

**Microbiology Major
Bachelor of Science Degree
College of Letters and Science**

MICROBIOLOGY MAJOR REQUIREMENTS (22 - 23 credits, depending on when you take Microbio 370 / 470)

I. Microbiology Core Requirements (16 - 17 credits, depending on when you take Microbio 370 / 470)

_____ Microbio 303 (3 cr) _____ Microbio 450 (2 cr) _____ Microbio 527 (2 cr)
_____ Microbio 304 (2 cr) _____ Microbio 526 (3 cr) _____ Microbio 551 (2 cr)
_____ Microbio 370 (2 cr) [Spring 2009 or earlier] OR Microbio 470 (3 cr) [Fall 2009 or later]

II. Microbiology Elective Requirements (6 credits, 3 credits must be from Microbio list)

_____ Microbio 324 (2 cr) _____ Microbio 525 (3 cr) _____ Microbio 632 (2 cr)
_____ Microbio 325 (3 cr) _____ Microbio 528 (3 cr) ** _____ Microbio 640 (3 cr)
_____ Microbio 330 (3 cr) _____ Microbio 531 (1 cr) _____ Microbio 655 (3-4 cr)
_____ Microbio 375 (1-4 cr)* _____ Microbio 545 (1 cr)* _____ Microbio 668 (3 cr)
_____ Microbio 425 (3 cr) _____ Microbio 607 (3 cr) _____ Microbio 670 (2 cr)
_____ Microbio 505 (2 cr) _____ Microbio 612 (3 cr)
_____ Microbio 523 (3 cr) _____ Microbio 622 (2-3 cr)

*Microbio 375 / 545 may be taken more than once if topics differ

_____ AHABS 548 (3cr) _____ MMI 301 (3 cr) _____ MMI 529 (2 cr)
_____ Biochem 601 (2cr) _____ MMI 302 (3 cr) _____ MMI 554 (2 cr)
_____ Biochem 602 (2cr) _____ MMI 341 (3 cr)** _____ MMI 575 (2 cr)
_____ Bot 330 (3 cr) _____ MMI 350 (3 cr) _____ MMI 603 (5 cr)
_____ Bot 332 (4 cr) _____ MMI 410 (2 cr) _____ PI Path 505 (3 cr)
_____ Chem 565 (4 cr)

** Students may not use both MMI 341 and Microbio 528 as Electives

SUPPORTING COURSEWORK (REQUIRED)

I. General Chemistry: (Choose 1 sequence)

_____ 103 and 104
_____ 109

II. Organic Chemistry (all required):

_____ 343 _____ 344 _____ 345

III. Physics: (Choose 1 sequence)

_____ 103 and 104 _____ 201 and 202 _____ 207 and 208

IV. Biology:

Option A

_____ Botany 130 and Zoo 101 & 102;
OR Botany/Zoo 151 & 152

_____ Biochem 501 or Biochem 507-508*
or Biomol Chem 503

Option B

_____ Biocore 301

_____ Biocore 303

_____ Biocore 323

_____ Plus any two biocore labs

_____ Biochem 501 or Biochem 507-508*
or Biomol Chem 503

*Biochem 507-508 recommended for students planning to pursue graduate studies.

L&S BS DEGREE REQUIREMENTS

I. Math: Microbiology majors are required to take calculus and choose from one of the following (171-217, 211 or 221). The prerequisites for calculus are Math 112, 113 (or Math 114) or placement in calculus via the placement exam. Some students may already have credit for calculus because of Advanced Placement (AP) scores. Letters and Science students must take 2 intermediate level math courses. The Microbiology calculus requirement will count for one intermediate math. The department recommends a statistics course (such as Stat 301, 371, 541) for the second math course.

II. Foreign Language: Students must complete the third semester of a college course (ie Spanish 203) or 3 high school units in a single language. _____

III. Breadth Requirements (40 credits)

Humanities (H, L or Z--12 credits) 6 credits must be literature:

_____ (Lit) _____ (Lit) _____ (H, L, or Z) _____ (H, L, or Z)

Social Studies (S or Z--12 credits):

_____ (S or Z) _____ (S or Z) _____ (S or Z) _____ (S or Z)

Science (B, P, or N), 16 credits including 6 of bio and 6 of physical (the Microbiology requirements will satisfy the science breadth).

_____ (B) _____ (B) _____ (P) _____ (P) _____ (B, P or N)

IV. General Education Requirements

_____ Com A _____ Com B _____ QRA _____ QRB

Ethnic Studies (3 credits - may be counted toward appropriate Breadth requirement)

_____ (e)