

**Descriptions —Human Environment and Design of Courses**

**851. Preservation of Michigan and Midwestern Interiors**

Spring of odd-numbered years. 3(3-0)

R: Open only to graduate students in Interior Design and Human Environment majors.

Nineteenth-century interior architecture in Michigan and the midwest. Evaluating physical condition, technology of production, identification of sources and design solutions. Field trips required.

**852. Archival Research and Documentation in Interior Preservation**

Spring of even-numbered years. 3(3-0)

R: Open only to graduate students with preservation emphasis in Interior Design and Human Environment. Research techniques used in the preservation and restoration of historic structures.

**861. Research in Merchandising Management**

Fall. 3(3-0)

P: Research methods course.

Merchandising management research methodology. Implications of research for future directions in merchandising management.

**862. Merchandising Management: Human Resources**

Spring. 3(3-0)

P: HED 861.

Theory, research, and applications in human resource management in merchandising.

**863. Merchandising Management: Consumer Behavior**

Fall. 3(3-0)

Consumer behavior theory, application of consumer behavior models to merchandising management.

**864. International Retailing Behavior**

Spring. 3(3-0)

P: HED 861 or approval of department.

Global retail systems. Comparison of United States and foreign retail systems.

**865. Japanese Retail Distribution Systems**

Summer. 3(3-0)

Distribution of consumer products in Japan. Changing retail formats leading to the emergence of discount retailers. Strategic alliances and vertical channel systems. Comparative US/Japanese structure.

**890A. Supervised Independent Study in Merchandising Management**

Fall, Spring, Summer. 1 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.

Independent study in topics related to consumer behavior, human resource management, or international merchandising management.

**890B. Supervised Independent Study in Apparel and Textiles**

Fall, Spring, Summer. 1 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.

Independent study in topics related to apparel design, historic costume and textiles, museum collections, or human behavior and ecological relations.

**890C. Supervised Independent Study in Interior Design and Human Environment**

Fall, Spring, Summer. 1 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.

Independent study in topics related to facilities design and management, human shelter, or interior design preservation and conservation.

**891A. Topics in Merchandising Management**

Fall, Spring, Summer. 3(3-0) A student may

earn a maximum of 6 credits in all enrollments for this course.

Selected topics related to consumer behavior, human resource management, or international merchandising management.

**891B. Topics 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 in Merchandising Management, Interior Design and Human Environment, and Apparel and Textiles.

Selected topics related to apparel design, historic costume and textiles, museum collections, or human behavior and ecological relations.

**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.

**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**

**HM**

**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 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. 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. 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.

**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. 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.

**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. 1 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: 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.

**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. 2 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. 3 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(2-0)

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 the 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 within 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 credit. 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 credit. 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 sub-specialties in medicine and surgery.

## Descriptions — Human Medicine of Courses

### 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

Fall. 3(3-0)  
P: HM 810, LCS 829. R: Open only to master's students in the Epidemiology major 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.

### 814. Nutritional Epidemiology

Fall of odd-numbered years. 3(3-0)  
P: HM 810 or concurrently. R: Open only to master's students in the Epidemiology major 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

Summer of even-numbered years. 3(3-0)  
P: HM 810. R: Open only to master's students in the Epidemiology major 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

Summer of odd-numbered years. 3(3-0)  
P: HM 810 or concurrently. R: Open only to master's students in the Epidemiology major 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) 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(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 spatio-epidemiologic analyses for human health.

### 821. Epidemiology of the Health and Cognitive Status of the Elderly

Fall of odd-numbered years. 3(3-0)  
P: HM 810 or concurrently. Interpretation of research on the health and cognitive status of elderly. Interpretation of statistical tests of hypotheses. Conclusions based on data. SA: FMP 821

### 823. Cancer Epidemiology

Fall of even-numbered years. 3(3-0)  
P: STT 421, HM 810. R: Open only to master's students in the Epidemiology major 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

Spring of odd-numbered years. 3(3-0) Interdepartmental with Physics.  
P: HM 810, STT 422. R: Approval of college. Mathematical modeling of epidemics. Stochastic and chaotic systems approaches. Applications through personal computer software.

### 826. Research Methods in Epidemiology

Fall. 3(3-0)  
P: STT 422 R: Open only to master's students in Epidemiology. Approval of college. Analyses of epidemiologic and clinical data applying statistical methods, based on logistic and survival models, using standard 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.

### 890. 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.

### 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

### 150. 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

Spring. 4(2-4)  
P: CEM 143. R: Open only to juniors or seniors or graduate students in the Department of Food Science and Human Nutrition. 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(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.