### B.A. IN MICROBIOLOGY DEGREE REQUIREMENT CHECK SHEET

**Purpose:**

**Date:**

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#### Credit hours:
- Currently enrolled in: _____ semester: __________
- Currently enrolled in: _____ semester: __________

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#### CASE REQUIREMENTS:
- English Composition
- Mathematical Modeling (see note under major requirements)
- Public Oral Communication (COLL-P 155)
- Critical Approaches to the Arts and Sciences—must be done at IUB
- CASE A&H—4 courses (will count 2 GenEd A&H here; 2 must be inside College); need: ______
- CASE S&H—4 courses (will count 2 GenEd S&H here; 2 must be inside College); need: ______
- CASE N&M—4 courses; fulfilled by major
- Intensive Writing (IW)—must be done at IUB inside the College
- Foreign Language (FL)—4th semester proficiency
- CASE Culture Studies: 1 course Diversity in U.S.—must be done at IUB
- CASE Culture Studies: 1 course Global Civilizations and Cultures—must be done at IUB

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#### MICROBIOLOGY MAJOR REQUIREMENTS:
**Major requirements** must be completed with a C- or better.

- **Chemistry and quantitative methods Addenda**
- Requirements must be completed with a C- or better, but they do not count toward major GPA or major hours.

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#### TOTAL HOURS REQUIREMENTS:

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<th>Required</th>
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<tr>
<td>Major Hours</td>
<td>30</td>
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<tr>
<td>College Hours outside the major</td>
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<td>Total College Hours</td>
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<td><strong>Total Credit Hours</strong></td>
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<td>300-499 level Hours</td>
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<td>IUB COLL Res. after 60 Hours</td>
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**IPRP (in-progress repeated course):** Yes  No

If yes, credit hours showing as needed in your AAR may not be accurate. Ask an advisor!

College GPA of at least 2.000 is required.  _____

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#### IUB GENERAL EDUCATION REQUIREMENTS:

**Foundations:**
- English Composition (minimum grade of C required)
- Mathematical Modeling (see note under major requirements)

**Breadth of Inquiry:**
- Arts & Humanities (A&H)—6 credits; need: ______
- Social & Historical (S&H)—6 credits; need: ______
- Natural & Mathematical (N&M)—(fulfilled by major)

**World Languages & Cultures:**
- World Language—4th semester proficiency
  OR World Cultures—6 credits
  OR Approved international experience

GenEd residency complete: Yes  No  If no, you need: ______

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#### Biology

- BIOI-L 112
- BIOI-L 211
- BIOI-M 250 OR BIOI-M 380

**See lists on reverse and fill in courses below:**

- 2 Microbiology Labs:
  - ______________________
  - ______________________

- 1 Advanced Lecture: ______________________

- 3 Advanced Elective Lectures:
  - ______________________
  - ______________________
  - ______________________

- 1 Advanced Elective Lab: ______________________

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#### Chemistry

- CHEM-C 117 lecture (see note below)
- CHEM-C 341 OR CHEM-R 340

**Note:** CHEM-C 127 lab is NOT required for this degree, but it is recommended for pre-health students.

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#### Quantitative Methods

- One course: LAMP-L 316, MATH-M 118, M 119, M 211, M 365, V 118, V 119, PSY-K 300, PSY-K 310, SOC-S 371, SPEA-K 300, STAT-S 300, OR STAT-S 303

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* MATH-M 118, MATH-M 119, MATH-V 118, MATH-V 119, and MATH-M 211 also fulfill GenEd and CASE Mathematical Modeling; the other choices do not.
**Microbiology Lab list**
Complete two (2) courses:
- One of:
  - BIOL-M 315 Microbiology Lab (2 cr.)
  - BIOL-M 316 Molecular Microbiology Lab (3 cr., rarely offered)
  - BIOL-X 150 ASURE Biology Research Lab 1 (4 cr., approved topics only – ask advisor)
  - BIOT-X 150 ASURE Biotechnology Research Lab 1 (3 cr.)
- BIOL-M 360 Microbial Physiology Lab (3 cr., spring)
- BIOL-M 435 Viral Tissue Culture Lab (3 cr., P or C: BIOL-M 430, spring)
- BIOL-M 445 Medical Microbiology Lab (3 cr., P or C: BIOL-M 440, fall)
- BIOL-M 465 Environmental Microbiology Lab (3 cr., variable)
- BIOL-M 485 Microbial and Molecular Genetics Lab (3 cr., variable)
- BIOL-X 325 ASURE Biology Research Lab 2 (3 cr., approved topics only – ask advisor)
- BIOT-X 325 ASURE Biotechnology Research Lab 2 (3 cr.)

**Advanced Lecture list**
Complete one (1) Advanced Lecture:
- BIOL-L 321 Human Immunology (3 cr., spring)
- BIOL-L 472 Microbiomes: Host and Environmental Health (3 cr., spring)
- BIOL-M 350 Microbial Physiology and Biochemistry (3 cr., spring)
- BIOL-M 430 Virology (3 cr., spring)
- BIOL-M 440 Medical Microbiology: Lecture (3 cr., fall)
- BIOL-M 460 Microbial Evolution (3 cr., rarely offered)
- BIOL-M 480 Microbial and Molecular Genetics (3 cr., fall)

**Advanced Elective Lecture list**
Complete three (3) Advanced Elective Lectures:
- Additional course(s) from Advanced Lecture list above
- BIOL-L 311 Genetics (3 cr., fall, spring, and summer)
- BIOL-L 312 Cell Biology (3 cr., fall and spring)
- BIOL-M 375 Human Parasitology (4 cr., spring) OR MSCI-M 375 Parasitology (4 cr., spring)
- BIOL-M 416 Biology of AIDS (3 cr., rarely offered)
- BIOT-T 310 Biotechnology Lecture (3 cr., fall)
- BIOT-T 322 Biotechnology Writing & Communication (3 cr., fall and spring)
- CHEM-C 483 Biological Chemistry (3 cr., fall and spring) OR CHEM-C 484 Biomolecules and Catabolism (3 cr., fall and spring)

**Microbiology courses are generally offered only in specific semesters (either fall or spring), and they have prerequisites. Always check the Bulletin and the Schedule of Classes for course information before taking a course. Questions? Email your advisors at bioadv@iu.edu.**

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