

UNIVERSITY OF WISCONSIN-MADISON
COLLEGE OF AGRICULTURAL AND LIFE SCIENCES

Department: **BACTERIOLOGY**
Major: **MICROBIOLOGY (677)**
Degree: **BS-NATURAL SCIENCES (ANS)**

These requirements apply to students declaring this major from Summer 2009 through Spring 2010

Completion of the CALS degree requirements will satisfy all University General Education Requirements (GER)

Admission to UW

If admitted with a deficiency see your academic Dean in 116 Agricultural Hall

SECTION 1 - COLLEGE REQUIREMENTS

These requirements apply to all degrees in the College. The courses required in this section also meet UW General Education Requirements. A course taken to satisfy a requirement in Section 1 may also be used to satisfy one, but only one, requirement in another section of the curriculum. Departments may specify somewhat different courses to satisfy the requirement in each sub-section.

Communication (I.C.)

____ Must complete one University Com A course and one University Com B course.

COURSES MAY ONLY BE USED ONCE WITHIN THESE CATEGORIES (I.E.1.-I.E.4.)

Econ or Ag and Applied Econ (I.E.1.)

____ 3 credits required from: A A E 215, 323, 336, ECON 101, 102, 111, 121, 261

Ethnic Studies (I.E.2.)

____ 3 credits required from any course classified as "e"

Humanities (I.E.3.)

____ 6 credits required from any course classified as H, L, or Z

Social Science (I.E.4.)

____ 3 credits required from any course classified as S or Z - but not
Econ or Ag and Applied Econ

International Studies (I.H.)

A course satisfying this requirement may also meet one, but only one, other curricular requirement, including one other requirement in Section 1.

3 credits required from this list:

- _____ A A E 344, 350, 374, 462, 473, 474, 567
- _____ AGRONOMY 377
- _____ AN SCI 370
- _____ ANTHRO 100, 104, 260, 277, 318, 327, 350, 358, 470
- _____ ATM OCN 121, 132
- _____ C&E SOC (formerly RUR SOC) 222, 230, 260, 613, 630
- _____ ECON 467, 474, 552, 567
- _____ ENTOM 201, 371
- _____ F&W ECOL 360, 430, 450, 452
- _____ GEOG 120, 127, 139, 244, 260, 349, 353, 355, 538
- _____ HISTORY 103, 104, 142, 242, 260, 277, 349, 359, 410, 419, 436, 440, 441, 444, 445, 446, 458
- _____ INTL BUS 200
- _____ L SC COM 340
- _____ JOURN 621
- _____ MARKETNG 420
- _____ NUTR SCI 350
- _____ POLI SCI 103, 106, 222, 244, 252, 253, 254, 260, 261, 277, 312, 331, 333, 338, 339, 342, 346, 362, 379, 505, 618, 620, 621, 627, 630, 633, 639, 640, 642, 650, 651, 652, 655, 659, 660, 661, 663, 665
- _____ SOC 244, 252, 260, 277, 614, 634

SECTION 2 - DEGREE REQUIREMENTS

These requirements apply to all Natural Sciences Degrees. Different departments may specify somewhat different courses.

Mathematics (I.A., I.B., IV.A.)

- _____ MATH 112 and 113, OR MATH 114, OR may be satisfied by placement exam
- _____ Calculus: Choose from: MATH 211, 221, or 171 and 217
- _____ Statistics: Choose from: STAT 301, 371, 541

Chemistry/Mathematics (I.D., IV.C.)

Required:

- _____ CHEM 103 and 104 OR CHEM 109
- AND
- _____ All are required: CHEM 343, 344, 345

Physics (IV.B.)

- _____ Two courses required from: PHYSICS 103 and 104, OR 201 and 202, OR 207 and 208

Biological Science (IV.E, IV.F.)

One of the following groups required:

- _____ BIOCORE 301 and 302 and 303 and 304 and 323
- _____ BOTANY/ZOOLOGY 151 and 152
- _____ BOTANY 130, and ZOOLOGY 101 and 102

AND

One of the following groups required:

- _____ BIOCHEM 501
 - _____ BIOCHEM 507 AND 508
 - _____ BMOLCHEM 503
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SECTION 3 - MAJOR REQUIREMENTS

Major (IV.G.)

All are required:

_____ MICROBIO 303
_____ MICROBIO 304
_____ MICROBIO 450
_____ MICROBIO 470
_____ MICROBIO 526
_____ MICROBIO 527
_____ MICROBIO 551

6 credits required, at least 3 must be from the first subset.

MICROBIO 375 may be repeated if topics vary.

_____ (1st subset) MICROBIO 324, 325, 330, 375, 425, 505, 523, 525, 528*, 531, 545, 607, 612, 622, 625, 632, 640, 650, 655, 668, 670

_____ (2nd subset) BIOCHEM 601, BOTANY 330, 332, CHEM 565, F&W ECOL 548
M M & I 301, 302, 341*, 350, 410, 529, 554, 575, 603, PL PATH 505

*** Students may not use both MMI 341 and MICROBIO 528 to fulfill elective requirement.**

Capstone Experience (I.I.)

_____ MICROBIO 551

Electives

The student may complete this section with any courses.

_____ _____
_____ _____

SPECIAL NOTES: For the Bachelor of Science Degree, students must complete a minimum of 124 credits with at least a 2.0 cumulative GPA. Students must take their last 30 credits in residence while officially enrolled in the College of Agricultural and Life Sciences. Degree credit will be granted only once for courses that are repeated. Other degree requirements are outlined in the Undergraduate Catalog.

DEPARTMENTAL NOTES:

Consult advisor for proper sequence of Microbiology and Chemistry/Biochemistry courses.

Students are strongly encouraged to complete several semesters of independent research (299, 691, 692, 699).

Students who take Chem 109 are advised that some Medical/Professional schools require 2 semesters of general chemistry. A second semester of inorganic chemistry (CHEM 311 or 327) is recommended.

Students planning to pursue graduate studies are encouraged to complete Biochemistry 507, 508 and Math 221, 222 (calculus). Physics 201-202 or 207-208, Chemistry 565 (physical chemistry) and Microbiology 612 (molecular genetics) also recommended.

Students are advised that career opportunities may be limited if they do not maintain a 2.5 GPA.

Comments:

Date of Audit:

Degree credits to date:

Microbiology (ANS)

Effective Summer 2009 through Spring 2010