

## **MICROBIOLOGY GRADUATE PROGRAM (MS)**

### **Thesis Track**

**A minimum of 34 credits with the following distribution:**

**1. Core requirements - all 16 credits of the following:**

- MI 512 *Applied, Food, and Industrial Microbiology* (spring) (prerequisites: MI 200, CH 112, and a course in statistical methods)
- MI 525 *Microbial Physiology* (fall) (prerequisites: MI 200, CH 211 & 212)
- MI 611 *Medical & Public Health Microbiology* (fall) (prerequisites: MI 200 or equivalent)
- MI 626 *Advanced Microbial Physiology* (spring) (prerequisites: MI 525)

**2. Elective requirements – the remaining credits are taken from the courses below:**

**NOTE: 18 credits must be from courses 600 level and above**

- MI 503 *Epidemiology* (even year spring) (prerequisite: MI 200, and a course in statistical methods)
- MI 513 *Pathogenic Fungi* (odd year fall) (prerequisite: MI 200)
- MI 517 *Electron Microscopy* (offered as required) (prerequisites: MI 212 or BI 213; and CH 111 & 112)
- MI 521 *Immunology and Serology* (even year fall) (prerequisites: MI 200, CH 211 & 212)
- MI 522 *Microbial Genetics* (odd year spring) (prerequisites: MI 200, CH 211)
- MI 523 *Microbial Ecology* (offered as required) (prerequisites: MI 200, additional unit of MI, CH 112)
- MI 524 *Molecular Biotechnology* (offered as required) (prerequisite: course in genetics or microbial genetics)
- MI 591 *Special Topics in Microbiology* (periodically)
- MI 612 *Pathology* (odd year fall) (prerequisites: MI 611)
- MI 615 *Electron Microscopy* (offered as required) (prerequisites: permission of instructor)
- MI 618 *Parasitology* (odd year spring) (prerequisites: MI 611)
- MI 619 *Virology* (as required) (prerequisites: MI 611)
- MI 621 *Topics in Immunobiology and Immunochemistry* (odd year spring) (prerequisites: MI 521 & MI 611)
- MI 623 *Microbial Pathogenesis* (odd year spring) (prerequisites: MI 525)
- MI 630 *Cellular Microbiology* (even year spring) (prerequisites: MI 611)
- MI 691 *Special Topics in Microbiology* (periodically)
- MI 693 *Independent Study in Microbiology* (prerequisites: permission of instructor & program director)
- MI 700 *Comprehensive Exam* (taken in final semester)
- MI 710 *Graduate Seminar I* (fall)\*
- MI 720 *Graduate Seminar II* (spring)\*

*\*It is advised that non-thesis students do not take more than 1 seminar course*

**3. Thesis Research Courses – total of 6 credits**

- MI 797 *Research* (fall & spring) (prerequisites: permission of instructor & program director) - **2 credits**
- MI 798 *Thesis Research* (fall & spring) (prerequisites: permission of instructor & program director) - **0 credits**
- MI 799 *Thesis Research* (fall & spring) (prerequisites: permission of instructor & program director) - **4 credits**