# Science Education Option 2014-2016

ALL CLASSES MUST BE COMPLETED WITH A "C" OR BETTER AND A 2.75 GPA.

#### NAME:

GID:

The science education option focuses on courses designed to strengthen the student's background in sciences. While neither a minor nor an endorsement, this option will build an excellent foundation for those interested in teaching science at the grade school and middle school level. This option does not lead to State Endorsement in science. However, a notation will appear on the student's transcript indicating an additional option in science education.\*

Take ALL of the following:

Rubric/#	Course Title	Semester (s) Offered	Credits	Grade
Biological Science	1 lab course <sup>*</sup> (4cr) and 1 choice (3-4 cr) from list below			
BIOB 170* BIOB 160* BIOE 103	Prin. Of Biol Diversity Prin of Living System Environmental Science & Society	Fall/ Spring Fall/Spring Fall/Spring	7-8 cr	
BIOM 103 Earth Science ERTH 101IN* ERTH 212RN* GEO 103CS* ERTH 102CS ASTR 110IN	General Microbiology <b>1 lab course* (4cr) and</b> <b>1choice (3-4 cr) from list below</b> Intro to Physical Geology Yellowstone Scientific Lab Intro to Environmental Geography Topics in Earth Science <i>(choose 3-4)</i> Mysteries of the Sky	Fall/Spring/Summer Fall/Spring Fall Spring Fall/Spring Fall/ Spring/ Summer	7-8 cr	
Physical Science CHMY 121* CHMY 141* PHSX 103IN PHSX 201IN* PHSX 205* PHSX 207*	1 Chemistry lab course* (4 cr) and 1 Physics lab course* (3-4 cr) and 1 choice (3-4 cr) from list below Introduction to General Chemistry General Chemistry I Our Physical World Physics by Inquiry College Physics I College Physics II	Fall/ Spring/ Summer Fall/ Spring/ Summer Spring Fall/ Spring Fall/Spring/ Summer Fall/Spring/ Summer	9-12 cr	

A minimum of 120 credits is required for graduation; 42 of these credits must be in courses numbered 300 and above. Students choosing this competency voluntarily select a program that requires additional coursework above the 120 credits required for a standard four-year degree.

Students must declare this as an additional option by completing the appropriate form.

Total Credits: 15+

For additional information contact:

Dr. Mary Leonard Department of Education <u>mleonard@montana.edu</u> 406-994-2336



### Elementary (K-8) Education Major - Plus Science Option Suggested Curriculum by Semester 2014-2016

All grades must be completed with a "C" or better and a 2.75 GPA in major, minor, option & CUM. A minor or option is encouraged but not required for this major.

Freshman Year ( Cr) Summer courses are recommended (not required) to reduce credit load in Fall/Spring semesters and support degree completion in 4 years – especially if adding a minor or option.

Fall		
Course	Cr	Grd
EDU 101US - Teaching & Learning	3	
WRIT 101W - College Writing	3	
EDU 222IS - Ed Psych and Child Development	3	
Biology from List (with Lab)	3-4	
Math 132 - Numbers & Ops for K-8 Teachers*	3	
*(Must test into Math Level 3 via MPLEX or ACT/SAT to register)		

Spring					
Course	Cr	Grd			
EDU 204IA – Creative Arts & Lifelong Learning	3				
NASX Course - NASX 105D; NASX 205D; OR 232D	3				
Human Cultures — GPHY 121D; GPHY 141D; ANTY 101D;	3				
SOCI 101IS; AMST101D					
Earth Science from List (with Lab)	4				
Math 133Q – Geo & Meas. for K-8 Tchrs	3				

Sophomore Year ( Cr) Check course µ	ore-requis	ites.		
Fall	Spring			
Course	Cr	Grd	Course Cr	Grd
PSCI 210 – American Government	3		EDU 211D – Multicultural Education 3	
EDU 331 – Lit. & Lit. for Children	3		EDU 370 – Integrating Tech into Education 2	
TE250CS Technology & Society	3		Earth Science from List 3-4	
CHMY 121/141 (STEM Elective)	4		History Core — HSTA 1011H; HSTA 1021H; HSTR 1011H OR 4 HSTR1021H	
Math 234 – Adv Topics Math K-8 Teachers	3		Physical Science from List (with Lab) 3-4	

#### Junior Year (\_\_\_\_\_ cr) Must be at 93 credits at end of Spring semester to graduate in 4 years

Fall				Spring			
Course	Cr	Grd		Course		Grd	
EDU 382 – Assessment, Curriculum & Instruction	3			Physical Science from List	3-4		
EDSP 306 – Exceptional Learners 3				EDU 397 – K-8 Creative Arts Methods	3		
EDU 330 – Emergent Literacy				EDU 397 – K-8 Science Methods	3		
EDU 397 - K-8 Health Enhancement 3				EDU 342 – Managing the Learn. Env.	3		
Biology from List 4			Ī	EDU 395 – Practicum I	3		
Submit application to Teacher Education Program				Attend Student Teaching Meeting	ng		

#### Senior Year (\_\_\_\_\_ cr)

Fall						
Course	Cr	Grd				
EDU 397 – K-8 Language Arts Methods	3					
EDU 397 – K-8 Math Methods	3					
EDU 397R – K-8 Social Studies Methods	3					
EDU 438 – Lit Assessment, Diagnosis & Instruction						
EDU 395 – Practicum II (Classroom)	3					
Submit application for Student Teaching & Graduation						

Spring						
Course	Cr	Grd				
EDU 495 – Student Teaching	12					
Total # of Credits:						



## **Department of Education • Semester Planning Sheet**

Au	tumn Seme	ster	Sp	oring Semes	ter		Summer	VIE OWIAEK2U
Rubric	Number	Credits	Rubric	Number	Credits	Rubric	Number	Credits
	tumn Semes			oring Semes			Summer	
Rubric	Number	Credits	Rubric	Number	Credits	Rubric	Number	Credits
	tumn Semes			oring Semes			Summer	
Rubric	Number	Credits	Rubric	Number	Credits	Rubric	Number	Credits
	tumn Seme			oring Semes			Summer	
Rubric	Number	Credits	Rubric	Number	Credits	Rubric	Number	Credits
			-					