

B.S. IN BIOLOGY (AOC: Integrative & Organismal Biology) – DEGREE REQUIREMENT CHECK SHEET for students who matriculated summer 2020 through spring 2022

Student Name/ID: _____

Purpose: _____

Date: _____

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 (minimum grade of C required)
- 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:

	Required	Complete	Needed
Major Hours	30		
Total College Hours	100		
Total Credit Hours	120		
300-499 level Hours	36		
IUB COLL Res. after 60 Hours	36		

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. _____

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 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 IUB: _____ needed
- 18 BIOL hours at 300-499 level: _____ needed 15 concentration hours: _____ needed
- Major GPA and concentration GPA \geq 2.000. Major GPA: _____ Concentration GPA: _____

BIOLOGY

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

★ 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, 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

- 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 15 credit hours

Biology B.S. degree with Area of Concentration: Integrative & Organismal Biology

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.

Lecture Courses*

Physiological Systems Biology Lectures. Two (2) courses:

- BIOL-B 371 Ecological Plant Physiology (3 cr., *Advanced Skills, fall*)
- BIOL-L 321 Human Immunology (3 cr., *spring*)
- BIOL-L 410 Topical Issues in Biology (2–3 cr., **D.U.S. approval required**)
- BIOL-L 417 Stem Cells in Devel., Disease, Regen. (3 cr., *Advanced Skills, spring*)
- BIOL-L 423 Brain, Behavior and Evolution (3 cr., *Advanced Skills, rarely offered*)
- BIOL-P 451 Integrative Human Physiology (4 cr., *fall and spring*)
- BIOL-Z 462 Genetics of Behavior (3 cr., *Advanced Skills, spring*)
- BIOL-Z 463 Comp. Neurobio. of Animal Behavior (3 cr., *Advanced Skills, fall*)
- BIOL-Z 466 Endocrinology (3 cr., *Advanced Skills, variable, fall*)
- PHSL-P 416 Comparative Animal Physiology (3 cr., *fall*)
- PSY-P 466 Molecular and Cellular Neurobiology (3 cr., *fall*, P: PSY-P 346)

Organism-Level Biology Lectures. Two (2) courses:

- BIOL-B 351 Fungi (3 cr., *on hiatus*)
- BIOL-L 376 Biology of Birds (4 cr., *fall and spring*)
- BIOL-L 410 Topical Issues in Biology (2–3 cr., **D.U.S. approval required**)
- BIOL-L 453 Sensory Ecology (3 cr., *Advanced Skills, fall*)
- BIOL-M 460 Microbial Evolution (3 cr., *Advanced Skills, rarely offered*)
- BIOL-Z 373 Entomology (3 cr.) (*fall and summer*)
- BIOL-Z 374 Invertebrate Zoology (3 cr.) (*alternate fall semesters*)
- BIOL-Z 406 Vertebrate Zoology (5 cr., *spring*)
- BIOL-Z 460 Animal Behavior (3 cr., *Advanced Skills, fall and spring*)
- BIOL-Z 476 Biology of Fishes (3 cr., *alternate fall semesters*)

* **AT LEAST ONE (1) OF THE FOUR REQUIRED LECTURE CLASSES ABOVE MUST BE AN ADVANCED SKILLS COURSE FROM THE ADVANCED SKILLS LECTURE LIST:**

Advanced Skills Lecture list

- BIOL-B 371 Ecological Plant Physiology (3 cr.) (*fall*)
- BIOL-L 417 Stem Cells in Development, Disease, Regeneration (3 cr.) (*spring*)
- BIOL-L 423 Brain, Behavior and Evolution (3 cr.) (*rarely offered*)
- BIOL-L 453 Sensory Ecology (3 cr.) (*fall*)
- BIOL-M 460 Microbial Evolution (3 cr., *rarely offered*)
- BIOL-Z 460 Animal Behavior (3 cr.) (*fall and spring*)
- BIOL-Z 462 Genetics of Behavior (3 cr.) (*spring*)
- BIOL-Z 463 Comparative Neurobiology of Animal Behavior (3 cr.) (*fall*)
- BIOL-Z 466 Endocrinology (3 cr.) (*variable, fall*)

Laboratory Courses. Two (2) courses:

- ABEH-A 350 Animal Behavior Laboratory (3 cr.) (*fall*) – **it's out of alphabetical order in the Bulletin lab list, but it's approved!**
- ANAT-A 464 Human Tissue Biology (4 cr.) (*fall and spring*)
- BIOL-B 300 Vascular Plants (4 cr.)
- BIOL-B 352 Fungi: Laboratory (2 cr., *on hiatus*)
- BIOL-B 364 Summer Flowering Plants (4 cr., *on hiatus*)
- BIOL-L 376 Biology of Birds (4 cr.) (*fall and spring*)
- BIOL-L 433 Tropical Biology (3 cr.) (*overseas study in December or May*)
- BIOL-P 451 Integrative Human Physiology (4 cr.) (*fall and spring*)
- BIOL-S 318 Evolution, Honors (4 cr.) (*fall and spring*) – **Important:** only 1 credit hour of BIOL-S 318 may count toward Concentration Hours
- BIOL-Z 373 Entomology (3 cr.) (*fall and summer*)
- BIOL-Z 375 Invertebrate Zoology Laboratory (2 cr.) (*fall*)
- BIOL-Z 406 Vertebrate Zoology (5 cr.) (*spring*)
- BIOL-Z 469 Endocrinology Laboratory (2 cr.) (*spring*)
- PSY-P 473 Laboratory in Molecular Neuroscience (4 cr., P: PSY-P 346)
- **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

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.