### ME.340 (BIOLOGICAL CHEMISTRY)

**ME.340.300. Research Practicum. 0 Credits.**
N/A

**ME.340.699. Biological Chemistry Elective. 0 Credits.**
For Medical Students only. Specialized Topics in ME Biological Chemistry. Refer to Medical Student Electives Book located at https://www.hopkinsmedicine.org/som/students/academics/electives.html.

**ME.340.702. Current Topics in Biological Chemistry. 2 Credits.**
Current Topics in Biological Chemistry, Rigor and Reproducibility in Research and some additional module (paper review, proposal writing, Nobel-Prize winning discoveries, DEI, etc.

**ME.340.704. Developmental Biology. 1.5 Credits.**

**ME.340.706. Cell Migration in Development, Homeostasis and Disease. 0 Credits.**

**ME.340.709. Fundamentals of Glycobiology. 2.5 Credits.**
Lectures, journal clubs, and seminars are utilized to provide students with a broad foundation in the field of Glycobiology.

**ME.340.710. Techniques in Glycobiology. 4 Credits.**
Techniques in Glycobiology

**ME.340.711. Bacterial Cell Biology and Development. 0 Credits.**
This course will examine a breadth of topics in bacterial cell biology in the form of faculty lectures providing foundational information and student presentations of current research. Topics to be covered include: cell shape, polarity, and division; cell cycle control; intracellular signaling; bacterial communities; developmental processes in bacteria; and antibiotic targets and resistance.

**ME.340.712. Bacterial Signaling and Communities. 0 Credits.**
This course will examine a breadth of topics in bacterial cell biology in the form of faculty lectures providing foundational information and student presentations of current research. Topics to be covered include: cell shape, polarity, and division; cell cycle control; intracellular signaling; bacterial communities; developmental processes in bacteria; and antibiotic targets and resistance.

**ME.340.713. Microbial Pathogenesis. 1 Credit.**
This course will examine a breadth of topics in microbial pathogenesis in the form of faculty lectures providing foundational information and student presentations of current research. Various aspects of host-pathogen interactions will be covered including routes of infection; adhesion, invasion and colonization; extracellular, cytosolic and vacuolar pathogens; virulence mechanisms and host cell manipulation; innate immunity and host defense mechanisms; antibiotic therapy and resistance.

**ME.340.714. Exosomes: Molecular Mechanisms and Biomedical Applications. 0 Credits.**
This course will explore the biology of exosomes and other secreted vesicles, as well as their biomedical roles and translational applications. Class Content will consist of a combination of in-class lectures, assigned readings, assigned literature research projects, and student presentations.

**ME.340.715. Graduate Elective in Proteomics. 1 Credit.**

**ME.340.805. Research in Biochemistry and Molecular Biology. 0 Credits.**
N/A