HUMAN MEDICINE  HM

College of Human Medicine

101 Introduction to Public Health
Spring. 3(3-0)

491 Special Topics in Bioethics and Medical Humanities
Fall, Spring. 2 to 7 credits. R: Not open to freshmen or sophomores. Special topics in ethics and humanities of health care, proposed by faculty on a group study basis.

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. Administered by Human Medicine. RB: One year of graduate-professional program in College of Human Medicine.
Field experience in primary care.

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

513 Neurological Domain
Fall. 3(3-0) RB: Not open to first year students. R: Open to graduate-professional students in the College of Human Medicine.
Basic sciences applied to clinically relevant situations. Problem-based small group experiences.

515 Cardiovascular Domain
Spring. 4(4-0) RB: Not open to first year students. R: Open to graduate-professional students in the College of Human Medicine.
Basic sciences applied to clinically relevant situations. Problem-based small group experiences.

516 Disorders of Thought, Emotion, and Behavior Domain
Fall. 4(4-0) RB: Not open to first year students. R: Open to graduate-professional students in the College of Human Medicine.
Basic science applied to clinically relevant situations. Problem-based small group experiences.

517 Musculoskeletal Domain
Fall. 2(2-0) RB: Not open to first year students. R: Open to graduate-professional students in the College of Human Medicine.
Basic science applied to patient cases. Problem-based learning small group teaching.

525 Pulmonary Domain
Spring. 3(3-0) RB: Not open to first year students. R: Open to graduate-professional students in the College of Human Medicine.
Basic sciences applied to clinically relevant situations. Problem-based learning small group experiences.

526 Urinary Tract Domain
Spring. 3(3-0) RB: Not open to first year students. R: Open to graduate-professional students in the College of Human Medicine. Basic sciences applied to clinically relevant situations. Problem-based learning small group experiences.

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

528 Metabolic and Endocrine and Reproductive Domain
Spring. 3 credits. RB: Block I. Not open to first year students. R: 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: Open only to graduate-professional students in the 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) RB: HM 531 R: Open only to graduate-professional students in the College of Human Medicine.
Adult screening physical examination and its integration with data-gathering skills.

533 Clinical Skills III
Summer. 2(2-0) RB: HM 532 R: Open to graduate-professional students in the College of Human Medicine.
Age specific screening examinations and integration with data-gathering skills. Skill-oriented content will be supplemented with theoretical material covering the human lifespan.

534 Clinical Skills IV
Fall. 2(1-2) RB: 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) RB: HM 535 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.

537 Topics in Reproductive Health
Fall. 1(1-0) R: Open only to graduate-professional students in the College of Human Medicine, the College of Osteopathic Medicine, and to graduate students in the College of Nursing.
Pre-clinical focus on topics of reproductive health.

539 Hematopoietic/Neoplasia Domain
Fall. 4(4-0) RB: Not open to first year students. R: Open to graduate-professional students in the College of Human Medicine.
Learn and apply advanced concepts of the basic sciences to clinically relevant situations. Problem-based learning small group experiences.

546 The Social Context of Clinical Decisions
Fall. 1(1-0) RB: 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) RB: 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) RB: 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.

550 International Law and Ethics of Human Subject Research
Fall. 2(2-0) R: Open to graduate students or graduate-professional students or approval of department.
Interdisciplinary understanding of the substance and interrelationships of international law and ethics in protecting human subjects of biomedical and behavioral research.

561 Basic Principles of Pathology
Spring. 2 credits. Interdepartmental with Osteopathic Medicine. Administered by Human Medicine. R: Open only to graduate-professional students in the colleges of Human and Osteopathic Medicine. SA: PTH 542
Fundamental pathologic processes. Clinical applications.

571 Integrative Clinical Correlations I
Fall. 2(2-0) RB: (ANT 551 or concurrently) and (BMB 521 or concurrently) and (BMB 521 or concurrently) R: Open only to graduate-professional students in the 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. 1(1-0) RB: (HM 571 or concurrently) and (ANT 552 or concurrently) and (ANT 552 or concurrently) and (PTH 542 or concurrently) R: Open only to graduate-professional students in the College of Human Medicine.
Correlation of the principles of the basic biological and behavioral sciences within the disciplines of clinical medicine using case presentations.

581 Mentor Program
Fall. 1(0-2) R: Open only to graduate-professional students in the College of Human Medicine.
Human Medicine—HM

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. R: Open 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. Current trends.

590 Special Topics in Medicine
Fall, Spring, Summer. 1 to 6 credits. A student may earn a maximum of 34 credits in all enrollments for this course. R: Open to students in the College of Human Medicine. Special topics related to healthcare covering a wide variety of disciplines and fields

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: Open only to graduate-professional students in the 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.

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. RB: 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.

609 Laboratory Medicine Clerkship
Fall, Spring, Summer. 1 to 8 credits. A student may earn a maximum of 16 credits in all enrollments for this course. Interdepartmental with Osteopathic Medicine. Administered by Human Medicine. R: Open only to graduate-professional students in College of Human Medicine or Osteopathic Medicine. SA: PTH 609 Laboratory procedures. Correlation of laboratory data with morphologic abnormalities in patients with pathophysiology.

610 Pathology Clerkship
Fall, Spring, Summer. 1 to 8 credits. A student may earn a maximum of 12 credits in all enrollments for this course. Interdepartmental with Osteopathic Medicine. Administered by Human Medicine. R: Open only to graduate-professional students in College of Human Medicine or Osteopathic Medicine. SA: PTH 608 Anatomic and clinical pathology with emphasis on clinical-pathological correlation. Conducted in pathology departments of affiliated hospitals.

629 Leadership in Medicine for Underserved or Vulnerable Communities
Spring. 6 credits. P: PHD 600 and MED 608 and FMP 608 and FMP 608 and PSC 608 and OGR 608 and SUR 608 R: Open to graduate-professional students in the College of Human Medicine. Approval of college. SA: MED 628 Issues involved in securing access to medical care and community resources for families in medically underserved communities.

631 Advanced Leadership in Medicine for Underserved or Vulnerable Communities
Spring. 6 credits. P: HM 629 R: Open to graduate-professional students in the College of Human Medicine. Approval of college. SA: MED 631
Continuation of HM 629. Medical care of an underserved or vulnerable population in a rural, urban, or international setting. Development of abilities to intervene in the public health issues of this population.

635 Core Competencies I
Fall, Spring, Summer. 2(0-2) A student may earn a maximum of 6 credits in all enrollments for this course. R: Open to graduate-professional students in the College of Human Medicine.
Core knowledge and skills from an interdisciplinary perspective.

636 Core Competencies II
Fall, Spring, Summer. 2(0-2) A student may earn a maximum of 6 credits in all enrollments for this course. R: Open to graduate-professional students in the College of Human Medicine.
Core knowledge and skills from an interdisciplinary perspective.

637 Core Competencies III
Fall, Spring, Summer. 2(0-2) A student may earn a maximum of 6 credits in all enrollments for this course. R: Open to graduate-professional students in the College of Human Medicine.
Core knowledge and skills from an interdisciplinary perspective.

640 Service Learning In the Community
Fall, Spring, Summer. 1(1-0) R: Open to graduate-professional students in the College of Human Medicine. Demonstrate preparation and planning to provide services which respond to community need. Participate for 40 hours with community organization. Demonstrates reflectivity on participation in services.

641 Clinical Skills Competence Experience
Fall, Spring, Summer. 2 to 12 credits. A student may earn a maximum of 12 credits in all enrollments for this course. R: Approval of college. Review of communication skills, history-taking, and physical examination skills in faculty-observed patient encounters.

691 Research Clerkship
Fall, Spring, Summer. 2 to 12 credits. A student may earn a maximum of 12 credits in all enrollments for this course. RB: (HM 690) or approval of community research director. R: Open only to graduate-professional students in the College of Human Medicine. Biological, behavioral, or clinical research project.

801 Introduction to Public Health
Fall. 3(3-0) RB: Academic or professional background in public health or public health-related discipline. Undergraduate level math or statistics course work. R: Open to masters students in the Public Health major or in the Public Health Specialization.
Philosophy and concepts of the discipline of public health. History and development of the profession. Ethical, legal and political considerations. Provide first introduction to core public health areas.

802 Biostatistics for Public Health
Fall. 3(3-0) RB: Academic or professional background in public health or public health-related discipline, undergraduate level math or statistics course work. R: Open to masters students in the Public Health major or in the Public Health Specialization.

803 Epidemiology and Public Health
Fall. 3(3-0) RB: Academic or professional background in public health or public health-related discipline, undergraduate level math or statistics course work. R: Open to masters students in the Public Health major or in the Public Health Specialization. Not open to students with credit in EPI 810 or EPI 811.
Distributions and determinants of disease in populations. Epidemiologic research, quantitative methods, study designs pros/cons.

804 Public Health Administration
Spring. 3(3-0) RB: Academic or professional background in public health or public health-related discipline, undergraduate level math or statistics course work. R: Open to masters students in the Public Health major or in the Public Health Specialization.
Planning, organization, administration, management, evaluation and policy analysis of public health. Legal and ethical considerations of public health.

805 Social and Behavioral Aspects of Public Health
Spring. 3(3-0) RB: Academic or professional background in public health or public health-related discipline, undergraduate level math or statistics course work. R: Open to masters students in the Public Health major or in the Public Health Specialization.
Concepts and methods of social and behavioral sciences applied to public health problems and issues.

806 Environmental Factors of Health
Spring. 3(3-0) RB: Academic or professional background in public health or public health-related discipline, undergraduate level math or statistics course work. R: Open to masters students in the Public Health major or in the Public Health Specialization.
Biological, physical and chemical factors that affect health of populations. Regulatory approaches to environmental hazards. Potential impact of environmental agents on health and preventive management approaches.

820 Humanistic and Social Perspectives on Health
Fall. 3(3-0) R: Open only to students in the M.A. program in Bioethics, Humanities, and Society. SA: HL 820 Multidisciplinary perspectives on health care and medicine. Linkages among the humanities, social sciences and the sciences.

830 Practical Applications of Public Health Law
Fall of odd years. 3(3-0) P: HM 801 RB: Academic or professional background in public health or public health related discipline. R: Open to students in the Public Health major or approval of college.
Overview of legal basis of public health authority. Use of law to direct public health practice.
831 Communicable Disease in Public Health
Fall of even years. 3(3-0) P: HM 801 and HM 803 RB: Academic or professional background in public health or public health related discipline. Undergraduate level math or statistics course work. R: Open to students in the Public Health major or approval of college.

832 Global Public Health
Spring of even years. 3(3-0) RB: Academic or professional background in public health or public health related discipline. Undergraduate level math or statistics course work. R: Open to students in the Public Health major or approval of college.
Factors and dynamics that affect global public health. Application of public health principles and policies in international settings. Key international stakeholders and their roles in global public health.

833 Introduction to Pharmaceutical Counterfeiting and Public Health
Fall of odd years. 3(3-0) P: HM 801 RB: Academic or professional background in public health or public health related discipline. R: Open to students in the Public Health major or approval of college.
General principles of counterfeiting, counterfeit pharmaceuticals, and how it affects public health. Scope, policy, supply chain management, and health effects are examined using current case examples.

834 Advanced Counterfeit Pharmaceuticals Readings
Spring of even years. 3(3-0) P: HM 801 and HM 833 RB: Academic or professional background in public health or public health related discipline. R: Open to students in the Public Health major or approval of college.
Advanced topics on the impact of counterfeit pharmaceuticals on public health.

835 Independent Study in Public Health
Fall: Spring, Summer. 1 to 9 credits. A student may earn a maximum of 9 credits in all enrollments for this course. R: Open to students in the Public Health major or approval of college.
Independent study in areas relevant to public health.

836 Comparative Global Healthcare Systems
Spring. 3(3-0) RB: Undergraduate degree in science or applied science with experience in a healthcare clinical setting. R: Open to students in the Public Health major or approval of college.
Public health and culture, environment, psychosocial and economic issues. Healthcare systems and health policies. Community health assessments.

837 Poverty and Public Health
Fall of even years. 3(3-0) P: HM 801 RB: Academic or professional background in public health or public health related discipline. Undergraduate level math or statistics course work. R: Open to students in the Public Health major or approval of college.
Concepts of health and poverty and their interrelatedness from a global and public health perspective. Roles of international agencies, national policy, gender, socioeconomic status, race, ethnicity, culture, access to resources, and conflict. Role of public health programs in the achievement and maintenance of healthy populations. Struggle to eliminate poverty.

838 Cultural Aspects of Public Health Practice
Fall. 3(3-0) RB: Academic or professional background in public health and/or public health related discipline, undergraduate level math or statistics coursework. R: Open to students in the Public Health major or approval of college.
Cultural concepts that shape health and illness. Major issues and trends in global health. Culture and socioeconomic factors related to work with diverse populations. Applications for public health practice.

839 Water and Public Health: A Global Perspective
Spring of odd years. 3(3-0) RB: Academic or professional background in public health and/or public health related discipline. R: Open to students in the Public Health major and/or in the Public Health Specialization or approval of college.
Role of water in public health, focusing on the global crisis of water quantity and quality. Specific water "hot spots" primarily the Middle East, Africa, Asia, the Western and Southern U.S., and Mexico.

840 Public Health Finance
Spring of odd years. 3(3-0) RB: Academic or professional background in public health and/or public health related discipline, experience with databases. R: Open to students in the Public Health major or approval of college.
Issues surrounding financial administration of health service organizations. Pragmatic side of healthcare finance, incorporating healthcare economics.

841 Public Health Policy
Fall. 3(3-0) RB: Academic or professional background in public health and/or public health related discipline R: Open to students in the Public Health major or in the Public Health Specialization or approval of college.
U.S. healthcare delivery and financing systems and their contributions to improving health status.

842 Introduction to Public Health Informatics
Fall of even years. 3(3-0) RB: Academic or professional background in public health and/or public health related discipline, experience with databases R: Open to students in the Public Health major or approval of college.
Survey of information technology applications in the public health domain, functions and tools used to generate public health knowledge. Disease surveillance platforms and web-based public health education, ethical and legal issues surrounding data exchange.

843 Methods in Public Health Informatics
Fall of even years. 3(3-0) RB: Academic or professional background in public health and/or public health related discipline, experience with databases R: Open to students in the Public Health major or approval of college.
Theory, processes and applications of management information systems and how they relate to public health mgmt, project management skills for information system implementation and evaluation.

844 Legal/Ethical Issues in Public Health Informatics
Spring of odd years. 3(3-0) RB: Academic or professional background in public health and/or public health related discipline, experience with databases R: Open to students in the Public Health major or approval of college.
Focus on legal-ethical parameters affecting application of health technology.

845 Informatics and Information Technology
Spring of odd years. 3(3-0) P: HM 842 and HM 843 RB: Academic or professional background in public health and/or public health related discipline, experience with databases R: Open to students in the Public Health major or approval of college.
Information technology for health informatics systems, principles of relational database systems, operations, information systems, data sets, data standards and classification systems.

846 Advanced Topics in Public Health Informatics Management
Summer of odd years. 3(3-0) P: HM 842 and HM 843 RB: Academic or professional background in public health and/or public health related discipline, experience with databases R: Open to students in the Public Health major or approval of college.
Research, evaluation and applications of informatics in public health and public health research.

847 Healthcare in Ghana: A Public Health Perspective
Spring. 4(4-0) Sumner. Abroad. P: HM 848 RB: Academic or professional background in public health and/or public health related discipline, undergraduate level health-related discipline R: Open to students in the Public Health major and open to juniors or seniors. Approval of college; application required.
Overview of major public health issues and the health care system, both Western and traditional, in Ghana. Health status indicators and determinants; major programs/strategies; organization of the health care system, access to and payment for care; role, image and status of health care providers; interface between Western and traditional medicine.

848 Preparation for Healthcare in Ghana
Spring. 1(1-0) Preparation for public health study abroad experiences in Ghana.
849 Healthcare in Brazil: A Public Health Perspective
Summer. 8(8-0) Summer: Abroad. P: HM 850 RB: Academic or professional background in public health and/or public health related discipline; undergraduate level health-related discipline R: Open to students in the Public Health major and open to juniors or seniors. Approval of college; application required.
Overview of major public health issues and the health care system in Brazil. Health status indicators and determinants of health and the legal basis and structure of the Brazilian health care system and social safety net. Includes field experiences with local health care providers and political leaders.

850 Preparation for Healthcare in Brazil Spring. 1(1-0) Preparation for public health study abroad experiences in Brazil.

851 eHealth and Telemedicine in Public Health Spring of odd years. 3(3-0) RB: Academic or professional background in public health and/or public health related discipline, experience with databases R: Open to students in the Public Health major or approval of college.
Application of information and telecommunication technologies to the provision of healthcare including the use of mobile telephones in mHealth (Mobile Health). Benefits and applications of eHealth, telemedicine and mHealth both domestically and internationally.

852 Outbreak Investigations in Public Health Spring of odd years. 3(3-0) RB: Academic or professional background in public health and/or public health related discipline, experience with databases R: Open to students in the Public Health major or approval of college.
Process for conducting public health outbreak investigations including the role of local, state, federal and international agencies. Legal, political, media and law enforcement issues.

853 Public Health Program/Intervention Evaluation Fall of even years. 3(3-0) P: HM 801 RB: Academic or professional background in public health and/or public health related discipline, experience with databases R: Open to graduate students in the Public Health major or approval of college.
Introduce public health program evaluation methods/tools. Causal inference criteria, standard evaluation guidelines, procedural and outcome evaluation methods and needs assessment and performance monitoring tools. Integrates epidemiology, biostatistics and public health knowledge pertaining to program evaluation.

854 Health Equity Framework For Public Health Practice Spring of odd years. 3(3-0) RB: Academic or professional background in Public Health and or public health related discipline R: Open to students in the Public Health major or in the Public Health Specialization or approval of college.
Social justice and health equity framework for the practice of public health with analysis of persistent health disparity across race, class, gender, and other forms of difference.

855 Environmental Public Health: Assessment and Response Spring of odd years. 3(3-0) P: HM 806 and (HM 802 or HM 803) RB: Academic or professional background in public health and/or public health related discipline, experience with public health statistics. R: Open to students in the Public Health major or approval of college.
Provide students with a conceptual foundation, practical skills and exposure to community-based methodologies for identifying and assessing environmental issues and developing strategies for improvement.

856 International Public Health Experience in Mexico Spring of odd years. 1(1-0) RB: Academic or professional background in public health and/or public health related discipline, experience with databases R: Open to students in the Public Health major or approval of college. C: PRR 410 concurrently.
International public health field experience designed to provide students exposure to the culture and health problems facing local communities through hands-on practical experience in Mexico.

857 Occupational Health and Safety in Public Health Spring of odd years. 3(3-0) RB: Academic or professional background in public health and/or public health related discipline, experience with databases R: Open to students in the Public Health major or approval of college.
Physical, biological and chemical hazards in terms of recognition, assessment, control of workplace hazards. Current regulations, standards, personal protective equipment, monitoring equipment and career opportunities are covered.

858 Making a Community Diagnosis Spring of odd years. 1(1-0) RB: Academic or professional background in public health and/or public health related discipline R: Open to students in the Public Health major or approval of college.
Concept and methods used in conducting community assessments (nationally and globally) – exploring key health indicators, environmental factors and community resources used to identify problems in a population.

859 Migrant, Refugee and Mobile Populations: Impact on Public Health Fall of odd years. 3(3-0) RB: Academic or professional background in public health and/or public health related discipline, experience with databases R: Open to students in the Public Health major or approval of college.
Core public health issues prevalent and sometimes elusive in immigrant, refugee and mobile populations. Historical context, health care delivery, access and other barriers to preventive care, social justice, cultural competence, health policy, program challenges, measurement and data assimilation.

860 Introduction to Public Health Nutrition Spring of odd years. 3(3-0) RB: Academic or professional background in public health and/or public health related discipline, experience with databases R: Open to students in the Public Health major or approval of college.
Biological principles of nutrition and physical activity with public health focus. Nutritional issues in specific populations. Introduction to malnutrition, current issues in nutrition, role of nutrition in chronic diseases, and nutrition policy and intervention programs.

861 Parasitic Diseases and Public Health in Developing Countries Spring of even years. 3(3-0) RB: Academic or professional background in public health and/or public health related discipline, knowledge of parasitology R: Open to students in the Public Health major or approval of college.
Nature, impact and control of parasitic diseases in developing countries.

862 Intersections of Human and Animal Health Summer of odd years. 3(3-0) RB: Academic or professional background in public health and/or public health related discipline, experience with databases R: Open to graduate students in the Public Health major or approval of college.
Epidemiology and preventive medicine disease control methods for the control of infectious diseases and environmental health issues shared by animals and people.

863 Vitamins and Minerals: Risks to Public Health Spring of even years. 3(3-0) RB: Academic or professional background in public health and/or public health related discipline R: Open to students in the Public Health major or approval of college.
Introduction to public health issues in vitamin and mineral nutrition, including biological roles, human requirements, and consequences of deficiency and excesses. Current issues regarding specific micronutrient status in U.S. and worldwide. Current and proposed population-based interventions.

864 U.S. Healthcare Access and Delivery for Migrant, Refugee, and Mobile Populations Summer of even years. 3(3-0) RB: Academic or professional background in public health and/or public health related discipline R: Open to students in the Public Health major or approval of college.
Impact and challenges posed to U.S. Public Health system by migrant, refugee and mobile populations entering the United States and core public health issues they face. Barriers to prevention including health care access and delivery, social justice, cultural and language competence, workplace and environmental factors. Issues in measurement and data assimilation.

865 Demography, Population Dynamics and Public Health Spring of even years. 3(3-0) RB: Academic or professional background in public health and/or public health related discipline R: Open to students in the Public Health major or approval of college.
Methods and concepts in the study of population change. Analytical approaches for analyzing and interpreting population changes. Applications in planning, policy-making and administration.

866 Integrated Research Study Design and Informatics Fall of odd years. 3(3-0) RB: Academic or professional background in public health and/or public health related discipline, nursing or allied health R: Open to students in the Public Health major or approval of college.
Introduction to clinical trial phases, research design, informatics aims, informatics platforms and data lifecycle.
Master's Thesis Research
Fall, Spring, Summer. 1 to 9 credits. A student may earn a maximum of 12 credits in all enrollments for this course.
Master's thesis research.