MEDICAL SCIENCES - MEDICAL SCHOOL (MED SC-M)

MED SC-M 699 — DIRECTED STUDY
1-9 credits.
Requisites: Open only to Med stdts
Course Designation: Level - Advanced
L&S Credit - Counts as Liberal Arts and Science credit in L&S
Grad 50% - Counts toward 50% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions

MED SC-M 703 — INTEGRATED HEMATOLOGY SYSTEM
3 credits.
Integrated hematology pathophysiology integrated with pharmacology, nutrition, and pathology.
Requisites: Open to Grad stdts by cons inst coordinator
Course Designation: Grad 50% - Counts toward 50% graduate coursework requirement
Repeatable for Credit: No

MED SC-M 706 — INTEGRATED CARDIOVASCULAR SYSTEM
4 credits.
Cardiovascular pathophysiology integrated with pharmacology, nutrition, pathology, public health and ethics.
Requisites: Open to Grad stdts by cons inst coordinator
Course Designation: Grad 50% - Counts toward 50% graduate coursework requirement
Repeatable for Credit: No

MED SC-M 707 — INTEGRATED GASTROINTESTINAL & HEPATIC SYSTEMS
3 credits.
Combines pathophysiology, pathology, pharmacology, neoplasia and nutrition.
Requisites: Open to Grad stdts by cons inst and coordinator
Course Designation: Grad 50% - Counts toward 50% graduate coursework requirement
Repeatable for Credit: No

MED SC-M 709 — INTEGRATED RENAL SYSTEM
3 credits.
Integrated renal pathophysiology integrated with pharmacology, nutrition, pathology, public health and ethics.
Requisites: Open to Grad stdts by cons inst and coordinator
Course Designation: Grad 50% - Counts toward 50% graduate coursework requirement
Repeatable for Credit: No

MED SC-M 711 — INTEGRATED ENDOCRINOLOGY AND REPRODUCTIVE HEALTH
3 credits.
Combines pathophysiology, pathology, pharmacology, neoplasia and nutrition.
Requisites: Open to Grad stdts by cons inst and coordinator
Course Designation: Grad 50% - Counts toward 50% graduate coursework requirement
Repeatable for Credit: No

MED SC-M 715 — INTEGRATED RESPIRATORY SYSTEM
4 credits.
Respiratory pathophysiology integrated with pharmacology, nutrition, pathology, public health and ethics.
Requisites: Open to Grad students by cons inst and coordinator
Course Designation: Grad 50% - Counts toward 50% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2017

MED SC-M 717 — PHARMACOLOGY I
4 credits.
Lectures and discussions. For students in medicine.
Requisites: Completion of the 1st year medical school curriculum
Course Designation: Grad 50% - Counts toward 50% graduate coursework requirement
Repeatable for Credit: No

MED SC-M/POP HLTH 719 — SEMINAR-CONTEMPORARY ISSUES IN HEALTH CARE
1-2 credits.
Lecture. Social, economic and political aspects of health care delivery, including health needs and demands, doctor shortage, health team, models of delivering care, health planning, cost and financing, quality of care and international systems.
Requisites: Graduate or professional standing
Course Designation: Grad 50% - Counts toward 50% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2008

MED SC-M 721 — NEOPLASTIC DISEASES
2 credits.
Requisites: Open to Grad stdts by cons inst coordinator
Course Designation: Grad 50% - Counts toward 50% graduate coursework requirement
Repeatable for Credit: No

MED SC-M 724 — INTEGRATED DERMATOLOGY
1 credit.
Addresses the anatomy and function of the skin and offers an overview of diseases that impact the skin.
Requisites: Standing as med 1 student
Course Designation: Grad 50% - Counts toward 50% graduate coursework requirement
Repeatable for Credit: No
MED SC-M 726 — PSYCHIATRY: INTERPERSONAL AND BIOPSYCHOSOCIAL ASPECTS
1 credit.

Advances understanding of medical models that integrate disease, health and patients in a systems manner. Examines common psychiatric disorders and their occurrence. Demonstrates usefulness of population and public health perspectives and focuses on developing advanced skills in interviewing psychiatric patients.

Requisites: Med Sc-M 716
Course Designation: Grad 50% - Counts toward 50% graduate coursework requirement
Repeatable for Credit: No

MED SC-M 727 — PHARMACOLOGY II
2 credits.

Continuation of 717.
Requisites: All basic sci courses taught in the 1st yr and the 1st semester of the 2nd yr of the Med Schl curriculum
Course Designation: Grad 50% - Counts toward 50% graduate coursework requirement
Repeatable for Credit: No

MED SC-M 728 — INTEGRATED MUSCULOSKELETAL SYSTEM
2 credits.

Provides an understanding of the musculoskeletal system's function and response to injury and disease.
Requisites: Standing as a year 2 medical student (completion of year 1 medical school curriculum)
Course Designation: Grad 50% - Counts toward 50% graduate coursework requirement
Repeatable for Credit: No

MED SC-M 729 — INTEGRATED NEUROSCIENCES
3 credits.

Describes the normal and abnormal function of the nervous system, including changes in cognition, emotion and behavior.
Requisites: Standing as a year 2 medical student (completion of year 1 medical school curriculum)
Course Designation: Grad 50% - Counts toward 50% graduate coursework requirement
Repeatable for Credit: No

MED SC-M 731 — MEDICAL NEUROANATOMY
3 credits.

multidisciplinary basic science of medicine course that covers the development, structure, and function of the nervous system with the purpose of preparing future physicians to understand and diagnose common neurological syndromes. The course covers general principles of the development, connectivity, and blood supply of the central and peripheral nervous system. Course sessions will cover both regions and functions of the nervous system.
Requisites: Open to Graduate students and by consent of instructor
Course Designation: Grad 50% - Counts toward 50% graduate coursework requirement
Repeatable for Credit: No

MED SC-M 733 — COMPLEMENTARY MEDICINE: IMPLICATIONS FOR CLINICAL PRACTICE
1 credit.

This elective course will cover the fundamentals of psychoneuroimmunology; meditation; traditional chinese medicine; botanical medicine; ayurveda; homeopathy; massage, therapeutic touch and reiki; chiropractic, osteopathic and cranial sacral therapy; art therapy; integration of complementary medicine into a mainstream practice.
Requisites: 1st or 2nd yr Med st
Course Designation: Grad 50% - Counts toward 50% graduate coursework requirement
Repeatable for Credit: No

MED SC-M 734 — CLINICAL NUTRITION IN HUMAN HEALTH AND DISEASE
1 credit.

The course covers the following topics: Nutrition assessment and support; malnutrition; eating disorders; nutritional consequences of alcoholism; obesity; nutrition across the life cycle; nutrition of chronic diseases, and nutrition fads.
Requisites: Must be Grad stdt or Med stdt
Course Designation: Grad 50% - Counts toward 50% graduate coursework requirement
Repeatable for Credit: No

MED SC-M 735 — MEDICAL SPANISH FOR HEALTH SCIENCE STUDENTS
1 credit.

This course is offered for health science students with beginning or intermediate Spanish proficiency who want to acquire medical interviewing, physical examination and cultural competency skills to enhance their ability to provide care for Spanish-speaking patients and their families.
Requisites: Med, nursing, pharm, vet med stdts who have had prev Spanish lang instruction
Course Designation: Grad 50% - Counts toward 50% graduate coursework requirement
Repeatable for Credit: No

MED SC-M 740 — OVERVIEW OF RURAL HEALTH
1 credit.

This elective course will introduce students to key concepts of rural medicine and especially of rural Wisconsin.
Requisites: Health professional or related program enrollment with course director permission
Course Designation: Grad 50% - Counts toward 50% graduate coursework requirement
Repeatable for Credit: No
MED SC-M 747 — PERSUASION: THE ART OF EFFECTIVELY CONVEYING HEALTH INFORMATION
1 credit.

Effectively presenting knowledge is an important skill in the health sciences, both to those in our fields as well as those in other arenas. Learn how to write clear, engaging, and visually striking slides conveying medical information as well as interact well with those slides. Become more comfortable with speaking about health sciences topics, whether your listeners are professional colleagues or general audiences. Learn how to facilitate health discussions in a manner which is valuable for all participants. This course combines discussion with professionally fulfilling presentations by the participants to try out their skills and receive valuable, supportive feedback from their colleagues. This course ties in deeply with those in health sciences community engagement and advocacy training “threads” and is essential for anyone looking to influence population health. Become an effective and engaging presenter through this course!
Requisites: Currently enrolled in a health professions program (MD, PA, PT, RN, Pharmacy, Genetic Counseling, MPH, OT)
Course Designation: Grad 50% - Counts toward 50% graduate coursework requirement
Repeatable for Credit: No

MED SC-M 751 — FOUNDATIONS OF MEDICINE 1
3 credits.

Basic concepts in several disciplines that underlie the practice of medicine. Themes include cellular injury, tissue repair, inflammation, neoplasia, pharmacodynamics, drug disposition, peripheral nervous system pharmacology, life cycle nutrition and basic concepts regarding obesity.
Requisites: Standing as med 2 student (completion of year 1 Medical School curriculum)
Course Designation: Grad 50% - Counts toward 50% graduate coursework requirement
Repeatable for Credit: No

MED SC-M/M & I 755 — FOUNDATIONS OF MEDICINE 2
3 credits.

Addresses the basic principles of medical microbiology and the infectious diseases involving the cardiovascular, respiratory, renal and dermatologic systems and related any-microbial therapies.
Requisites: Standing as med 2 student (completion of year 1 Medical School curriculum)
Course Designation: Grad 50% - Counts toward 50% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2017

MED SC-M 757 — FOUNDATIONS OF MEDICINE 3
3 credits.

Addresses the basic principles of virology and parasitology and the infectious diseases involving the gastrointestinal, musculoskeletal and central nervous systems and related antimicrobial therapies.
Requisites: Med Micro 701
Course Designation: Grad 50% - Counts toward 50% graduate coursework requirement
Repeatable for Credit: No

MED SC-M 759 — FOUNDATIONS OF MEDICINE 4
1 credit.

Addresses several advanced concepts in medicine through themes that incorporate multisystem perspectives.
Requisites: Standing as a year 2 med student (completion of year 1 medical school curriculum)
Course Designation: Grad 50% - Counts toward 50% graduate coursework requirement
Repeatable for Credit: No

MED SC-M/LAW/NURSING 768 — CONSUMER HEALTH ADVOCACY AND PATIENT-CENTERED CARE CLINICAL
1-7 credits.

Interdisciplinary health advocacy clinical supervised by diverse professional staff. Provide broad advocacy to patients with life-threatening and serious chronic illnesses. Advocacy topics include: medical decision-making, insurance, medical debt, disability issues. Weekly discussions of patient cases and related guest lectures.
Requisites: Graduate or professional standing or acceptance in Capstone Certificate in Consumer Health Advocacy
Course Designation: Grad 50% - Counts toward 50% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions

MED SC-M/LAW/NURSING 769 — CONSUMER ISSUES IN HEALTH CARE
1-3 credits.

Explores consumer issues in health care delivery in interdisciplinary discussion-based format. Covers current delivery system, expenditures/finance, managed care/insurance, barriers to access, reform, and other select topics. Ideal for future healthcare providers and others interested in patients’ experiences.
Requisites: Graduate or professional standing
Course Designation: Grad 50% - Counts toward 50% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Spring 2012

MED SC-M 770 — PATIENTS, PROFESSIONALISM AND PUBLIC HEALTH
4 credits.

Introduces students to the concepts of health and disease, which vary from patient to patient and through time. This includes health from a population standpoint, with an introduction to basic public health concepts as well as how physicians may positively impact both individual and population level health. Woven within that framework are introductions to key aspects of professionalism, patient-centered history-taking, and core communication skills.
Requisites: Declared in Medical program
Course Designation: Grad 50% - Counts toward 50% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2017
MED SC-M 771 — BODY IN BALANCE
11 credits.

Organized around physiological themes, the course includes material related to the cardiovascular system, hematology, nephrology, and pulmonology to present an integrated picture of how these systems function together to maintain homeostasis. In addition, there is significant content from other competency domains such as public health, ethics, evidence-based medicine, patient care/communication and clinical skills.

Requisites: Declared in Medical program
Course Designation: Grad 50% - Counts toward 50% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2017

MED SC-M 772 — FOOD, FASTING & FITNESS
9 credits.

Food, Fasting and Fitness is organized around biomedical themes including nutrients, the digestive system, the biochemistry and endocrine control of metabolism, exercise and fitness and the removal of waste products and toxins to present an integrated picture of how these systems function together to maintain homeostasis. It also integrates developmental content from Threads including Communication, Patient Care, Ethics, Health Information Technology, Public Health, Professionalism, Quality Improvement, Patient Safety and Scientific Inquiry.

Requisites: Declared in Medical program
Course Designation: Grad 50% - Counts toward 50% graduate coursework requirement
Repeatable for Credit: No

MED SC-M 773 — HUMAN FAMILY TREE
8 credits.

The course content focuses on molecular, genetic, embryologic, hormonal, anatomical and physiological factors that govern fertility, cell growth, fetal development, and pregnancy as well as the congenital anomalies that can occur when those processes are aberrant. It encompasses the full life-cycle spectrum including childhood growth and development, young adulthood/adolescence and young adults, genetic basis of human disease, reproductive health, menopause, aging, unregulated cell growth (cancer) and end of life issues. In addition, there is significant content from other competency domains such as public health, advocacy, ethics, patient care/communication and clinical skills.

Requisites: Declared in Medical program
Course Designation: Grad 50% - Counts toward 50% graduate coursework requirement
Repeatable for Credit: No

MED SC-M 774 — INVADERS AND DEFENSE
9 credits.

An integrated examination of how the immune system interacts with foreign microbes, the normal micro biome, and self tissues, both normal and malignant. It examines inflammation and the impacts of this type of response on normal cells, in wound healing, infectious disease, and inflammatory diseases including autoimmune disease and dermatologic conditions, including neoplasia of the skin. It covers the development of adaptive immune responses from vaccination, infectious processes, and organ transplantation. It covers the basic biology and pathophysiology of “invaders” of the human body, including viruses, fungi, and bacteria, along with their clinical diagnosis and therapy. Lastly, the course addresses malignant transformation of the immune effector cells themselves, including cancers of mature lymphoid cells and bone marrow derived malignancies.

Requisites: Declared in Medical program
Course Designation: Grad 50% - Counts toward 50% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2017

MED SC-M 775 — MIND & MOTION
10 credits.

Mind Motion is a 10-week course that introduces students to core basic science, pathophysiologic, and diagnostic principles requisite for the care and treatment of patients with musculoskeletal, neurologic, and psychiatric presentations and disorders. Basic science concepts include those from the traditional disciplines of cell biology, histology, biochemistry, anatomy, embryology, neuroscience, and behavioral science. There is regular integration of these topics with their pathologic and pathophysiologic counterparts. In addition, there will be integration of content related to other curricular domains, or “threads”, that include Patient Care Communication, Evidence Based Medicine, Health Information Technology, Quality Improvement Patient Safety, Professionalism, Scientific Inquiry and Public Health.

Requisites: Declared in Medical program
Course Designation: Grad 50% - Counts toward 50% graduate coursework requirement
Repeatable for Credit: No
Last Taught: Fall 2017

MED SC-M 800 — PATIENT, DOCTOR AND SOCIETY 1
3 credits.

First year first semester students spend one half-day every other week in a clinical setting with a primary care physician. In each clinical session, the student will accompany the physician in seeing as many patients as feasible and appropriate. Learning activities for each clinic session will focus on a clinical skill as well as various features of primary care.

Requisites: 1st yr Med st
Course Designation: Grad 50% - Counts toward 50% graduate coursework requirement
Repeatable for Credit: Yes, unlimited number of completions
MED SC-M 801 — PATIENT, DOCTOR AND SOCIETY 2  
3 credits.

A second semester first year course which covers the basic topic areas of (1) medical ethics and the systems issues in health care, (2) the patient and family, (3) the impact of illness, and (4) the doctor-patient relationship.

**Requisites:** Declared in Medical program  
**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement  
**Repeatable for Credit:** No

MED SC-M 806 — PATIENT, DOCTOR AND SOCIETY 3  
3 credits.

In large groups, small groups, and visits to primary care clinics, students will continue to acquire clinical knowledge and skills pertaining to taking histories, performing physical examinations, interpreting medical literature, considering ethical dilemmas, and understanding the US health care system.

**Requisites:** Med Sci-M 800, 804  
**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement  
**Repeatable for Credit:** No  
**Last Taught:** Fall 2017

MED SC-M 807 — PATIENT, DOCTOR AND SOCIETY 4  
3 credits.

In large groups, small groups, and visits to primary care clinics, students will continue to acquire clinical knowledge and skills pertaining to taking histories, performing physical examinations, interpreting medical literature, considering ethical dilemmas, and understanding the US health care system.

**Requisites:** Med Sci-M 800, 804, 806  
**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement  
**Repeatable for Credit:** No

MED SC-M 810 — CARE ACROSS THE LIFE CYCLE  
12 credits.

Promotes the student's development of clinical knowledge and skills necessary to care for patients and populations across the lifespan. Students will gain practical experience in a variety of inpatient and outpatient settings including pediatrics, obstetrics and geriatrics. There is regular integration of clinical topics with the relevant physiology and pathophysiology and other basic science components. In addition, there will be integration of content related to other curricular domains, or "threads", that include Patient Care Communication, Evidence Based Medicine, Health Information Technology, Quality Improvement Patient Safety, Professionalism, Scientific Inquiry and Public Health.

**Requisites:** Declared in Medical program  
**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement  
**Repeatable for Credit:** No

MED SC-M 811 — CHRONIC AND PREVENTIVE CARE  
12 credits.

A Phase 2 course in the MD program that uniquely positions students to identify the roles of physicians, interdisciplinary providers, health care systems, and communities in screening, treating, and preventing common, chronic conditions. Activities are centered on health promotion, outpatient-based chronic disease management, and community health. Students' clinical experiences will occur in primary care, behavioral health, and other ambulatory and community-based settings that focus on chronic disease management. Continuity will occur in primary care clinics over the 12 weeks as well as by student participation in a longitudinal community health engagement project.

**Requisites:** Declared in Medical program  
**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement  
**Repeatable for Credit:** No

MED SC-M 812 — ACUTE CARE  
12 credits.

A Phase 2 course that is centered on assessing patients with urgent medical conditions, providing acute inpatient care, and transitioning patients to other care settings or home under the care of other professionals. Activities emphasize providing acute care in inpatient and outpatient urgent care settings as well as on the inpatient wards, and developing acute management plans and subsequent transition of care plans. Clinical experiences will be in acute care settings such as the emergency department and inpatient medicine (both general and subspecialty), psychiatry, and neurology. The block builds upon the fundamental science concepts introduced in Body in Balance and Mind and Motion during Phase 1, including Ohm's Law, acid-base balance, and volume regulation. Structured educational sessions will proceed through the 12-week block following an organ system-based approach and employ varied modalities including podcasts, real-time case discussions, webcasts, independent readings, and online nationally supported modules. All students will complete an integrated patient-centered experience by participating in the care of a patient from an urgent admission through inpatient treatment and discharge. Assessment will include faculty global ratings of performance, written projects, clinical simulation, task completion, National Board of Medical Examiners (NBME) shelf exam, and an Objective Structured Clinical Examination (OSCE).

**Requisites:** Declared in Medical program  
**Course Designation:** Grad 50% - Counts toward 50% graduate coursework requirement  
**Repeatable for Credit:** No
MED SC-M 813 — SURGICAL AND PROCEDURAL CARE
12 credits.

A phase 2 course in the MD program that is focused on the care of adults and children undergoing an operation or procedure, including the perioperative preparation, operative care, and post-operative cares for core clinical conditions in the specialties of anesthesia, neurosurgery, ophthalmology, general surgery, otolaryngology, urology, cardiothoracic surgery, peripheral vascular surgery, orthopedics, plastic and reconstructive surgery, and gynecology, as well as interventional radiology, procedural cardiology and gastroenterology. Patient care experiences will take place in the clinics, emergency department, inpatient wards, inpatient and outpatient operating rooms and procedure suites. The block builds upon the basic science concepts introduced in Phase 1, including cerebral spinal fluid production and flow, fluids and electrolytes, consciousness, inflammation and wound healing, and cancer biology. Structured educational sessions will proceed through a 12 week block following an anatomic approach using case discussions, podcasts, curated independent reading, online nationally supported modules, and simulation skills. All students will complete a longitudinal patient care experience by participating in the pre-operative preparation, anesthesia care, operative care, and post-operative care of one inpatient. In addition, there will be integration of content related to other curricular domains, or "threads", that include Patient Care Communication, Evidence Based Medicine, Health Information Technology, Quality Improvement Patient Safety, Professionalism, Scientific Inquiry and Public Health.

Requisites: Declared in Medical program
Course Designation: Grad 50% - Counts toward 50% graduate coursework requirement
Repeatable for Credit: No

MED SC-M 902 — AMBULATORY ACTING INTERNSHIP
4 credits.

Designed for students to assume primary responsibility of patients in the outpatient setting. Students will work with direct oversight of a faculty attending as they interview and examine patients, decide upon accurate diagnoses and formulate an appropriate treatment plan. The course will be offered among various specialties and will take place across the statewide campus. A primary focus of this rotation is medical decision-making regarding the ordering of tests and labs, medications and other therapeutic interventions. Students will be expected to demonstrate effective communication with patients.

Requisites: Declared in Medical program
Course Designation: Grad 50% - Counts toward 50% graduate coursework requirement
Repeatable for Credit: No

MED SC-M 909 — INTERNSHIP PREP COURSE
3 credits.

A required course for all medical students. The course is designed for students to apply the knowledge and skills developed over four years of medical school and prepare them for the transition from medical student to intern. The course will cover topics in the following domains: Common and Critical Medical Conditions, Laboratory Interpretation and Procedural Skills, Professionalism and Communication, Hospital and Team Functioning and Life Skills. Sessions will include core topics for all students and sessions for those who will pursue medical or surgical specialties.

Requisites: Enrollment limited to Medical Students in their fourth year only.
Course Designation: Grad 50% - Counts toward 50% graduate coursework requirement
Repeatable for Credit: No

MED SC-M 910 — MEDIC CLINICS SELECTIVE: A STUDY OF MARGINALIZED POPULATIONS AND INTERPROFESSIONAL COLLABORATION
2 credits.

This course provides a two-pronged opportunity for fourth year medical students: 1) to re-engage with MEDiC clinics where they may have volunteered during their first and second years of medical school, and to further appreciate the complexities of serving marginalized populations; 2) the opportunity to use their recent clinical experience to contribute as both mentors and collaborators with students from multiple health professional professions. Students will be asked to look carefully at the broad public health issues affecting the patients they will treat in the MEDiC clinics and to appreciate how these issues inform their health status, health care and health access. Students will also be asked to investigate the role of race in health disparities, as well as the role of socio-economic status.

Requisites: Declared in Medical program
Course Designation: Grad 50% - Counts toward 50% graduate coursework requirement
Repeatable for Credit: No