

**B.S. IN BIOLOGY (AOC: Integrative & Organismal Biology) – DEGREE REQUIREMENT CHECK SHEET** for students who matriculated summer 2022 through spring 2024

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—4<sup>th</sup> 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		
<b>Total Credit Hours</b>	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)—3<sup>rd</sup> 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

- ☐ 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****★ 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

## 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 Developmental Biology & Stem Cells (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 Molec. and Cellular Neurobio. (3 cr., *usually fall, P: PSY-P 346*)

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

- ABEH-A 401 (3 cr., *variable*)
- ~~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, P or C: BIOL-Z 460*)
- ~~BIOL-M 460 Microbial Evolution~~ (3 cr., *Advanced Skills, on hiatus*)
- 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 LECTURES ABOVE MUST BE AN ADVANCED SKILLS COURSE FROM ADVANCED SKILLS LECTURE LIST:**

#### *Advanced Skills Lecture list*

- BIOL-B 371 Ecological Plant Physiology (3 cr.) (*fall*)
- BIOL-L 417 Developmental Biology & Stem Cells (3 cr.) (*spring*)
- BIOL-L 423 Brain, Behavior and Evolution (3 cr.) (*rarely offered*)
- BIOL-L 453 Sensory Ecology (3 cr.) (*variable, P or C: BIOL-Z 460*)
- 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.) (*spring*)
- ~~BIOL-B 352 Fungi Laboratory~~ (2 cr., *on hiatus*)
- ~~BIOL-B 364 Summer Flowering Plants~~ (4 cr.) (*summer, 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, rarely offered*)
- PSY-P 473 Lab in Molecular Neuroscience (4 cr., *fall and spring, 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.