<table>
<thead>
<tr>
<th>Credit hours:</th>
<th>Purpose:</th>
<th>Date:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Currently enrolled in: ______ semester: ______________</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Currently enrolled in: ______ semester: ______________</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**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 A&H here; need: ______
- CASE S&H–2 courses; will count 2 GenEd S&H here; need: ______
- CASE N&M–4 courses; fulfilled by major
- Intensive Writing (IW)–must be done at IUB inside the College
- Foreign Language (FL)–3rd semester proficiency
- CASE Culture Studies: Diversity in U.S. course–must be done at IUB

**BIOLOGY MAJOR REQUIREMENTS:**

Major requirements must be completed with a C- or better. ★ Chemistry, physics, statistics, and math Addenda

- 30 major hours: ______ needed
- 18 BIOL hours at 300-499 level: ______ needed
- Major GPA and concentration GPA ≥ 2.000. Major GPA: ______  Concentration GPA: ______

★ 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

- EAS-E 314, PSY-K 300/K 310, SOC-S 371, SPEA-K 300, SPH-Q 381, LAMP-L 316, MATH-M 365, OR STAT-S 300/S 303

★ MATH

- MATH-M 211 OR MATH-M 119 and MATH-M 120 OR MATH-V 119 and MATH-M 120

**IUB GENERAL EDUCATION REQUIREMENTS:**

- Foundations:
  - English Composition (minimum grade of C required)
  - Mathematical Modeling (fulfilled by major)
  - Arts & Humanities (A&H)–6 credits; need: ______
  - Social & Historical (S&H)–6 credits; need: ______
  - Natural & Mathematical (N&M)–(fulfilled by major)

- Breadth of Inquiry:
  - 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>Required</th>
<th>Complete</th>
<th>Needed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major Hours</td>
<td>30</td>
<td></td>
</tr>
<tr>
<td>Total College Hours</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>Total Credit Hours</td>
<td>120</td>
<td></td>
</tr>
<tr>
<td>300-499 level Hours</td>
<td>36</td>
<td></td>
</tr>
<tr>
<td>IUB COLL Res. after 60 Hours</td>
<td>36</td>
<td></td>
</tr>
</tbody>
</table>

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. ______
Biology B.S. degree with Area of Concentration: Biology of Disease
The following must equal at least 15 credit hours. Two of the upper-level lectures and both of the upper-level labs must be taken on the IU Bloomington campus.

1. Required Lectures. Two (2) courses:
   - BIOL-L 312 Cell Biology (3 cr.) (fall and spring)
   - BIOL-L 321 Human Immunology (3 cr.) (spring)
   - BIOL-L 328 Disease Ecology and Evolution (3 cr.) (variable, spring)
   - BIOL-M 380 Microbiology of Infectious Disease (3 cr.) (fall)

2. Advanced Skills Lecture. One (1) course:
   - BIOL-L 411 Adv. Gene Reg.: Transcription, Epigenetics, & Disease (3 cr.) (spring)
   - BIOL-L 412 Analysis of Cancer Research (3 cr.) (on hiatus)
   - BIOL-L 417 Stem Cells in Development, Disease, and Regeneration (3 cr.) (spring)
   - BIOL-L 472 Microbiomes: Host and Environmental Health (3 cr.) (spring)
   - BIOL-L 485 Genetics, Models of Human Disease, and Research (3 cr.) (fall)
   - BIOL-L 486 Advanced Cell Biology (3 cr.) (P: BIOL-L 312) (spring)
   - BIOL-L 487 Molecular Mech. of Develop. and Disease (3 cr.) (spring, rarely offered)
   - BIOL-M 380 Microbiology of Infectious Disease (3 cr.) (fall)
   - BIOL-M 416 Biology of AIDS (3 cr.) (spring, rarely offered)
   - BIOL-M 440 Medical Microbiology: Lecture* (3 cr.) (fall)
   - BIOL-Z 466 Endocrinology (3 cr.) (variable, usually fall)

3. Lecture Elective. One (1) course:
   - Additional course from the Advanced Skills Lecture list
   - BIOL-B 351 Fungi (3 cr., on hiatus)
   - BIOL-L 312 Cell Biology (3 cr.) (fall and spring)
   - BIOL-L 321 Human Immunology (3 cr.) (spring)
   - BIOL-L 410 Topical Issues in Biology (2–3 cr.) may be used as Lecture Elective, depending on the topic covered; D.U.S. approval required.
   - BIOL-M 430 Virology Lecture (3 cr.) (spring)
   - BIOL-P 451 Integrative Human Physiology (4 cr.) (fall and spring)
   - BIOL-Z 373 Entomology (3 cr.) (fall and summer)
   - BIOL-Z 469 Endocrinology Laboratory (2 cr.) (spring, rarely offered)
   - BIOT-X 325 ASURE Biotechnology Research Lab 2 (3–4 cr., D.U.S. approval required)

4. Laboratory. Two (2) courses:
   - BIOL-B 352 Fungi: Laboratory (2 cr.) (on hiatus)
   - BIOL-L 324 Human Molecular Biology Laboratory (3 cr.) (spring)
   - BIOL-M 315 Microbiology Laboratory (2 cr.) (fall, spring, and summer)
   - BIOL-M 316 Molecular Microbiology Laboratory* (3 cr.) (see prerequisites) (spring)
   - BIOL-M 435 Viral Tissue Culture Laboratory (3 cr.) (spring)
   - BIOL-M 445 Medical Microbiology Laboratory* (3 cr.) (fall)
   - BIOL-P 451 Integrative Human Physiology (4 cr.) (fall and spring)
   - BIOL-X 325 ASURE Biology Research Lab 2 (3 cr., D.U.S. approval required)
   - BIOL-Z 373 Entomology (3 cr.) (fall and summer)
   - BIOL-Z 469 Endocrinology Laboratory (2 cr.) (spring, rarely offered)
   - BIOT-X 325 ASURE Biotechnology Research Lab 2 (3–4 cr., D.U.S. approval required)

* BIOL-M 316, BIOL-M 440, and BIOL-M 445 have Microbiology prerequisites. For Biology B.S. students, BIOL-M 380 may substitute for BIOL-M 250 as a prerequisite.

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 2.000 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