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535. Clinical Skills V  
Spring, Summer. 2(1-3)  
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 and apply advanced concepts in 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)  
P: 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  
Pall. 22-6)  
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(2-0)  
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  
Pall. 2(1-2)  
P: ANT 551, ECO 521, PSH 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(1-2)  
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. 12(0)  
P: HM 543, HM 572, PSH 552, PSH 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  
Pall, Spring, Summer. 10(2-3) 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 field.

582. Mentor Program Year II  
Pall, Spring, Summer. 10(2-3) A student may earn a maximum of 2 credits in all enrollments for this course. R: 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  
Pall, Spring, Summer. 1 to 34 credits. R: Open only to 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  
Pall, Spring, Summer. 4 to 26 credits. 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  
Pall, Spring, Summer. 4 to 12 credits. R: Open only to graduate-professional students in College of Human Medicine. Hospital- and office-based clinical experiences in sub-specialties in medicine and surgery.

609. Core Competencies I  
Pall. 2 credits. R: Open only to 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.

610. Core Competencies II  
Spring. 2 credits. R: Open only to 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.

637. Core Competencies III  
Spring, Summer. 2 credits. R: Open only to 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.

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

810. Introduction to Descriptive and Analytical Epidemiology  
Pall. 3(0-3)  
P: 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. Fundamentals of and practice in investigating the interaction of host, agent, and environment. Epidemiologic 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  
Pall, Spring, Summer. 3 credits. R: Open only to master's students in Epidemiology or approval of college. Survey of methods used in investigating disease outbreaks. Field trips required.

814. Nutritional Epidemiology  
Pall. 3(0-3)  
P: 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. 3(0-3)  
P: 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(0-0)
F: 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(0-0)
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(0-0) Interdepartmental 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(0-0) Interdepartmental with Geography.
P: HM 810. R: Open only to master's students in Epidemiology or approval of college.

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

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

225. Epidemiologic Modeling
Summer of even-numbered years. (3(0-0)
P: HM 810, STT 422. R: Approval of college.
Mathematical modeling of epidemics. Stochastic and chaotic systems approaches. Applications through pc software.

229. Design and Conduct of Epidemiological Studies and Clinical Trials
Spring, 3(2-2) Interdepartmental with Large Animal Clinical Sciences. Managed 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.

290. Independent Study in Epidemiology
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.

289. 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.
P: Open only to master's students in Epidemiology. R: Open only to master's students in Epidemiology.

HUMAN NUTRITION AND FOODS

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

159. Introduction to Nutrition and Food Science
Fall, Spring, Summer. 3(2-0) Interdepartmental with Food Science.
Nutrition needs in life stages from a human ecological perspective. Domestic and international factors affecting the availability of safe, nutritious food supply. Relationships of food choices to health and disease.

300. Experimental Approaches to Foods
Fall.
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 foods.

311. Principles of Human Nutrition
Spring. (3(0-0)
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. (3(2-0)
P: CPS 100 or CPS 120 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.

350. Food Consumption Behavior
Fall. (3(0-0)
P: EC 201 or EC 202; ML 362 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(0-0)
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(0-0)
P: HNF 150 or HNF 311. R: Not open to freshmen. Open only to students in Department of Food Science and Human Nutrition.

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. Production evaluation using sensory techniques. Offered half of semester.

404. Food Product Development
Fall. (3(0-0)
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. Socio-cultural Aspects of Food
Spring. (3(0-0)
P: STT 300 or STT 315 or STT 421 or STT 454; 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.

409. Foodservice Operations
Fall. (3(0-0)
P: HNF 150 or HNF 311; HNF 200. R: Not open to freshmen and sophomores. Principles, processes and control techniques in foodservice operations. Menu planning, procurement, and on-premises storage and issue. Production, consumer distribution, safety and sanitation.

441. Management of Foodservice Operations
Spring. (3(0-0)
P: CPS 100 or CPS 130 or CPS 131; HNF 440; GRT 310 or concurrently. R: Not open to freshmen and sophomores.
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. (3(0-0)
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.