

# Microbiology

## **College of Arts and Sciences**

## **The Academic Minor**

Many departments have designed academic minors for the convenience of undergraduate students.

A minor is a structured group of courses that leads to considerable knowledge and understanding of a subject, although with less depth than a major. Some employers consider minors desirable, and the corresponding major requirements at the University may stipulate a minor. Some students choose to complement their major program with a minor in a related field or even in an entirely different field of interest. Students interested in pursuing an academic minor should contact their college dean's office and the department responsible for the minor program for guidance and advising.

Please note that undergraduate students can only complete a minor *in addition* to and as *a complement* to a major. The University does not award stand-alone minors.

# **Minor in Microbiology**

The minor in Microbiology consists of a total of **19 hours** as follows:

#### **Minor Requirements**

| BIO 308 General Microbiology   |
|--|
| BCH 401G Fundamentals of Biochemistry  |
| or   |
| BIO 315 Introduction to Cell Biology   |
| 0 <b>r</b>   |
| CHE 550 Biological Chemistry I   |
| or   |
| CHE 552 Biological Chemistry II  |
|  |
| One course from the following:   |
| BIO/MI 494G Immunobiology  |
| BIO/MI 495G Bacterial Pathogenesis   |
| BIO/MI 582 Virology  |
| If more than one course is taken from this list, the additional course(s) would count as |

If more than one course is taken from this list, the additional course(s) would count as an elective for the minor.

### **Minor Electives**

| Select 7 or 8 hours of electives | (to make a total of 19 hours for the minor) f | rom.   |
|----------------------------------|---|--------|
| Select / of a nours of electives | (to make a total of 19 nours for the minor) I | TOIII. |

| BIO 397 Research in Microbiology 1-3   |
|--|
| BIO 427 Seminar in Microbiology (Subtitle required)1                             |
| ABT/BIO/ENT/FOR 461 Introduction to Population Genetics                          |
| CPH 310 Disease Detectives: Epidemiology in Action                               |
| FSC 530 Food Microbiology and Safety   |
| PLS 566 Soil Microbiology  |
| PLS 567 Methods in Soil Microbiology1  |
| PPA 500 Physiology of Plant Health and Disease                                   |
| Other microbiology-related courses at the 300-level or above, as approved by the |
| Director of Undergraduate Studies for the Microbiology minor.                    |

| TSC 052 Toodoonie Disease Agents |   |
|----------------------------------|---|
| PPA 650 Fungal Biology           | 3 |
| PPA 670 Plant Bacteriology       |   |
| PPA 671 Advanced Plant Virology  | 2 |