#### 891C. Topics in Interior Design and Human Environment

Fall, Spring, Summer. 3(3-0) A student may earn a maximum of 6 credits in all enrollments for this course.

R: Open only to seniors and graduate students in Merchandising Management, Interior Design and Human Environment, and Apparel and Textiles.

Selected topics related to facilities design and management, human shelter, or interior design preservation and conservation.

#### 892A. Seminar in Merchandising Management

Fall, Spring, Summer. 3(3-0) A student may earn a maximum of 6 credits in all enrollments for this course.

Consumer behavior, human resource management, or international merchandising management.

### 892B. Seminar in Apparel and Textiles

Fall, Spring, Summer. 3(3-0) A student may earn a maximum of 6 credits in all enrollments for this course.

R: Open only to seniors and graduate students.

Apparel design, historic costume and textiles, museum collections, or human behavior and ecological relations.

#### 892C. Seminar in Interior Design and Human Environment

Fall, Spring, Summer. 3(3-0) A student may earn a maximum of 6 credits in all enrollments for this course.

R: Open only to seniors and graduate students.

Facilities design and management, human shelter, or interior design preservation and conservation.

# 893A. Internship in Merchandising Management

Fall, Spring. 1 to 3 credits. A student may earn a maximum of 3 credits in all enrollments for this course.

R: Open only to graduate students. Approval of department.

Supervised internship in a professional setting in consumer behavior, human resource management, or international merchandising management.

## 893B. Internship in Apparel and Textiles

Fall, Spring. 2 to 4 credits. A student may earn a maximum of 4 credits in all enrollments for this course.

R: Open only to graduate students. Approval of department.

Supervised internship in a professional setting in apparel design, historic costume and textiles, museum collections, or human behavior and ecological relations.

# 893C. Internship in Interior Design and Human Environment.

Fall, Spring. 2 to 6 credits. A student may earn a maximum of 6 credits in all enrollments for this course.

R: Open only to graduate students. Approval of department.

Supervised internship in a professional setting in facilities design and management, human shelter, or interior design preservation and conservation.

### 898. Master's Project

Fall, Spring, Summer. 1 to 4 credits. A student may earn a maximum of 8 credits in all enrollments for this course.

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.

### 899. Master's Thesis Research

Fall, Spring, Summer. 1 to 7 credits. A student may earn a maximum of 20 credits in all enrollments for this course.

R: Open only to graduate students in the Department of Human Environment and Design.

#### 900. Decision Processes in Design and Management Spring. 3(3-0)

R: Open only to doctoral students in Human Environment: Design and Management.

Theory and practice of decision processes in the design and management of human environments. Philosophy and methods of participation in environmental change.

#### 901. Research Problems in Human Environment and Design Fall. 3(3-0)

P: Research methods course. R: Open only to doctoral students in Human Environment: Design and Management.

Identification of researchable problems in apparel and textiles, interior design and facilities management, and merchandising management. Strategies and techniques for preparing grant proposals and documents for publication.

### 902. Research Seminar

Spring. 2(2-0)

P: HED 901 or concurrently. R: Open only to doctoral students in Human Environment: Design and Management.

Intensive study in an area of apparel and textiles, interior design and facilities management, or merchandising management.

## 999. Doctoral Dissertation Research

Fall, Spring, Summer. 1 to 24 credits. A student may earn a maximum of 30 credits in all enrollments for this course.

## **HUMAN MEDICINE**

## $\mathbf{H}\mathbf{M}$

## College of Human Medicine

### 501. Preceptorship Training

Fall, Spring, Summer. 1 to 8 credits. A student may earn a maximum of 24 credits in all enrollments for this course. Interdepartmental with Family Practice.

R: One year of graduate-professional program in College of Human Medicine.

Field experience in primary care.

# 511. Infectious Disease and Immunology Fall. 3 credits.

R: Open only to graduale-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. Disorders of Behavior and Development Fall. 2 credits.

P: Completion of all Block I required courses. R: Not open to first year students. Open only to graduate-professional students in the College of Human Medicine. Basic sciences applied to clinically relevant situations. Problem-based small group experiences.

# 513. Neurological and Musculoskeletal Domain

Fall. 5 credits.

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 credits.

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 credits.

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 credits.

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 credits.

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 credits.

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 credits.

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. I credit.

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: Graduale 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.

## 534. Clinical Skills IV

Fall. 2(1-2)

P: HM 533. R: Open only to graduate-professional students in College of Human Medicine.

Advanced interviewing and physical examination skills. Communication of patient-related data with the patient and other health professionals, orally and in writing. Problem solving.

#### 535. Clinical Skills V

Spring, Summer. 2(1-2)

P: HM 534. R: Open only to graduate-professional students in College of Human Medicine.

Advanced interviewing and physical examination skills. Oral case presentations and written medical records. Introductory problem solving skills.

## 536. Comprehensive Domain

Spring. 3 credits.

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.

## 539. Hematopoietic/Neoplasia

Spring. 2 credits.

P: Block I. R: Open only to graduate-professional students in College of Human Medicine.

Learn/apply advanced concepts of the basic sciences to clinically relevant situations. Done in integrated, problem-based small group experiences and other 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.

#### 546. The Social Context of Clinical Decisions Fall. 2(2-0)

P: Completion of Block I requirements. R: Open only to graduate-professional students in College of Human Medicine.

Social perspectives on medicine and medical care.

### 547. The Social Context of Clinical Decisions II

 $Spring.\ 2(2\text{-}0)$ 

P: HM 546. R: Open only to graduate-professional students in College of Human Medicine.

Issues and concepts related to social and professional responsibilities of physicians.

## 548. Medical Humanities Seminar

Spring. 2(2-0)

P: HM 547. R: Open only to graduate-professional students in College of Human Medicine.

Issues related to the humanities and human values pertinent to medical practice.

### 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 disciplines of clinical medicine using case presentations.

### 572. Integrative Clinical Correlations II Spring. 2(2-0)

P: HM 571, ANT 552, ANT 562, MIC 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) A student may earn a maximum of 3 credits in all enrollments for this course.

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.

### 582. Mentor Program Year II

Fall, Spring. 1(0-2) A student may earn a maximum of 2 credits in all enrollments for this course. P: Completion of 3 credits of HM 581. R: Open only to graduate-professional students in College of Human Medicine.

Continuing exploration of the dimensions of being a physician, professional skills needed to interact with patients and medical workers, and current trends in field.

### 591. Special Problems in Human Medicine

Fall, Spring, Summer. 1 to 34 credits. A student may earn a maximum of 36 credits in all enrollments for this course.

R: Graduate-professional students in College of Human Medicine.

Work under the direction of a faculty member on an experimental, theoretical, or applied problem that requires a broad, interdisciplinary approach.

## 605. Comprehensive Care Clerkship

Fall, Spring, Summer. 4 to 20 credits. A student may earn a maximum of 20 credits in all enrollments for this course. Interdepartmental with Family Practice.

P: FMP 602. R: Open only to graduate-professional students in College of Human Medicine.

Comprehensive and longitudinal management of patients in ambulatory care settings.

### 608. Sub-Specialty Clerkships

Fall, Spring, Summer. 4 to 12 credits. A student may earn a maximum of 12 credits in all enrollments for this course.

P: FMP 602. R: Open only to graduate-professional students in College of Human Medicine.

Hospital-and office-based clinical experiences in subspecialties in medicine and surgery.

### 635. Core Competencies I

Fall. 2 credits. A student may earn a maximum of 6 credits in all enrollments for this course. Interdepartmental with Medicine, Family Practice, and Pediatrics and Human Development.

P: FMP 602. R: Open only to graduate-professional students in College of Human Medicine.

A weekly seminar addressing core knowledge and skills from an interdisciplinary perspective.

### 636. Core Competencies II

Spring. 2 credits. A student may earn a maximum of 6 credits in all enrollments for this course. Interdepartmental with Medicine and Family Practice. P: FMP 602. R: Open only to graduate-professional students in College of Human Medicine.

A weekly seminar addressing core knowledge and skills from an interdisciplinary perspective.

### 637. Core Competencies III

Spring, Summer. 2 credits. A student may earn a maximum of 6 credits in all enrollments for this course. Interdepartmental with Medicine, Pediatrics and Human Development, Family Practice, Surgery, and Obstetrics, Gynecology and Reproductive Biology. P: FMP 602. R: Open only to graduate-professional students in College of Human Medicine.

A weekly seminar addressing core knowledge and skills from an interdisciplinary perspective.

## 640. Advanced Comprehensive Care

Fall, Spring, Summer. 6 credits. A student may earn a maximum of 18 credits in all enrollments for this course. Interdepartmental with Pediatrics and Human Development, Medicine, Family Practice, and Obstetrics, Gynecology and Reproductive Biology.

P: FMP 608, PHD 600, MED 608. R: Open only to graduate-professional students in College of Human Medicine.

Clinical experience in community-oriented primary care. Emphasis on urban and rural underserved populations.

### 691. Research Clerkship

Fall, Spring, Summer. 2 to 6 credits. A student may earn a maximum of 6 credits in all enrollments for this course.

P: HM 690 or approval of community research director. R: Open only to graduate-professional students in College of Human Medicine.

Biological, behavioral, or clinical research project.

#### 810. Introduction to Descriptive and Analytical Epidemiology Fall. 3(3-0)

R: Open only to master's students in Epidemiology or approval of college.

Study of disease from a population perspective as the interaction of host, agent, and environment. Fundamental concepts include case definition, measuring frequency of disease, mortality and morbidity data, and major study designs.

## 812. Causal Inference in Epidemiology

Summer. 3(3-0)

P: HM 810, LCS 829. R: Open only to master's students in Epidemiology or approval of college.

Causal models, criteria, and causality related to study design and analysis in epidemiology. Application of theoretical concepts to the design, analysis, and assessment of epidemiologic research.

## 813. Investigation of Disease Outbreaks

Fall, Spring, Summer. 3 credits.

P: HM 810 or concurrently. R: Open only to master's students in Epidemiology or approval of college. Principles of and practice in investigating disease outbreaks. Field trips required.

## ${\it 814.} \quad {\it Nutritional Epidemiology}$

Fall of even-numbered years. 3(3-0)
P: HM 810 or concurrently. R: Open only to master's
students in Epidemiology or approval of college.
Methodologies used in epidemiologic studies of diet and
health in the context of U.S. and international dietary
patterns. Relationship between diet and specific diseases.

### 815. Epidemiology of Cardiovascular Disease

Spring of odd-numbered years. 3(3-0)
P: HM 810. R: Open only to master's students in
Epidemiology or approval of college.

Survey of methodologies used in epidemiologic studies of cardiovascular diseases. Review of evidence of genetic, environmental, and behavioral causes of cardiovascular disease.

#### 816. Reproductive and Perinatal Epidemiology

Spring of even-numbered years, 3(3-0) P: HM 810 or concurrently. R: Open only to master's students in Epidemiology or approval of college. Epidemiology of adverse health states in pregnancy and the puerperium. Impact of these health states on subsequent child development.

#### 817. Epidemiology of Communicable Diseases

Fall of even-numbered years. 3(3-0) P: HM 810. R: Open only to master's students in Epidemiology or approval of college.

Application of principles of epidemiology to research in communicable diseases relevant to public health in the U.S. and other countries.

#### 818. The Epidemiology of Zoonotic Diseases Spring of odd-numbered years, 3(3-0) Interde-

partmental with Veterinary Medicine.

P: HM 810. R: Open only to master's students in Epidemiology or approval of college.

Human susceptibility to diseases of animals. Modes of transmission, surveillance, and strategies for prevention of specific zoonotic diseases.

#### 819. Spatial Epidemiology and Medical Geography

Spring of even-numbered years. 3(3-0) Interdepartmental with Geography.

P: HM 810. R: Open only to master's students in Epidemiology or approval of college.

Concepts, techniques, and utilization of spatioepidemiologic analyses for human health.

#### 823.Cancer Epidemiology

Summer of odd-numbered years, 3(3-0) P: STT 421, HM 810. R: Open only to master's students in Epidemiology or approval of college.

Basic principles of carcinogenesis. Major etiologic factors, types of malignancies, and biomarkers for susceptibility and exposure. Prevention and early detection of cancer.

#### 824. Injury Epidemiology

Fall of odd-numbered years. 3(3-0) P: HM 810. R: Open only to master's students in Epidemiology or approval of college. Injury epidemiology, control, and prevention.

#### 825. Epidemiologic Modeling

Summer of even-numbered years. 3(3-0) P: HM 810, STT 422. R: Approval of college.

Mathematical modeling of epidemics. Stochastic and chaotic systems approaches. Applications through pc software

#### 829. Design and Conduct of Epidemiological Studies and Clinical Trials

Spring. 3(2-2) Interdepartmental with Large Animal Clinical Sciences. Administered by Large Animal Clinical Sciences.

P: VM 533 or approval of department. R: Open only to graduate students in the colleges of Human Medicine, Osteopathic Medicine, or Veterinary Medicine.

Applied analytical methods in experimental design. Assessment of health and disease status of animal and human populations. Risk assessment and interpretation of clinical trials.

#### Independent Study in Epidemiology 890.

Fall, Spring, Summer. 1 to 3 credits. A student may earn a maximum of 12 credits in all enrollments for this course.

P: HM 810. R: Open only to master's students in Epidemiology or approval of college.

Independent study in areas relevant to epidemiology such as population genetics.

#### 899. Master's Thesis Research

Fall, Spring, Summer. 1 to 3 credits. A student may earn a maximum of 12 credits in all enrollments for this course.

R: Open only to master's students in Epidemiology.

## **HUMAN NUTRITION AND** FOODS

## HNF

Department of Food Science and Human Nutrition College of Agriculture and Natural Resources College of Human Ecology

#### Introduction to Nutrition and Food Science

Fall, Spring, Summer. 3(3-0) Interdepartmental with 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.

#### 300. Experimental Approaches to Foods

P: CEM 143. R: Open only to majors in Dietetics and Foods: Technology and Management. Completion of Tier I writing requirement.

Effects of preparation methods and ingredient substitutions on chemical and physical properties of food constituents. Effects of changes in chemical and physical properties on functional and sensory attributes of

#### 311. Principles of Human Nutrition

Spring. 3(3-0)

P: BCH 200.

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.

#### 320. 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 STT 201. C: STT 201. 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. Statistical interpretation of journal articles. Nutritional epidemiology, nutrient composition, and computer diet analysis. SA: HNF 220

#### Food Consumption Behavior 350.

Fall. 3(3-0)

P: EC 201 or EC 202; ML 302 or concurrently. R: Completion of Tier I writing requirement.

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.

#### 375. Community Nutrition

Fall. 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.

#### 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.

#### 400. Art and Science of Food Preparation

Spring. 1 credit.

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. Offered half of semester.

#### 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.

#### 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, religion, and food related health problems.

## Sensory Assessment of Foods

Spring. 2(1-2)

P: STT 200 or STT 201 or STT 315 or STT 421 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.

## 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 foodservice operations. Menu planning, procurement, and onpremise storage and issue. Production, consumer distribution, safety and sanitation.

#### 441. Management of Foodservice Operations Spring. 2(2-0)

P: CPS 100 or CPS 130 or CPS 131; HNF 440; MGT 310 or concurrently. R: Not open to freshmen and sopho-

Fiscal management of human and material resources in food service operations. Application of manual and electronic data processing strategies to analyze and control costs.

#### 444. Computerized Foodservice Management Laboratory

Spring. 1(0-3)

P: CPS 100 or CPS 130 or CPS 131; HNF 441 or concurrently. 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 precosting, nutrient analysis, cost analysis, and other foodservice applications.