

IMMUNOLOGY CONCENTRATION (8 credits)

Year 1

Fall

BIOMS 6150 Essential Immunology* (3 credits)

BIOMS 6151 Immunology/Infectious Disease Methods and Design I (1 credit)

VETMI 7120 Seminars in Infection & Immunity (1 credit)

Spring

BIOMS 6250 Advanced Immunology (3 credits) – *to be offered Spring 2024*

BIOMS 6251 Immunology/Infectious Disease Methods and Design II (1 credit) – *available Spring 2023*

VETMI 7120 Seminars in Infection & Immunity (1 credit)

Year 2

Immunology Journal Club

VETMI 7120 Seminars in Infection & Immunity (1 credit)

Any other elective suggested by thesis committee

*A student may request an exemption from Essential immunology if they took a similar course. Dr Leifer and/or Dr Rhodes will review the syllabus from that course and ensure the topics were covered at comparable breadth and depth. Students will be required to take BIOMS6151 regardless of whether they are excused from the Essential Immunology course. If the student is excused from Essential Immunology, they will choose an elective to fulfill the additional 3 credits.

VIROLOGY CONCENTRATION (8-10 credits)

Year 1

Fall

BIOMS 6090 Principles of Virology (2 credits) – can be taken in year 2 instead of year 1

BIOMS 6150 Essential Immunology* (3 credits)

BIOMS 6151 Immunology/Infectious Disease Methods and Design I (1 credit)

VETMI 7120 Seminars in Infection & Immunity (1 credit)

Spring

Choice of 3 credit elective on relevant topic Or Immunology/Infectious Disease Methods and Design II (1 credit)

VETMI 7120 Seminars in Infection & Immunity (1 credit)

Year 2

Virology Journal Club

VETMI 7120 Seminars in Infection & Immunity (1 credit)

Any other elective suggested by thesis committee

*A student may request an exemption from Essential immunology if they took a similar course. Dr Leifer and/or Dr Rhodes will review the syllabus from that course and ensure the topics were covered at comparable breadth and depth. Students will be required to take BIOMS6151 regardless of whether they are excused from the Essential Immunology course. If the student is excused from Essential Immunology, they will choose an elective to fulfill the additional 3 credits.

MICROBIOLOGY CONCENTRATION (8-10 credits)

Year 1

Fall

BIOMS 6150 Essential Immunology* (3 credits)

BIOMS 6151 Immunology/Infectious Disease Methods and Design I (1 credit)

VETMI 7120 Seminars in Infection & Immunity (1 credit)

Spring

BIOMS 4340 Cellular and Molecular Microbial Pathogenesis (3 credits) or BIOMS 4040 Pathogenic Bacteriology (3 credits)

Or Immunology/Infectious Disease Methods and Design II (1 credit)

VETMI 7120 Seminars in Infection & Immunity (1 credit)

Year 2

Microbiology Journal Club

VETMI 7120 Seminars in Infection & Immunity (1 credit)

Any other elective suggested by thesis committee

*A student may request an exemption from Essential immunology if they took a similar course. Dr Leifer and/or Dr Rhodes will review the syllabus from that course and ensure the topics were covered at comparable breadth and depth. Students will be required to take BIOMS6151 regardless of whether they are excused from the Essential Immunology course. If the student is excused from Essential Immunology, they will choose an elective to fulfill the additional 3 credits.

Electives for all concentrations

BioMI 6901: Prokaryotic Biology: Structure and Function

BIOMI 6902 Prokaryotic Biology: Environmental Microbiology

BioMI 6903: Prokaryotic Biology: Bacterial Physiology and Diversity

BioMI 6904: Prokaryotic Biology: Bacterial Pathogenesis

BioMI 6905 Prokaryotic Biology: Bacterial Pathogenesis

BioMI 6906: Prokaryotic Biology: Viral Diversity and Ecology

BME 6130 – Advanced Microbiome Engineering