ME.800 (INTERDEPARTMENTAL)

ME.800.300. DDP Research Practicum/Special Studies. 0 Credits. N/A

ME.800.609. Genes to Society I (inc. Immunology, Microbiology/Infectious Disease, and Hematology/Oncology). 0 Credits.

ME.800.610. Genes to Society II (inc. Brain, Mind, & Behavior, Nervous System and Special Senses). 0 Credits.
Required course in the first year medical student curriculum.

ME.800.611. Health Care Disparities Intersession. 0 Credits.

ME.800.612. Health Promotion and Disease Prevention Intersession. 0 Credits.

ME.800.613. Global Health Intersession. 0 Credits.

ME.800.614. Pain Intersession. 0 Credits.

ME.800.615. Disaster Medicine Intersession. 0 Credits.

ME.800.616. Longitudinal Ambulatory Clerkship - 1st year. 0 Credits.
Longitudinal Ambulatory Clerkship - 1st year

ME.800.617. Longitudinal Ambulatory Clerkship - 2nd year. 0 Credits.
Required course in the second year medical student curriculum.

ME.800.618. Transition to Residency and Internship and Preparation for Life. 0 Credits.
This two-week capstone course is offered twice in April of Year Four. The goal of TRIPLE is to prepare students to work effectively as interns, residents and practicing physicians. Additionally, it will help students to develop the knowledge, attitudes and skills necessary to be successful in their professional lives. In addition to Advanced Cardiac Life Support Certification, activities include exercises in Rapid Response scenarios; central venous catheter and interosseous line insertion; airway management; multitasking, organization and prioritization; advanced communications; reflective writing; teaching skills and facilitated small group discussions.

ME.800.619. Scientific Foundations of Medicine (inc. Epidemiology, Macromolecules, Cell Physiology, Metabolism, Genetics, and Pharmacology). 0 Credits.

ME.800.621. Clinical Foundations of Medicine. 0 Credits.
Clinical Foundations of Medicine

ME.800.622. Foundations of Public Health. 0 Credits.
Required course in the first year medical student curriculum.

ME.800.623. Scholarly Concentrations. 0 Credits.
Required course in the first year medical student curriculum.

ME.800.624. Translational Science Intersession - Metabolism. 0 Credits.

ME.800.625. Translational Science Intersession - Infectious Disease. 0 Credits.

ME.800.626. Translational Science Intersession - Immunology. 0 Credits.

ME.800.627. Translational Science Intersession - Cancer. 0 Credits.

ME.800.628. End of Life/Palliative Care Intersession. 0 Credits.

ME.800.629. Substance Abuse Care Intersession. 0 Credits.

ME.800.630. Genes to Society III (inc. Cardiovascular, Pulmonary, and Renal). 0 Credits.
Required course in the first year medical student curriculum.

ME.800.631. Genes to Society IV (inc. GI, Reproductive, Endocrine, and Musculoskeletal). 0 Credits.
Required course in the second year medical student curriculum.

ME.800.632. Patient Safety Intersession. 0 Credits.

ME.800.633. Scholarly Concentrations - 2nd year. 0 Credits.
Required course in the second year medical student curriculum.

ME.800.634. Transition to the Wards. 0 Credits.
Required course in the second year medical student curriculum.

ME.800.635. Genes to Society I (inc. Immunology, Microbiology/Infectious Disease and Hematology/Oncology). 0 Credits.


ME.800.637. Foundations of Public Health: Epidemiology, Ethics & the Health Care System. 0 Credits.
Required course in the first year medical student curriculum.

The purpose of this course is to present the language and principles of biomedical science that students will be using throughout their study of human health and disease. Course methods include lecture, readings, journal clubs, virtual microscopy, small-group problem-solving sessions and clinical correlations.

ME.800.639. Genes to Society I (inc. Immunology, Microbiology/Infectious Disease, Hematology, and Dermatology). 0 Credits.
Required course in the first year medical student curriculum.

ME.800.640. Topics in Interdisciplinary Medicine - Disparities and Inequities in Health and Health Care. 0 Credits.
Required course in the first year medical student curriculum.

ME.800.641. Topics in Interdisciplinary Medicine - Obesity, Nutrition, & Behavior Change. 0 Credits.
Required course in the first year medical student curriculum.

ME.800.642. Topics in Interdisciplinary Medicine – Global Health. 0 Credits.
Required course in the first year medical student curriculum.

ME.800.643. Topics in Interdisciplinary Medicine – Pain. 0 Credits.
Required course in the first year medical student curriculum.

ME.800.644. Topics in Interdisciplinary Medicine – Disaster Medicine. 0 Credits.
Required course in the first year medical student curriculum.

ME.800.645. Topics in Interdisciplinary Medicine - Substance Use Disorders. 0 Credits.
Required course in the second year medical student curriculum.

ME.800.646. Topics in Interdisciplinary Medicine – Patient Safety. 0 Credits.
Required course in the second year medical student curriculum.

ME.800.647. Topics in Interdisciplinary Medicine – End of Life/Palliative Care. 0 Credits.
Required course in the second year medical student curriculum.

ME.800.648. Topics in Interdisciplinary Medicine – Metabolism. 0 Credits.
Topics in Interdisciplinary Medicine – Metabolism
**ME.800.649. Topics in Interdisciplinary Medicine – Immunology. 0 Credits.**
Topics in Interdisciplinary Medicine – Immunology

**ME.800.650. Topics in Interdisciplinary Medicine – Infectious Disease. 0 Credits.**
Topics in Interdisciplinary Medicine – Infectious Disease

**ME.800.651. Topics in Interdisciplinary Medicine – Cancer. 0 Credits.**
Topics in Interdisciplinary Medicine – Cancer

**ME.800.652. Topics in Interdisciplinary Medicine - Introduction to Regenerative Medicine. 0 Credits.**
Topics in Interdisciplinary Medicine - Introduction to Regenerative Medicine

**ME.800.653. Integrative Medicine. 0 Credits.**
Required course in the first year medical student curriculum.

**ME.800.654. Scientific Foundations of Medicine Histology and Pathobiology. 0 Credits.**
N/A

**ME.800.655. Topics in Interdisciplinary Medicine - High Value Healthcare. 0 Credits.**
This three-day course is offered in February of Year One after the Microbiology and Infectious Disease section. The goals of the course are to empower students to understand high value care and advocate for its practice. Lectures serve as the background on why providers order unnecessary labs, imaging, and medications and the changes that are occurring. Interactive small group sessions then allow students to participate in hands-on approaches to improving their role as stewards of healthcare for the healthcare system and most importantly their patients.

**ME.800.656. Genes to Society III - Cardiovascular. 0 Credits.**
This GTS Cardiovascular course will build upon seminal observations on the structure and function of the cardiovascular system. See course syllabus for full description and objectives.

**ME.800.657. Primary Care Leadership Track 1. 0 Credits.**

**ME.800.658. Primary Care Leadership Track 2. 0 Credits.**

**ME.800.659. Primary Care Leadership Track 3. 0 Credits.**

**ME.800.660. Primary Care Leadership Track 4. 0 Credits.**

**ME.800.661. Topics in Interdisciplinary Medicine - Genomic Medicine. 0 Credits.**
Fulfills TIME requirement in the third and fourth year medical student curriculum.

**ME.800.662. Pre-clerkship Education Exercises. 0 Credits.**

**ME.800.699. Interdepartmental Elective. 0 Credits.**
For Medical Students only. Specialized Topics in Interdepartmental. Refer to Medical Student Electives Book located at https://www.hopkinsmedicine.org/som/students/academics/electives.html.

**ME.800.701. Topics in Interdisciplinary Medicine - Genomic Medicine. 1 Credit.**
N/A

**ME.800.702. Introduction to the Human Body: Anatomy, Histology, Physiology. 5 Credits.**
The focus of the course is an overview exposure to the organ systems of the human body. Class has histology oral presentations.

**ME.800.703. CMM Core Discussion. 1.5 Credits.**
In section One: Students present a journal article and lead the class discussion. In section Two: 3R online modules with class discussions. In section Three: Compliments Intro to Clinical Research course content.

**ME.800.705. Method, Logic and Experimental Design. 1 Credit.**
Studies meet in small groups with faculty members to read and discuss current research articles. The goal is to learn to critically evaluate experiments, results, and to design controlled experiments.

**ME.800.707. Computational Biology and Bioinformatics. 0.5 Credits.**
This short course is a survey of quantitative methods in modern biology and the computational concepts that are developing to analyze large datasets. Topics range from a review of statistics to problems in sequence analysis to the modeling of complex systems. The goal of the course is to familiarize students with the concepts of computational biology rather than to achieve a deep understanding of any one topic.

**ME.800.708. BCMB Core Discussion. 0.5 Credits.**
Core discussion is a small-group discussion which corresponds to the BCMB core module lectures.

**ME.800.709. Cellular and Molecular Basis of Disease. 3 Credits.**
The emphasis of this course is the cellular and molecular aspects of the pathogenesis and treatment of human diseases.

**ME.800.710. Beginning Spanish for Medical Personnel. 0 Credits.**

**ME.800.711. Advanced Beginning Spanish for Medical Personnel. 0 Credits.**

**ME.800.712. Intermediate Spanish for Medical Personnel. 2 Credits.**

**ME.800.713. BCMB Responsible Conduct of Research. 0.5 Credits.**
This discussion course focuses on responsible conduct of research in science. Topics include Issues of Diversity, Mentoring, Misconduct/Fraud, Authorship, Conflict of Interest, Scientific Record Keeping, Animal and Human Experimentation.

**ME.800.715. Effective Scientific Communication. 1 Credit.**
Students will have the opportunity to improve their science communication skills and get exposed to the diversity of careers available in science communication.

**ME.800.716. Genomic Instability in Human Disease. 1.5 Credits.**

**ME.800.717. CMM Grant Writing: Nuts and Bolts. 1.5 Credits.**
Will give a general overview of the grant writing process to include the significant components of a hypothesis-driven scientific grant application and its peer review process. Proposals for this course will be based on each student’s current thesis work and will be developed as the thesis proposal.

**ME.800.718. Topics in Cellular and Molecular Medicine. 1 Credit.**
This course introduces students to CMM faculty and their areas of expertise.

**ME.800.719. Scientific Foundations of Medicine (inc. Cell Physiology, Macromolecules, Metabolism and Genetics). 0 Credits.**

**ME.800.722. BCMB Tutorial. 0 Credits.**
One-to-one reading tutorial with a faculty member who is an expert in the chosen field of study. The faculty member will select the papers to be discussed. The minimal duration of the tutorial has to be equivalent to eleven 1.5-hour sessions or a total of 16 hours. The course will be offered every quarter, including during the summer months.

**ME.800.723. Computational Genomics Methods. 0 Credits.**
Hands-on elective course discussing computational methods (including R, Unix and Python) for manipulating and exploring high-throughput datasets.

**ME.800.724. Introduction to Clinical Research. 1.5 Credits.**
Understand the steps involved in conceiving, conducting and translating clinical research. Prepare and review a clinical research project in groups.
ME.800.725. Medical Scientist Training Program in Research Ethics. 0 Credits.
N/A

This course is designed to provide an opportunity for students to learn
principles and practices of electron microscopy so they can use then
for their thesis projects. The course has two components: lectures and
hands-on experimental sessions. Lectures will cover history, principles,
and techniques. In the hands-on sessions, students will learn how to
process samples for electron microscopy, including, fixation, plastic
embedding, high-pressure freezing, freeze-substitution, imaging and
image analysis.

ME.800.780. Scientific Foundations of Medicine (inc. Macromolecules,
Cell Physiology, Metabolism, Genetics, Pharmacology, Foundations in
Histology and Pathobiology, and Neoplasia). 0 Credits.
N/A

ME.800.781. Scientific Foundations of Medicine: Macromolecules. 0
Credits.
N/A

ME.800.782. Scientific Foundations of Medicine: Cell Physiology. 0
Credits.
N/A

ME.800.783. Scientific Foundations of Medicine: Histopathology. 0
Credits.
Course is offered in two sections. Students must enroll and attend
both sections. The course is designed to provide the foundations to
understand organ histology and histopathology. The course begins
with basic concepts of tissue organization and ends with globally
relevant histopathologic changes seen in disease. The course is primarily
designed around the virtual microscopy (VM system within small groups,
occasional lectures, and e-lectures

ME.800.784. Scientific Foundations of Medicine: Metabolism. 0
Credits.
N/A

ME.800.785. Scientific Foundations of Medicine: Genetics. 0 Credits.
N/A

ME.800.786. Scientific Foundations of Medicine: Pharmacology. 0
Credits.
N/A

ME.800.787. Scientific Foundations of Medicine (inc. Macromolecules,
Cell Physiology, Metabolism and Genetics). 0 Credits.
N/A

ME.800.788. Scientific Foundations of Medicine: Neoplasia. 0 Credits.
N/A

ME.800.789. 3B's: Bench to Bedside and Back. 1 Credit.
Students in years 3 and 4 will gain further expose and education about
the clinical opportunities and translational implications associated with
their thesis research,

ME.800.801. Research in Cellular and Molecular Medicine. 0 Credits.
First year students perform 3 lab rotations. Upper-class students in
conjunction with thesis advisor perform focused research on his/her
thesis project.

ME.800.802. Research in Biochemistry, Cellular and Molecular
Biology. 0 Credits.
Laboratory Research

ME.800.803. Biomedical Sciences Practicum (BCMB). 0 Credits.
Provides an opportunity for students to actively conduct research in BME,
HGEN, BCMB-2, Biophysics, or PHYS.

ME.800.804. AstraZeneca Scholars Thesis Research. 0 Credits.
Graduate students engaged in the MedImmune Scholars Program will spend
50% of their time during their thesis work at MedImmune which is
located in Gaithersburg, MD. This program enrolls students from multiple
departments / graduate programs and there will be interdivisional
registrations (WSE, SPH, KSAS) for this SOM course. Registration for this
course is restricted to students who have been selected for the program.

ME.800.805. BCMB Quantitative Biology Lab. 1 Credit.
Weekly session provide hands-on work to reinforce and further develop
computational concepts and problems students learn didactically in the
BCMB core courses during the same period. Experimental design, and
concepts of rigor and reproducibility will also be emphasized.

ME.800.806. BCMB Computational Biology Bootcamp. 1 Credit.
This intensive one week course is meant to immerse student in
computation, and to provide them with the foundational tools to be able
to apply modern computational techniques and appropriate statistics to
their data.

ME.800.807. Research in Biomedical Science. 0 Credits.
Research course for students in the Crossdisciplinary Program for
Biomedical Sciences (XDBio)

ME.800.809. COVID-19 Molecular Virology and Public Health. 0
Credits.
Short elective course with a mix of lectures, readings, discussion, and
short assignments on the biology of coronaviruses, potential treatments,
therapeutic mechanisms, and contributions by the Johns Hopkins
community to deal with the COVID-19 pandemic. Topics include host-
pathogen interactions at the molecular, cellular, and immune/organismal
levels, vaccines, and public health strategies.

ME.800.810. Seminar Course. 1 Credit.
During this course, BCMB students will read and analyze papers on
different topics related to biochemistry, molecular and cell biology,
and will further discuss them with the scientists who led the work.
Specifically, these will be selected invited speakers for the various
seminar series running on campus by different departments.

ME.800.811. Introduction to Responsible Conduct of Research. 1
Credit.
This first-year course incorporates discussions on topics such as: (a) the
scientist as a responsible member of society, (b) research misconduct,
(c) data acquisition and management, (d) authorship and publication
practices, (e) mentor and trainee responsibilities, (f) use of animals in
research, (g) conflicts of interest, (h) collaborative research and (i) human
subjects protection. By inviting graduate students from a variety of
training programs, the course provides a forum for students to share their
experiences. Attendance is required for all sessions.
ME.800.900. Experiential Learning Practicum Course. 1 Credit.
The PDCO Experiential Learning Practicum offers PhD students and postdoctoral fellows the opportunity to gain experience in research-related careers in various sectors via externship opportunities (short-term opportunities with < 10 hours/week time commitment). Through these opportunities, participants will build both technical and non-technical skills that have the potential to aid them in research-related settings. Students will be expected to contribute to the project as outlined in the externship description and meet the stated expectations of the externship host site. Students will be evaluated based on an evaluation submitted by the externship supervisor at the conclusion of the externship.