Biology Teaching Option

The Biology Teaching option in the Biological Sciences major is designed for students who wish to become licensed to teach Biology in grades 5-12. Upon completion of the degree, students are eligible for licensure in the state of Montana. Secondary education students are encouraged to pursue a teaching minor in an additional content area and should contact an advisor for details. Obtaining a teaching minor will require more than eight semesters. For more information on admission to the Teacher Education Program, Student Teaching, Licensure, Professional Expectations and more, please visit: The Teacher Education (http://catalog.montana.edu/ undergraduate/education-health-human-development/departmenteducation/) Page

The Biology Teaching Option includes 40 credits of Biology (28-30 credits of basic biology courses, plus 11-12 biology elective credits), supporting Chemistry, Physics, and Mathematics courses, 18 credits in the university Core 2.0, 24 credits of professional preparation, and Student Teaching. Biology electives must include 8 credits of advisor-approved upper division credits in biological sciences.

Freshman Year	Credits	
	Fall	Spring
BIOB 170IN - Principles of Biological Diversity	4	
CHMY 141 - College Chemistry I	4	
& CHMY 142 - College Chemistry I Lab		
M 161Q - Survey of Calculus	4	
EDU 101US - Teaching and Learning	3	
or COMX 111US - Introduction to Public		
Speaking or CLS 101US - Knowledge and Community		
BIOB 160 - Principles of Living Systems		4
CHMY 143 - College Chemistry II		4
& CHMY 144 - College Chemistry II Lab		
HDFS 101IS - Indiv and Fam Dev: Lifespan		3
EDU 223IS - Educ Psych and Adolescent Dev		3
or EDU 222IS - Educ Psych & Child Development		
University Core or Electives		0-3
Year Total:	15	14-17
Sophomore Year	Credits	
	Fall	Spring
CHMY 211 - Elements of Organic Chemistry	Fall 5	Spring
& CHMY 212 - Elements of Organic Chemistry		Spring
& CHMY 212 - Elements of Organic Chemistry Lab	5	Spring
& CHMY 212 - Elements of Organic Chemistry Lab PHSX 205 - College Physics I	5	Spring
& CHMY 212 - Elements of Organic Chemistry Lab PHSX 205 - College Physics I EDU 370 - Integrating Tech into Educ	5 4 3	Spring
& CHMY 212 - Elements of Organic Chemistry Lab PHSX 205 - College Physics I EDU 370 - Integrating Tech into Educ University Core or Electives	5	
& CHMY 212 - Elements of Organic Chemistry Lab PHSX 205 - College Physics I EDU 370 - Integrating Tech into Educ University Core or Electives BCH 380 - Biochemistry	5 4 3	Spring 5
& CHMY 212 - Elements of Organic Chemistry Lab PHSX 205 - College Physics I EDU 370 - Integrating Tech into Educ University Core or Electives BCH 380 - Biochemistry & BCH 381 - Biochemistry Lab	5 4 3	5
& CHMY 212 - Elements of Organic Chemistry Lab PHSX 205 - College Physics I EDU 370 - Integrating Tech into Educ University Core or Electives BCH 380 - Biochemistry & BCH 381 - Biochemistry Lab Choose one of the following:	5 4 3	
& CHMY 212 - Elements of Organic Chemistry Lab PHSX 205 - College Physics I EDU 370 - Integrating Tech into Educ University Core or Electives BCH 380 - Biochemistry & BCH 381 - Biochemistry Lab Choose one of the following: BIOM 103IN - Unseen Universe: Microbes (3)	5 4 3	5
& CHMY 212 - Elements of Organic Chemistry Lab PHSX 205 - College Physics I EDU 370 - Integrating Tech into Educ University Core or Electives BCH 380 - Biochemistry & BCH 381 - Biochemistry Lab Choose one of the following: BIOM 103IN - Unseen Universe: Microbes (3) BIOM 360 - General Microbiology (5)	5 4 3	5 3-5
& CHMY 212 - Elements of Organic Chemistry Lab PHSX 205 - College Physics I EDU 370 - Integrating Tech into Educ University Core or Electives BCH 380 - Biochemistry & BCH 381 - Biochemistry Lab Choose one of the following: BIOM 103IN - Unseen Universe: Microbes (3) BIOM 360 - General Microbiology (5) PHSX 207 - College Physics II	5 4 3	5 3-5 4
& CHMY 212 - Elements of Organic Chemistry Lab PHSX 205 - College Physics I EDU 370 - Integrating Tech into Educ University Core or Electives BCH 380 - Biochemistry & BCH 381 - Biochemistry Lab Choose one of the following: BIOM 103IN - Unseen Universe: Microbes (3) BIOM 360 - General Microbiology (5) PHSX 207 - College Physics II EDU 211D - Multicultural Education	5 4 3 0-3	5 3-5 4 3
& CHMY 212 - Elements of Organic Chemistry Lab PHSX 205 - College Physics I EDU 370 - Integrating Tech into Educ University Core or Electives BCH 380 - Biochemistry & BCH 381 - Biochemistry Lab Choose one of the following: BIOM 103IN - Unseen Universe: Microbes (3) BIOM 360 - General Microbiology (5) PHSX 207 - College Physics II EDU 211D - Multicultural Education Year Total:	5 4 3 0-3 12-15	5 3-5 4
& CHMY 212 - Elements of Organic Chemistry Lab PHSX 205 - College Physics I EDU 370 - Integrating Tech into Educ University Core or Electives BCH 380 - Biochemistry & BCH 381 - Biochemistry Lab Choose one of the following: BIOM 103IN - Unseen Universe: Microbes (3) BIOM 360 - General Microbiology (5) PHSX 207 - College Physics II EDU 211D - Multicultural Education	5 4 3 0-3 12-15 Credits	5 3-5 4 15-17
& CHMY 212 - Elements of Organic Chemistry Lab PHSX 205 - College Physics I EDU 370 - Integrating Tech into Educ University Core or Electives BCH 380 - Biochemistry & BCH 381 - Biochemistry Lab Choose one of the following: BIOM 103IN - Unseen Universe: Microbes (3) BIOM 360 - General Microbiology (5) PHSX 207 - College Physics II EDU 211D - Multicultural Education Year Total:	5 4 3 0-3 12-15	5 3-5 4 3

BIOO 412 - Animal Physiology or BIOO 433 - Plant Physiology	3	
BIOB 318 - Biometry or STAT 216Q - Introduction to Statistics	3	
EDSP 306 - Exceptional Learners	3	
University Core or Electives	3-6	
BIOE 370 - General Ecology		3
BIOB 420 - Evolution		3
BIOE 499 - Senior Thesis/Capstone		2
EDU 382 - Assessmt, Curric, Instructn		3
University Core or Electives		3-6
Year Total:	15-18	14-17
Senior Year	Credits	
	Fall	Spring
BIOE 408 - Rocky Mountain Vegetation or BIOE 416 - Alpine Ecology	Fall 3	Spring
		Spring
or BIOE 416 - Alpine Ecology	3	Spring
or BIOE 416 - Alpine Ecology EDM 403 - Methods: 5-12 Science	3	Spring
or BIOE 416 - Alpine Ecology EDM 403 - Methods: 5-12 Science EDP 304 - Practicum: 5-12/K-12	3 3 2	Spring
or BIOE 416 - Alpine Ecology EDM 403 - Methods: 5-12 Science EDP 304 - Practicum: 5-12/K-12 EDP 305 - Practicum Lab: 5-12/K-12 EDU 347 - Managing the Learning Environment	3 3 2 1	Spring
or BIOE 416 - Alpine Ecology EDM 403 - Methods: 5-12 Science EDP 304 - Practicum: 5-12/K-12 EDP 305 - Practicum Lab: 5-12/K-12 EDU 347 - Managing the Learning Environment for K-12/Secondary	3 3 2 1 2	Spring
or BIOE 416 - Alpine Ecology EDM 403 - Methods: 5-12 Science EDP 304 - Practicum: 5-12/K-12 EDP 305 - Practicum Lab: 5-12/K-12 EDU 347 - Managing the Learning Environment for K-12/Secondary Upper Division Biology Elective	3 3 2 1 2	Spring 12
or BIOE 416 - Alpine Ecology EDM 403 - Methods: 5-12 Science EDP 304 - Practicum: 5-12/K-12 EDP 305 - Practicum Lab: 5-12/K-12 EDU 347 - Managing the Learning Environment for K-12/Secondary Upper Division Biology Elective PRAXIS exam	3 3 2 1 2	

University requirements for graduation also must be completed, including university core requirements and a minimum of 120 total credits of which 42 must be in courses numbered 300 and above.