

## Bachelor of Sciences - Biology Biology Education

An undergraduate degree from Washington State University requires a minimum of 120 total semester hours. The University, College of Arts and Sciences, and School of Biological Sciences each have specific requirements for a degree; checklists for these requirements are provided on the second page of this sheet. Requirements and electives for the specific degree and option headlined above are listed below this paragraph. All official requirements for each student's specific degree are listed in the student's my.wsu.edu Academic Requirement Report. This sheet is only meant to serve as a guide.

### **Biology Core Requirements:**

#### **Biological Sciences Requirements:**

		Credits	Grade
BIOLOGY 106	Intro Biology: Organismal	4	_____
BIOLOGY 107	Intro Biology: Cell Bio & Genetics	4	_____
BIOLOGY 301	General Genetics	4	_____
BIOLOGY 370 [M]	Ecology of Health & Disease <b>OR</b>		
BIOLOGY 372 [M]	General Ecology	4	_____
BIOLOGY 395	Evolutionary Medicine <b>OR</b>		
BIOLOGY 403	Evolutionary Biology <b>OR</b>		
BIOLOGY 405	Prin. of Organic Evolution	3	_____

#### **Calculus Requirement:**

MATH 140	Calculus for Life Scientists <b>OR</b>		
MATH 171	Calculus I	4	_____

#### **Statistics Requirement:**

STAT 212	Intro to Statistical Methods <b>OR</b>		
STAT 412	Stat Methods in Research I <b>OR</b>		
PSYCH 311	Statistics in Psychology	3-4	_____

#### **Chemistry Requirement:**

CHEM 105*	Principles of Chemistry I	4	_____
CHEM 106*	Principles of Chemistry II	4	_____
CHEM 345	Organic Chemistry I	4	_____

#### **Physics Requirement:**

PHYS 101 & 111*	General Physics I <b>OR</b>		
PHYS 201 & 211*	Physics for Sci. & Engineers I	4	_____
PHYS 102 & 112	General Physics II <b>OR</b>		
PHYS 202 & 212	Physics for Sci. & Engineers II	4	_____

### **Biology Education Requirements:**

PSYCH 105	Introductory Psychology	3	_____
ENGR 120	Innovation in Design	2	_____
CHEM 370	Chemical Biology <b>OR</b>		
MBIOS 303	Introductory Biochemistry	3-4	_____
TCH_LRN 301	Learning and Development	3	_____
BIOLOGY 430	Methods of Teaching Science I <b>OR</b>		
TCH_LRN 430	Methods of Teaching Science I	3	_____
BIOLOGY 431	Methods of Teaching Science II <b>OR</b>		
TCH_LRN 431	Methods of Teaching Science II	3	_____
TCH_LRN 465	Teaching ELL for Secondary Teach	3	_____
TCH_LRN 467 [M]	Adolescence, Community School	3	_____
TCH_LRN 470	Classroom Management	3	_____

### **Biology Education Requirements: (con't)**

#### **Choose one Animal Course from the following:**

		Credits	Grade
BIOLOGY 322 [M]	Invertebrate Biology	4	_____
BIOLOGY 324	Comparative Vertebrate Anatomy	4	_____
BIOLOGY 423	Ornithology	4	_____
BIOLOGY 428	Mammalogy	4	_____
BIOLOGY 432 [M]	Biology of Amphibians and Reptiles	4	_____
BIOLOGY 438 [M]	Animal Behavior	3	_____

#### **Choose one Plant Course from the following:**

BIOLOGY 332 [M]	Systematic Botany	4	_____
BIOLOGY 401 [CAPS][M]	Plants and People	3	_____
BIOLOGY 409	Plant Anatomy	4	_____
BIOLOGY 420	Plant Physiology	3	_____

### School of Biological Sciences Requirements

- A minimum of 120 total semester hours.
- At least 40 semester hours must be 300 and 400 level coursework.
- A minimum of 19 semester hours of core BIOLOGY courses (BIOLOGY 106; 107; 301; 370 or 372; and 395 or 403 or 405).
- An additional 21 semester hours of biological sciences coursework selected in consultation with your biology advisor. The 21 semester hours must include 15 credits of 300 and 400 level courses, six of which must be BIOLOGY taken in residence at WSU. See guidelines for the many BIOLOGY options that are available to structure your course selections.
- An overall GPA of at least 2.0 must be maintained in all college and departmental requirements.
- A maximum of four credits of coursework that are graded S,F may be used toward fulfilling School requirements or program options, and no other courses taken S,F can be applied toward fulfilling School requirements or program options.
- Two BIOLOGY courses to satisfy the "Writing in the Major" [M] requirement.
- One BIOLOGY course to satisfy the "Capstone" [CAPS] requirement.

### UCORE and College of Arts and Sciences Requirements

	Grade		Credits
[ROOT]	_____	Roots of Contemporary Issues	(3)
[COMM]	_____	Communication <b>OR</b>	(3)
[WRTG]	_____	Written Communication	(3)
[WRTG]	_____	Written Communication	(3)
[QUAN]	_____	Quantitative Reasoning	(3)
[SSCI]	_____	Inquiry in the Social Sciences	(3)
[HUM]	_____	Inquiry in the Humanities	(3)
[ARTS]	_____	Inquiry in the Arts	(3)
[BSCI]	_____	Inquiry in the Biological Sciences	(3)
[PSCI]	_____	Inquiry in the Physical Sciences	(3)
[EQJS]	_____	Inquiry into Equity and Justice	(3)
[DIVR]	_____	Diversity	(3)
[CAPS]	_____	Integrative <b>Biology</b> Capstone	(3)
[M]	_____	Writing in the Major (Biology)	(2-4)
[M]	_____	Writing in the Major (Biology)	(2-4)

Note: Three UCORE courses of 3 credits (9 credits total) may fulfill major requirements.

- \_\_\_\_\_ Foreign Language 1 yr. or 2 yrs. HS (CAS)
- \_\_\_\_\_ Upper Division 3xx-4xx (Minimum 40 credits)
- \_\_\_\_\_ Minimum Total Credits (120)
- \_\_\_\_\_ University Writing Portfolio

<https://writingprogram.wsu.edu/uwpsubmission/>