 P: FSC 401 or HNF 300. R: Not open to freshmen and sophomores.
 Functions of proteins, carbohydrates, and fats, and their interactions with other food ingredients. Objective and sensory food evaluation techniques.
 QP: HNF 300 ORFSC 333 QA: HNF 403 HNF 404

406*. **Sociocultural Aspects of Food**
 Spring. 3(3-0)
 R: Not open to freshmen and sophomores.
 One ISS "B" course option or concurrently.
 Factors impacting food consumption from a human ecological perspective. International and national food consumption patterns. Geographic, political, and economic aspects of food consumption. Food availability and distribution. Family structure, taboos, r
 QA: HNF 406

410*. **Sensory Assessment of Foods**
 Spring. 2(1-2)
 P: STT 201 or STT 315 or STT 464; HNF 200 or FSC 401. R: Open only to majors in Department of Food Science and Human Nutrition.
 Discriminative, consumer and descriptive methods used to evoke, measure, analyze, and interpret sensory reactions to food characteristics.
 QP: STT 201 ORSTT 315ORSTT422 QA: HNF 310

440*. **Foodservice Operations**
 Fall. 3(3-0)
 P: HNF 150 or HNF 311; HNF 200. R: Not open to freshmen and sophomores.
 Principles, processes and control strategies in food-service operations. Menu planning, procurement, and on-premise storage and issue. Production, consumer distribution, safety and sanitation.
 QP: HNF 200 ORHNF 102ORHNF 411 QA: HNF 440

441*. **Management of Foodservice Operations**
 Spring. 2(2-0)
 P: HNF 440 R: Juniors and above None
 None None
 Human-and-material-resources fiscal management using manual and electronic data processing strategies in foodservice operations.
 QP: HNF 440 QA: HNF 441

444*. **Computerized Foodservice Management Laboratory**
 Fall. 1(0-3)
 P: CPS 100 or CPS 130; HNF 441. R: Open only to majors in Dietetics, Foods: Technology and Management, Human Nutrition, and Nutritional Sciences.
 Use of prototype foodservice management software for inventory management, recipe adjustment, recipe and menu pre-costing, nutrient analysis, cost analysis, and other foodservice applications.
 QP: HNF 440 QA: HNF 441

445*. **Foodservice Management Experience**
 Spring. 2(1-4)
 P: HNF 441, MPH 205. R: Open only to seniors in Dietetics and graduate students in Human Nutrition, approval of department.
 Receipt, storage, preparation and service of foods. Safety and sanitation. Design, layout, and care of equipment. Costing. Meal tickets required.
 QP: HNF 440 MPH 200ORMPH 301 QA: HNF 440P

450*. **Contemporary Cases from the Food Industry**
 Spring. 3(3-0)
 P: HNF 350, MTA 300, MTA 302. R: Open only to seniors and graduate students in the College of Agriculture and Natural Resources, College of Business, and College of Human Ecology.
 Analysis and interpretation of the consumer environment. Development of effective strategies and policies for the food industry. Case study approach.
 QP: MTA 300 MTA 302 QA: HNF 415

460*. **Advanced Human Nutrition**
 Fall. 5(5-0)
 P: BCH 200 or BCH 401; HNF 150 or HNF 311; PSL 250.
 Metabolism of carbohydrates, proteins, fats, vitamins, and minerals as related to dietary requirements and disease processes in humans. Recommended dietary allowances of nutrients. Metabolism of nutrients. Food sources of nutrients.
 QP: BCH 200 PSL 241ORPSL 432 QA: HNF 461 HNF 462

463*. **Nutrition and Human Development**
 Fall. 3(3-0)
 P: HNF 460 or concurrently.
 Role of nutrients in anatomical, physiological, and biochemical processes as related to human growth and development. Nutrition throughout the life cycle. Nutritional assessment and programs.
 QP: HNF 462 QA: HNF 463

470*. **Clinical Nutrition and Dietetics**
 Spring. 4(3-2)
 P: BCH 200 or BCH 401; HNF 460; PSL 250 or PSL 431. R: Not open to freshmen and sophomores.
 Anatomical, physiological and biochemical changes associated with diseases. Nutritional assessment. Use of modified diets as adjuncts to other therapies.
 QP: HNF 462 QA: HNF 470 HNF 470P

473*. **Interpretation of Clinical Laboratory Tests in Dietetics**
 Fall. 3(3-0)
 P: HNF 460 or concurrently.
 Principles, procedures and interpretation of clinical laboratory tests. Interrelationships of nutrition and the biological sciences. Relationships of test results to total nutritional care.
 QP: HNF 462 QA: HNF 473

480*. **Concepts of Human Nutrition Research Methods**
 Spring. 2(1-3)
 P: HNF 311 or HNF 460; FSC 455. R: Open only to seniors and graduate students. Approval of department.
 Issues and techniques involved in nutrition research with humans and animals. Guided laboratory experience plus independent project.