

B.S. IN BIOLOGY (AOC: Integrative & Organismal Biology) – DEGREE REQUIREMENT CHECK SHEET for students who matriculated summer 2015 or after

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
- 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: _____

CASE REQUIREMENTS:

- Public Oral Communication (COLL-P 155)
- English Composition
- Mathematical Modeling (fulfilled by major)
- Critical Approaches to the Arts and Sciences
- 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
- Foreign Language (FL)–3rd semester proficiency

BIOLOGY MAJOR REQUIREMENTS:

Major requirements must be completed with a C- or better.

- 30 BIOL hours: _____ needed 18 BIOL hours at IUB: _____ needed
- 18 BIOL hours at the 300/400 level: _____ needed
- Major GPA of 2.00 or higher. Major GPA: _____

BIOLOGY

- BIOL-L 111
- BIOL-L 112
- BIOL-L 113
- 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)

CHEMISTRY

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

PHYSICS

- PHYS-P 201
- PHYS-P 202

STATISTICS

- PSY-K 300/310, SPEA-K 300, LAMP-L 316 **OR** STAT-S 300/303

MATH

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

Lectures + labs must = at least 18 credit hours

TOTAL HOURS REQUIREMENTS:

	Required	Complete	Needed
Major Hours (A)	30		
College Elective Hours (B)			
Elective Outside Hours (C)*	0		0
Total College Hours (A+B)	100		
Total Credit Hours (A+B+C)	120		
300/400-level Hours	36		
IUB COLL Res. after 60 credits	36		

* *Maximum of 20 Elective Outside Hours (C) allowed*

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

Overall College GPA of 2.00 or higher is required.

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

The following must equal at least 18 credit hours to fulfill the requirement for the Area of Concentration.

Lecture Courses*

Complete **two** of the following lectures in **organism-level biology**:

- BIOL-Z 374 Invertebrate Zoology (3 cr.)
- BIOL-Z 406 Vertebrate Zoology (5 cr.)
- BIOL-Z 373 Entomology (3 cr.)
- BIOL-L 376 Biology of Birds (4 cr.)
- BIOL-Z 476 Biology of Fishes (3 cr.)
- BIOL-B 351 Fungi (3 cr.)
- BIOL-Z 460 Animal Behavior (3 cr.)
- BIOL-M 460 Microbial Evolution (3 cr.) (P: BIOL-M 250)
- BIOL-L 453 Sensory Ecology (3 cr.)

Complete **two** of the following lectures in **physiological systems biology**:

- BIOL-Z 463 Comparative Neurobiology of Animal Behavior (3 cr.)
- PSY-P 466 Molecular and Cellular Neurobiology (3 cr.)
- PHSL-P 416 Comparative Animal Physiology (3 cr.)
- BIOL-P 451 Integrative Human Physiology (4 cr.)
- BIOL-L 423 Brain, Behavior and Evolution (3 cr.)
- BIOL-Z 466 Endocrinology (3 cr.)
- BIOL-B 371 Ecological Plant Physiology (3 cr.)
- BIOL-L 417 Developmental Biology (3 cr.)
- BIOL-L 321 Principles of Immunology (3 cr.)

* Of the four required lecture classes above, **at least one must be an Advanced Skills course** from the list below:

Advanced Skills Courses

- BIOL-Z 460 Animal Behavior (3 cr.)
- BIOL-Z 463 Comparative Neurobiology of Animal Behavior (3 cr.)
- BIOL-M 460 Microbial Evolution (3 cr.)
- BIOL-L 423 Brain, Behavior and Evolution (3 cr.)
- BIOL-Z 466 Endocrinology (3 cr.)
- BIOL-B 371 Ecological Plant Physiology (3 cr.)
- BIOL-L 417 Developmental Biology (3 cr.)
- BIOL-L 453 Sensory Ecology (3 cr.)

Laboratory Courses

Complete at least **two** of the following lab courses (courses must be different from those taken to fulfill the requirements shown at left):

- BIOL-Z 375 Invertebrate Zoology Laboratory (2 cr.)
- ANAT-A 464 Human Tissue Biology (4 cr.)
- BIOL-B 352 Fungi: Laboratory (2 cr.)
- BIOL-P 451 Integrative Human Physiology (4 cr.)
- BIOL-Z 469 Endocrinology Laboratory (2 cr.)
- PSY-P 473 Laboratory in Molecular Neuroscience (3 cr.)
- BIOL-B 300 Vascular Plants (4 cr.)
- BIOL-B 364 Summer Flowering Plants (4 cr.)
- BIOL-Z 373 Entomology (3 cr.)
- BIOL-L 376 Biology of Birds (4 cr.)
- BIOL-Z 406 Vertebrate Zoology (5 cr.)

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

Only 1 credit hour of BIOL-S 318 *Evolution, Honors* may be used toward the Area of Concentration lab requirement (not all 4 credit hours). Since 4 lectures + 2 labs must equal 18 credit hours minimum, it will be to most students' advantage not to select BIOL-S 318 in order to fulfill a lab for this Area of Concentration.

Most courses have prerequisites. Always check the Bulletin and the Schedule of Classes for course information before taking a course.