

INTERDEPARTMENTAL (INTER-ML)

INTER-ML 1001 Transition to Medical School (1 Credit)

Typically offered Fall

The Transition to Medical School course is a weeklong introduction for matriculating medical students to NYU GLISOM. Using multiple venues and formats, incoming students become familiarized with * our campus spaces (including education, clinical, and living) * our teaching community (faculty, academic coaches, education leadership, and administrative support) and learning environment * their fellow learners and near-peers * their curricular and para-curricular schedule, activities, responsibilities, and opportunities * their education and health resources such as financial aid, library, educational technology, and Student Health * the policies and procedures that guide daily operations of the medical school and the NYULH health system The week culminates in a momentous white coat ceremony for students and their families.

Grading: SOM Graded

Repeatable for additional credit: No

INTER-ML 1002 Language Acquisition (8 Credits)

Typically offered Fall

The Language Acquisition course integrates core concepts in molecular biology, genetics, biochemistry, cell biology, pathology, pathophysiology, microbiology, immunology, and pharmacology. All students must master this eight-week overview of basic science material before advancing to organ system courses.

Grading: SOM Graded

Repeatable for additional credit: No

INTER-ML 1003 Cardiology (4 Credits)

Typically offered Fall

This four-week course provides an introduction to the cardiovascular system. Topics covered include normal cardiovascular physiology, heart failure, hypertension, myocardial infarction, cardiac arrest, bacterial endocarditis, heart murmurs, heart valve disease, hyperlipidemia, preventive cardiology, and electrocardiogram.

Grading: SOM Graded

Repeatable for additional credit: No

INTER-ML 1004 Pulmonary (4 Credits)

Typically offered Fall

This four-week course provides an introduction to the pulmonary system. Key topics include pulmonary physiology, acute respiratory distress syndrome, asthma, bronchiolitis, chronic dyspnea, chronic obstructive pulmonary disease, pneumonia, pulmonary hypertension, and tuberculosis.

Grading: SOM Graded

Repeatable for additional credit: No

INTER-ML 1005 Renal (3 Credits)

Typically offered Fall

This three-week course provides an introduction to the renal system. Topics covered include normal renal physiology, acid-base balance, electrolyte imbalance, and kidney diseases. Daily sessions integrate concepts from disciplines including infectious disease, pharmacology, genetics, and embryology. Morphology of Medicine laboratory sessions, which focus on anatomy, pathology, and radiology, take place on Monday and Thursday mornings. CAPEs emphasize the impact of kidney disease on medical care. Patient encounters and bedside teaching experiences focus on history taking and physical examination for patients who have kidney disease.

Grading: SOM Graded

Repeatable for additional credit: No

INTER-ML 1006 Regional Anatomy (1 Credit)

Typically offered Fall

The Regional Anatomy Course is a one-week course within the Phase 1 of the curriculum. Head and Neck Anatomy will be introduced via comprehensive workshop and exposure to embryology, anatomy and radiology of the head and neck region. The learning objectives of this course will be achieved through the use of lectures, laboratories, skills lab and case-based learning.

Grading: SOM Graded

Repeatable for additional credit: No

INTER-ML 1007 Gastroenterology (4 Credits)

Typically offered Spring

This four-week course introduces students to the gastrointestinal system. Topics covered include congenital multi-organ motility disorder, Crohn's disease, acute biliary pancreatitis, gastroesophageal reflux disease, colon cancer, gastrointestinal complications in immunocompromised patients, abnormal results on liver-related tests, jaundice, and chronic liver disease.

Grading: SOM Graded

Repeatable for additional credit: No

INTER-ML 1008 Endocrinology-Reproduction (5 Credits)

Typically offered Spring

This five-week course provides an introduction to the endocrine/reproductive system. Topics covered include normal endocrine and reproductive systems; pituitary diseases; growth disorders; thyroid disease; calcium disorders; diabetes, obesity, puberty, and the menstrual cycle; pregnancy and its complications; and benign and malignant conditions of the male and female reproductive tracts, including the breast, and genital tract infections.

Grading: SOM Graded

Repeatable for additional credit: No

INTER-ML 1009 Musculoskeletal-Rheumatology-Dermatology (5 Credits)

Typically offered Spring

This five-week course provides an introduction to the musculoskeletal, rheumatology, allergy, and dermatology systems. Topics covered include medication allergies, osteoarthritis, rheumatoid arthritis, sacroiliitis, systemic lupus erythematosus, and granulomatosis with polyangiitis.

Grading: SOM Graded

Repeatable for additional credit: No

INTER-ML 1010 Brain-Mind-Behavior (6 Credits)*Typically offered Spring*

This six-week course provides a comprehensive introduction to the neuroscience and behavioral systems. Topics include the normal neurobehavioral system, acute ischemic stroke, panic disorder, seizures and migraines, bipolar disorder, schizophrenia, opioid use disorder, meningitis, Guillain-Barre syndrome, Alzheimer's disease, multiple sclerosis, amyotrophic lateral sclerosis, and sleep disorders in patients who have Parkinson's disease.

Grading: SOM Graded**Repeatable for additional credit:** No**INTER-ML 1011 Hematology/Oncology (2 Credits)***Typically offered Spring*

This two-week course provides an introduction to the hematology-oncology system. Topics covered include the hematological system, anemia, thrombocytopenia, and bone marrow disorders including malignant hematologic conditions such as leukemias and lymphomas. Daily morning sessions integrate concepts from disciplines including infectious disease, pharmacology, genetics, and embryology. Morphology of Medicine laboratory sessions, which focus on anatomy, histology, pathology, and radiology, take place on Monday and Thursday mornings.

Grading: SOM Graded**Repeatable for additional credit:** No**INTER-ML 1012 Practice of Medicine I (2 Credits)***Typically offered Fall and Spring*

The Practice of Medicine (POM) course is a longitudinal course that takes place during phase one of our curriculum that is designed to bridge the foundational and clinical sciences. The key components of bedside diagnosis are instituted in conjunction with each foundational science module in the first academic year. Students build upon core clinical skills that include the following: - medical interviewing, motivational interviewing, and communication skills that reinforce patient-centered care, establish the doctor-patient relationship, and gather information - adult and child physical examinations - verbal and written documentation of all elements gathered from history-taking and physical examinations - clinical reasoning to formulate an assessment from gathered data and generate a tiered differential diagnosis - interprofessional skills and building effective working relationship

Grading: SOM Graded**Repeatable for additional credit:** No**INTER-ML 1014 Health Systems Science I (2 Credits)***Typically offered Fall and Spring*

The Health Systems Science (HSS) curriculum is a longitudinal integrated curriculum from Phase 1 through 3. Phase 1 will focus on building foundation of knowledge on the core domains. The HSS core curricular content is structured around Six Health Systems Science domains: - Healthcare structure and processes - Healthcare policy, economics and management - Clinical informatics and health information technology - Population and public health a. Epidemiology and Biostatistics - Value-based Care - Health system improvement and patient safety In addition to the core domains, the HSS course focuses on Evidence Based Medicine and Practice, and Interprofessional Collaborative Care.

Grading: SOM Graded**Repeatable for additional credit:** No**INTER-ML 1016 Social Sciences, Humanities, Ethics, and Professionalism I (1 Credit)***Typically offered Fall and Spring*

The goal of the Social Sciences, Humanities, Ethics, and Professionalism (SHEP) course is to prepare students to capably negotiate the complexities of clinical care and of medicine in society. In this course, content from a variety of disciplines within the social sciences and humanities is interwoven to foster active skill development in moral self-awareness, self-reflection, moral reasoning, and ethical analysis. The ability to self-interrogate, self-modulate, and self-reflect during the process of thinking is called metacognition. Metacognition is recognized as a core clinical skill to be practiced for increasing mastery throughout the three-year curriculum, using a variety of pedagogical and experiential methods. SHEP's four content domains run as longitudinal threads - psychology of decision-making - history of medicine - systemic racism - professional identity formation Phase 1 topics and themes: codes of medical ethics, professionalism, epistemology, decision making psychology, heuristics and bias, moral reasoning and methods of ethical analysis, personal morals, professional ethics, including conscientious objection, race and racism in health care, social identity and health care, standards of decision making for non-capacitated patients, ethical issues in organ allocation, defining death (TBL), and ethical issues in genomic medicine.

Grading: SOM Graded**Repeatable for additional credit:** No**INTER-ML 1018 Continuity Ambulatory Practice Experience I (1 Credit)***Typically offered Fall and Spring*

The Continuity Ambulatory Practice Experience (CAPE) Course is a longitudinal ambulatory experience. This course will expose students to history, physical exam, assessment and management of patients. This continuity experience will encourage students to transition from an observer to being able to conduct and perform a thorough history and physical exam; and form an appropriate assessment and plan for patients. Generally, the beginning of the course will primarily entail observation and will be an opportunity to observe providers using core clinical skills to execute a medical interview: 1) develop rapport with their patients, 2) gather information in the form of obtaining a history and performing a physical/mental examination, and 3) collaborate with their patients on a management plan using shared decision making. As the student gains experience through classroom teaching and CAPE observation, there will be opportunities for increasing independence in gathering patient history and performing physical exam, under supervision by your preceptor.

Grading: SOM Graded**Repeatable for additional credit:** No**INTER-ML 1021 Special Topic in Teaching and Learning (1 Credit)***Typically offered occasionally*

This course will prepare students for roles as clinical educators of more junior students and eventually junior residents in the inpatient or ambulatory healthcare settings. Specific teaching skills will include: learner-centered instructional theory, curriculum development, clinical teaching and effective feedback. Students will design and present an instructional unit for review by course director, as well as evaluate current delivery methods of teaching and learning at NYU Langone Long Island Hospital and NYU Grossman Long Island School of Medicine.

Grading: SOM Graded**Repeatable for additional credit:** No

INTER-ML 1022 Introduction to Wellness and Nutrition (1 Credit)*Typically offered occasionally*

Physicians in the US are largely on their own when it comes to learning how to look for signs of nutrition problems, how to explain the significance of nutrition-related conditions and appropriate interventions, and how to refer patients to nutrition professionals. On average, physicians receive 19 hours of total nutrition education in medical school. The goal of this elective is to provide education and training in nutrition using an online core nutrition curriculum for medical students that includes both the preventive and therapeutic aspects of medical nutrition care for both pre-clinical and clinical education. In addition, students will explore physician wellness through reading assignments, TED Talks, online curriculum, and asynchronous discussions. Students will learn strategies to build healthy resilience, manage stress and fatigue, and prevent burnout during medical training. Students will research a wellness or nutrition topic tailored to their interest and personal goals, and present their findings at the end of the elective.

Grading: SOM Graded**Repeatable for additional credit:** No**INTER-ML 1034 Special Topic in Medical Education (1 Credit)***Typically offered occasionally*

This elective is designed for the medical student interested in teaching who wishes to gain practical experience in development and deployment of educational materials at the MS1 level of expertise. The student will work with a faculty preceptor to outline a discrete project on a faculty-approved topic of interest. The student and preceptor will work together to research, outline, and develop one clinically relevant deliverable from the following options:

Grading: SOM Graded**Repeatable for additional credit:** No**INTER-ML 1037 Preceptorship in Primary Care (1 Credit)***Typically offered Spring*

Clinical preceptorships are offered to students interested in early clinical exposure within their residency department. Students will be supported in identifying a preceptor(s) within their department. The student and mentor will build a unique experience/curriculum for a one-week time period and complete a Preceptorship Proposal Form at least six (6) weeks prior to the proposed start of the elective. Preceptorships must be approved by the Preceptorship Proposal Committee. When approved and successfully completed, preceptorships will contribute to a student's required Phase 1 elective time. In collaboration with their preceptor, students will develop personalized learning objectives and collaborate on how the student will demonstrate the learning outcomes; this information will be included on the Preceptorship Proposal Form.

Grading: SOM Graded**Repeatable for additional credit:** No**INTER-ML 2008 Continuity Ambulatory Practice Experience - II (1 Credit)***Typically offered Fall and Spring*

The Continuity Ambulatory Practice Experience (CAPE) Course is a longitudinal ambulatory experience. This course will expose students to history, physical exam, assessment and management of patients. This experience will demonstrate how to use problem solving skills related to medical thinking and reasoning for patient care. In Phase 2, students will have increased opportunity to practice and demonstrate communication and other core clinical skills to conduct organized, accurate, and complete medical encounters and deliver commensurate oral and written documentation that includes clinical reasoning assessments (summary statements and differential diagnoses) and management plans.

Grading: SOM Graded**Repeatable for additional credit:** No**INTER-ML 2009 Health Systems Science - II (1 Credit)***Typically offered Fall and Spring*

The Phase 2 of the longitudinal Health Systems Science (HSS) curriculum continues to emphasize the integration of the HSS domains to the basic and clinical sciences. Phase 2 content focuses on the application of health systems science principles to the delivery of high value patient care and to the improvement of the healthcare delivery process for individual patients and the population. The goals of the Phase 2 HSS curriculum are: - Develop competencies to deliver high value care for patients and populations - Collaborate in interprofessional teams to improve care - Apply QI science and systems thinking principles to improve the health outcomes of patients and population - Apply clinical epidemiology and research science to population health A major component of the HSS Phase 2 curriculum is project-based application through the development of the HSS capstone initiative.

Grading: SOM Graded**Repeatable for additional credit:** No**INTER-ML 2010 Social Sciences, Humanities, Ethics, and Professionalism - II (1 Credit)***Typically offered Fall and Spring*

The goal of the Social Sciences, Humanities, Ethics, and Professionalism (SHEP) course is to prepare students to capably negotiate the complexities of clinical care and of medicine in society. In this course, content from a variety of disciplines within the social sciences and humanities is interwoven to foster active skill development in moral self-awareness, self-reflection, moral reasoning, and ethical analysis. The ability to self-interrogate, self-modulate, and self-reflect during the process of thinking is called metacognition. Metacognition is recognized as a core clinical skill to be practiced for increasing mastery throughout the three-year curriculum, using a variety of pedagogical and experiential methods. SHEPs four content domains run as longitudinal threads - psychology of decision-making - history of medicine - systemic racism - professional identity formation Phase 2 topics and themes: reproductive ethics, ethics of discontinuing life-sustaining interventions, moral distress and organizational ethics, managing countertransference and boundaries, professional identify formation, case presentations, analyzing the medical literature for racism and bias, and medical jurisprudence.

Grading: SOM Graded**Repeatable for additional credit:** No

INTER-ML 2011 Transition to Clinical Care (1 Credit)*Typically offered Fall*

The Transition to Clinical Clerkships course is a weeklong introduction for rising pre-clerkship students who will start clinical rotations. Using multiple venues and formats, transitioning students participate in a brief synthetic retrospective review of core clinical skills and become familiarized with - their clerkship teaching faculty and clerkship content overviews - their curricular and para-curricular schedule, activities, responsibilities, and opportunities - the policies and procedures that guide daily operations in the clinical setting - EMR training - BLS/ACLS life support training The week culminates in a brief recommitment white coat ceremony.

Grading: SOM Graded**Repeatable for additional credit:** No**INTER-ML 3003 Capstone 2 (1 Credit)***Typically offered Fall*

The Capstone 2 Course is a three-week course at the beginning of the Phase 3 of the curriculum. Capstone 2 is a comprehensive high yield course focusing on the key clinical science concepts and its application to the practice of medicine, with special emphasis on health promotion and disease prevention. This course aims to prepare the student for the USMLE Step 2CK the second part of the United States Medical Licensing Examination. Step 2 CK assesses whether you can apply medical knowledge, skills, and understanding of clinical science essential for the provision of patient care under supervision and includes emphasis on health promotion and disease prevention. Step 2 CK ensures that due attention is devoted to principles of clinical sciences and basic patient-centered skills that provide the foundation for the safe and competent practice of medicine under supervision. In the Capstone 2 Course students will create individualized learning plans based on self-identified gaps in clinical science knowledge. Students will also be required to schedule Comprehensive Clinical Science Self-Assessments as part of their learning plans and report in weekly to their academic coaches and office of medical education.

Grading: SOM Graded**Repeatable for additional credit:** No**INTER-ML 3013 Transition to Residency (4 Credits)***Typically offered Spring*

The Transition to Residency course is a month-long retrospective for students who will be entering interns the next academic year. Using multiple venues and formats, including simulation, transitioning students participate in synthetic consolidation of core clinical skills * Case-based review of critical thinking/differential diagnosis for key syndromes * Review of key principles of pain management, antibiotic stewardship, etc. * Review of standard procedures * Final week is a residency-specific review of core clinical skills.

Grading: SOM Graded**Repeatable for additional credit:** No**INTER-ML 3014 Continuity Ambulatory Practice Experience - III (2 Credits)***Typically offered Spring*

The Continuity Ambulatory Practice Experience (CAPE) Course is a longitudinal ambulatory experience. This course will expose students to history, physical exam, assessment and management of patients. This experience will demonstrate how to use problem solving skills related to medical thinking and reasoning for patient care. During Phase 3, you will spend a concentrated period of time devoted solely to your CAPE practice, during which you can further consolidate core clinical skills. Core elements of the CAPE Phase 3 curriculum include patient-centered care, billing and coding, quality improvement, patient safety and appreciation for the day-to-day operations of a primary care ambulatory practice. Students will be immersed in the daily workings of a primary care practice with opportunities to help transform clinical care and office logistics.

Grading: SOM Graded**Repeatable for additional credit:** No**INTER-ML 3015 Health Systems Science - III (1 Credit)***Typically offered Fall and Spring*

The Phase 3 Health Systems Science (HSS) curriculum will continue to focus on the application of HSS principles and conceptual framework to advance the HSS capstone initiative and integration in the clinical learning environment. In addition, students are provided an opportunity for deeper immersion on leadership principles, role of physician as advocates and advance the knowledge of United States Health Care delivery systems and patient safety science.

Grading: SOM Graded**Repeatable for additional credit:** No**INTER-ML 3016 Social Sciences, Humanities, Ethics, and Professionalism - III (1 Credit)***Typically offered Fall and Spring*

The goal of the Social Sciences, Humanities, Ethics, and Professionalism (SHEP) course is to prepare students to capably negotiate the complexities of clinical care and of medicine in society. In this course, content from a variety of disciplines within the social sciences and humanities is interwoven to foster active skill development in moral self-awareness, self-reflection, moral reasoning, and ethical analysis. The ability to self-interrogate, self-modulate, and self-reflect during the process of thinking is called metacognition. Metacognition is recognized as a core clinical skill to be practiced for increasing mastery throughout the three-year curriculum, using a variety of pedagogical and experiential methods. SHEP's four content domains run as longitudinal threads - psychology of decision-making - history of medicine - systemic racism - professional identity formation Phase 3 topics and themes: ethics of human subjects research, medical jurisprudence, ethics of disaster medicine, assisted suicide and euthanasia, and narrative medicine.

Grading: SOM Graded**Repeatable for additional credit:** No

INTER-ML 3017 Medical Spanish (4 Credits)*Typically offered Fall and Spring*

Increase opportunities to speak with patient with Limited English Proficiency (LEP) and who speak Spanish in order to: ¥ Improve patient care ¥ Enhance patient outcomes and satisfaction ¥ Enhance provider satisfaction Note: using basic medical Spanish skills is not meant to replace the use of interpreter services; rather, it should augment them. Used by many medical schools across the country, this is an NIH-funded, self-paced, fully online medical Spanish course developed specifically for health care professionals. Instructional content broken down into 15-minute modules, learn by active participation (learning-by-speaking methodology), with role plays with real patient scenarios. 36 lessons are spread over three target proficiency levels.

Grading: SOM Graded**Repeatable for additional credit:** No**INTER-ML 3018 Capstone 1 (1 Credit)***Typically offered Fall*

The Capstone 1 Course is a four-week course at the beginning of Phase 3 of the curriculum. Capstone 1 is a comprehensive high yield course focusing on key basic science concepts and its application to the practice of medicine, with special emphasis on principles and mechanisms underlying health, disease, and modes of therapy. This course aims to prepare the student for the USMLE Step 1 examination, the first part of the United States Medical Licensing Examination. In the Capstone 1 Course students will create individualized learning plans based on self-identified gaps in basic science knowledge. Students will also be required to schedule Comprehensive Basic Science Self-Assessments as part of their learning plans and report in weekly to their academic coaches and office of medical education.

Grading: SOM Graded**Repeatable for additional credit:** No**INTER-ML 4008 Bioethics and Social Sciences (2 Credits)***Typically offered occasionally*

This Phase 3 elective in Bioethics and Social Sciences is a mentored self-study project. Students will be required to meet with the elective preceptor prior to be accepted for the elective, at which time the student will be expected to identify a research/writing project for the elective. This project may be developed together with the input of the elective preceptor. Students will meet with the elective preceptor at intervals during the elective for the purposes of guiding the student to resources, and mentoring in the development and drafting of the writing project. In addition to the writing project, students will participate in ethics committee meetings and ethics case consultation as the schedule permits. This elective requires pre-approval by the course director. Students are encouraged to contact the course director 2 months prior to the anticipated start date.

Grading: SOM Graded**Repeatable for additional credit:** No**INTER-ML 4160 Clinical Informatics (2 Credits)***Typically offered Fall and Spring*

At the intersection of health care and technology lies one of the fastest growing fields in our modern era: clinical informatics. As the technology sector continues its exponential expansion into everyday life for the modern individual, health care also seeks to integrate these advances into practice by satisfying the Triple Aim: improving patient experience, improving the health of populations and reducing the cost of health care. There is an obvious gap in medical student education across the country as there is little to no exposure to the field of clinical informatics. As generations become increasingly familiar with various aspects of technology, it stands to reason that this is where leaders for the field of informatics should be developed. A physician who receives training on health care technology and its implementation receives the foundation on which to innovate in all aspects of healthcare. This elective will serve as an introduction to the field of clinical informatics at NYU Langone Health (NYULH). Medical students will participate in didactic sessions, aside from connecting with their peers offline and in real time over the course of the elective, all elective participants will be enrolled in a "Clinical Informatics Alumni Network" via an e-mail listserv. This will provide a powerful platform for all alumni to connect and continue to explore their interest in informatics, with multiple opportunities for guidance, education and further participation. Students will shadow various informaticists and participate in health information technology (HIT) related activities across four departments at NYULH: Institute for Innovations in Medical Education (IIME), Digital Health Innovation and Entrepreneurialism, Clinical Informatics, and MCIT/Overview.

Grading: SOM Graded**Repeatable for additional credit:** No**INTER-ML 4168 Nutrition and Wellness (2 Credits)***Typically offered Fall and Spring*

Ask any doctor, and they will tell you: one of the best ways to lead a healthy life is through proper nutrition. Yet, nutrition is still rarely discussed because doctors seldom broach this subject with their patients. Medical student education often focuses on nutrients rather than topics such as motivational interviewing or meal planning. The goal of this elective is to shift away from nutritionism (i.e., nutrients in foods determine the value of food in the diet) and engage in practical discussions about real food and the environment in which we consume it. Using documentaries, recorded lectures, open online course and online resources, students will be able to distinguish between food that support wellness and those that threaten it. Students will research a nutrition topic tailored to their interest and personal goals.

Grading: SOM Graded**Repeatable for additional credit:** No**INTER-ML 4189 Advanced Preceptorship (2 Credits)***Typically offered Fall and Spring*

Clinical preceptorships are offered to students interested in a nontraditional elective or those who would like to work with a specific mentor/attending. Students are responsible for finding their own preceptor. The student and mentor build a unique experience/curriculum for a two-week rotation and complete a Preceptorship Proposal Form at least six (6) weeks prior to the proposed start of the elective. Preceptorships must be approved by the Preceptorship Proposal Committee. If approved and successfully completed, preceptorships will contribute to a student's required elective time. In collaboration with their preceptor, students will develop personalized learning objectives and collaborate on how the student will demonstrate the learning outcomes; this information will be included on the Preceptorship Proposal Form.

Grading: SOM Graded**Repeatable for additional credit:** No

INTER-ML 4193 Healthcare Simulation (2 Credits)

Typically offered Fall and Spring

This two-week elective draws back the curtain on healthcare simulation.

It is designed for 3rd year students who are interested in teaching with high fidelity simulation. Students will learn how to create a simulation session, from idea generation to program facilitation and debriefing.

Students will have the opportunity to work with members of the Simulation Center team to develop and execute high fidelity simulation programs. Students will be involved in all aspects of simulation education, including case creation, session programming and setup, as well as controlling high-fidelity mannequins. Students will participate in a basic core curriculum involving hands on work and short lectures on scenario design, curriculum design, debriefing, and simulation modalities. They will also create an educational module of their own and present it to the Simulation Center staff.

Grading: SOM Graded

Repeatable for additional credit: No