**Credit hours:**
Currently enrolled in: _____ semester: ______________
Currently enrolled in: _____ semester: ______________

**AFTER SUCCESSFUL COMPLETION OF CURRENT ENROLLMENT, YOU NEED THE FOLLOWING:**

**IUB GENERAL EDUCATION REQUIREMENTS:**

- **Foundations:**
  - English Composition
  - Mathematical Modeling (fulfilled by major)

- **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: ______

**TOTAL HOURS REQUIREMENTS:**

<table>
<thead>
<tr>
<th></th>
<th>Required</th>
<th>Complete</th>
<th>Needed</th>
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</thead>
<tbody>
<tr>
<td>Major Hours (A)</td>
<td>30</td>
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<tr>
<td>College Elective Hours (B)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elective Outside Hours (C)*</td>
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<td>0</td>
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<tr>
<td>Total College Hours (A+B)</td>
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<tr>
<td>Total Credit Hours (A+B+C)</td>
<td>120</td>
<td>36</td>
<td>36</td>
</tr>
</tbody>
</table>

* Maximum of 20 Elective Outside Hours (C) allowed

IPRP: Yes No If yes, needed credit hours may not be accurate.

Overall College GPA of 2.000 or higher is required.

**CASE REQUIREMENTS:**

- Public Oral Communication (COLL-P 155)
- English Composition
- Mathematical Modeling (fulfilled by major)
- Critical Approaches to the Arts and Sciences—must be done at IUB
- CASE A&H—2 courses; will count 2 GenEd; need: ______
- CASE S&H—2 courses; will count 2 GenEd; need: ______
- CASE N&M—fulfilled by major
- Intensive Writing (IW)—must be done at IUB inside the College
- Foreign Language (FL)—3rd semester proficiency

**BIOLOGY MAJOR REQUIREMENTS:**

Major requirements must be completed with a C- or better. *Chemistry, physics, statistics, and math requirements must be completed with a C- or better, but they do not count toward major GPA or major hours.

- 30 major hours: _____ needed
- 18 BIOL hours at 300/400 level: _____ needed
- Major GPA and concentration GPA ≥ 2.000. Major GPA: ______  Concentration GPA: ______

**BIOLOGY**

- BIOL-L 111
- BIOL-L 112
- BIOL-L 113 [ASURE: BIOL-X 150]
- BIOL-L 211 (P: L 112 and CHEM-C 117)
- BIOL-L 311
- BIOL-L 318

- Four Biology lectures (see reverse for list)
  - ________________ (IUB)
  - ________________ (IUB)
  - ________________ (Advanced Skills)
  - ________________

- Two Biology labs (see reverse for list)
  - ________________ (IUB)
  - ________________ (IUB)

Lectures + labs must = at least 18 credit hours

**CHEMISTRY**

- CHEM-C 117 and CHEM-C 127
- CHEM-C 341
- CHEM-C 342
- CHEM-C 343

**PHYSICS**

- PHYS-P 201
- PHYS-P 202

**STATISTICS**

- PSY-K 300/310, SOC-S 371, SPEA-K 300, LAMP-L 316, MATH-M 365, OR STAT-S 300/303

**MATH**

- MATH-M 211 OR MATH-M 119 and M 120 OR MATH-V 119 and M 120
Biology B.S. degree with Area of Concentration: Biology of Disease

The following must equal at least 18 credit hours to fulfill the requirement for the Area of Concentration. **Two** of the upper-level lectures and **both** of the upper-level labs must be taken on the IU Bloomington campus.

### Required Lecture Courses
Complete **two (2)** of the following lectures (6 cr.):
- BIOL-L 312 Cell Biology (3 cr.)
- BIOL-L 321 Human Immunology (3 cr.)
- BIOL-L 328 Disease Ecology and Evolution (3 cr.)
- BIOL-M 380 Microbiology of Infectious Disease (3 cr.)

### Additional Lecture Courses
Complete **two (2)** of the following lectures. **At least one lecture must be chosen from the Advanced Skills Lecture list.** Courses must be different from those taken to fulfill requirement above.

#### Advanced Skills Lecture list
- BIOL-L 411 Transcription, Epigenetics, and Human Disease (3 cr.)
- BIOL-L 412 Analysis of Cancer Research (3 cr.)
- BIOL-L 417 Stem Cells in Development, Disease, and Regeneration (3 cr.)
- BIOL-L 472 Microbial Ecology (3 cr.)
- BIOL-L 485 Genetics, Biological Research (3 cr.)
- BIOL-L 486 Advanced Cell Biology (3 cr.)
- BIOL-L 487 Molecular Mechanisms of Development and Disease (3 cr.)
- BIOL-M 380 Microbiology of Infectious Disease (3 cr.)
- BIOL-M 416 Biology of AIDS (3 cr.)
- BIOL-M 440 Medical Microbiology: Lecture* (3 cr.)
- BIOL-M 445 Medical Microbiology: Laboratory* (3 cr.)
- BIOL-P 451 Integrative Human Physiology (4 cr.)
- BIOL-Z 373 Entomology (3 cr.)
- BIOL-Z 469 Endocrinology Laboratory (2 cr.)
- ASURE students: BIOL-X 325 ASURE Biology Research Lab 2 (3 cr.) requires approval of D.U.S. to count in this Area of Concentration

#### Lecture Elective list
- Additional course from the Advanced Skills Lecture list
- BIOL-B 351 Fungi (3 cr.)
- BIOL-L 312 Cell Biology (3 cr.)
- BIOL-L 321 Human Immunology (3 cr.)
- BIOL-M 430 Virology Lecture (3 cr.)
- BIOL-P 451 Integrative Human Physiology (4 cr.)
- BIOL-Z 373 Entomology (3 cr.)
- CHEM-C 383 Human Biochemistry (3 cr.) OR CHEM-C 483 Biological Chemistry (3 cr.) OR CHEM-C 484 Biomolecules and Catabolism (3 cr.)
- MSCI-M 480 Molecular Biology of Cancer: Cell Signaling & Fate (3 cr.)
- MSCI-M 485 Physiology of Human Disease (4 cr.)

### Laboratory Courses
Complete **two (2)** of the following lab courses. These courses must be different from those taken to fulfill the requirements shown at left.

- BIOL-B 352 Fungi: Laboratory (2 cr.)
- BIOL-L 324 Human Molecular Biology Laboratory (3 cr.)
- BIOL-M 315 Microbiology Laboratory (2 cr.)
- BIOL-M 435 Viral Tissue Culture Laboratory (3 cr.)
- BIOL-M 445 Medical Microbiology: Laboratory* (3 cr.)
- BIOL-P 451 Integrative Human Physiology (4 cr.)
- BIOL-Z 373 Entomology (3 cr.)
- BIOL-Z 469 Endocrinology Laboratory (2 cr.)
- ASURE students: BIOL-X 325 ASURE Biology Research Lab 2 (3 cr.) requires approval of D.U.S. to count in this Area of Concentration

* BIOL-M 440 and BIOL-M 445 have Microbiology prerequisites. For Biology B.S. students, BIOL-M 380 may substitute in place of BIOL-M 250 as a prerequisite.

⇒ BIOL-L 410 Topical Issues in Biology (2–3 cr.) may be used towards the Area of Concentration, depending on the topic covered and with approval of the Director of Undergraduate Studies.

### Notes:
- Except for the GPA requirement, a grade of C- or higher is required for a course to count toward a requirement in the concentration.
- A GPA of at least 2.00 for all courses taken in the concentration—including those where a grade lower than C- is earned—is required.
- Most courses have prerequisites. Always check the Bulletin and the Schedule of Classes for course information before taking a course.

Subplan code: BIOLDISCON