

ADVISING WORKSHEET

BACHELOR OF SCIENCE DEGREE MAJOR IN BIOLOGY TEACHING LICENSURE OPTION General Bulletin 2017-2018

Montana State University Billings Advising & Career Services Phone: 406-657-2240 Fax: 406-657-2302 advising@msubillings.edu

www.msubillings.edu/advise/

Name	 	
Student ID#_	 	

GENERAL EDUCATION REQUIREMENTS - SEE ATTACHED PAGE FOR SPECIFIC COURSES

General Education Category	Course #	Credits	Grade	Semester	Equivalent
Category I: Global Academic Skills (9 credits) # A. Mathematics (3 credits) STAT 141 or 216 and M 171 – Major Requirements					
B. English (3 credits) #	WRIT 101				
C. Communication & Information Literacy (3 credits) #	COMX 111 or 115				
Category II: Natural Sciences (7 credits) # 2 lectures (6 credits) & 1 lab (1 credit) (1 life science & 1 physical science & 1 lab)					
DIOD 160/161 & CHMV 141 Maior Barriann and					
BIOB 160/161 & CHMY 141 – Major Requirements					
Category III: Social Sciences and History (6 credits) A. Social Science (3 credits)	EDU 105				
B. History (3 credits) #	HSTA 101 or 102				
Category IV: Cultural Diversity (3 credits) #	NASX 105 or 205				
Category V: Arts & Humanities (6 credits) A. Fine Arts (3 credits)					
B. Humanities (3 credits)					

A minimum grade of "C" required in all General Education courses.

Required for Admission to the Educator Preparation Program

Revie	wed:			

GENERAL EDUCATION REQUIREMENTS

	rv I. (GLOBAL ACADEMIC SKILLS	9 credits	CATEGO	DRV III	SOCIAL SCIENCES AND HISTORY 6 CI	REDITS
		uired to take one course from each sub				uired to take one course from each subcate	
		- Mathematics	3 credits				credits
M	105	Contemporary Mathematics	3	ANTY	217	Physical Anthropology & Archeology	3
M	114	Extended Technical Mathematics	3	BGEN	105	Introduction to Business	3
M	121	College Algebra	3	COMX	106	Communicating in a Dynamic Workplac	
M	122	College Trigonometry	3	ECNS	201	Principles of Microeconomics	3
M	130	Mathematics for Elementary Teacher		ECNS	202	Principles of Macroeconomics	3
M	143	Finite Mathematics	4	EDU	105	Education and Democracy	3
M	161	Survey of Calculus	3	GPHY	141	Geography of World Regions	3
M	171	Calculus I	4	HTH	110	Personal Health and Wellness	3
STAT	141	Introduction to Statistical Concepts	3	PSCI	210	Introduction to American Government	3
STAT	216	Introduction to Statistics	4	PSCI	220	Introduction to Comparative Government	
				PSYX	100	Introduction to Psychology	3
Subcate	gory B	- English	3 credits	PSYX	231	Human Relations	3
WRIT	101	College Writing I	3	SOCI	101	Introduction to Sociology	3
WRIT	121	Introduction to Technical Writing	3	SOCI	201	Social Problems	3
WRIT	122	Introduction to Business Writing	3				
WRIT	201	College Writing II	3	Subcate	gory B	- History 3	credits
WRIT	220	Business & Professional Writing	3	HSTA	<i>101</i>	American History I	3
WRIT	221	Intermediate Technical Writing	3	OR			
				HSTA	102	American History II	3
Subcate	gory C-	Communication & Information Litera	•	-			
COMX	111	Introduction to Public Speaking	3	CATEGO	ORY IV:	CULTURAL DIVERSITY 3 of	credits
OR				NASX	105	Introduction to Native American Studie	es 3
COMX	115	Introduction to Interpersonal Comm	nunication3	OR	100	21111 0411011 10 1 14111 0 1211101 10411 200410	.5
				NASX	205	Native Americans in Contemporary Soc	cietv 3
CATEGO	ORY II:	NATURAL SCIENCES 6 cr. lecture	& 1 cr. lab			. .	
Students	are req	uired to take one course from each sub	category and	CATEGO	DRY V:	ARTS & HUMANITIES 6	credits
at least o	one corr	esponding lab <u>or</u> Integrated Sciences					
Suboata				tudonte	are ree	uired to take one course trom each subcate	agory
Subtate	gory A		3-4 credits			uired to take one course from each subcate	
BIOB	gory A 101		3-4 credits	Subcate	gory A	- Fine Arts 3	credits
		- Life Sciences		Subcate ARTZ	gory A 101	- Fine Arts Art Fundamentals	credits 3
BIOB	101	- Life Sciences Discover Biology	3 1	Subcate ARTZ ARTZ	gory A 101 105	- Fine ArtsArt FundamentalsVisual Language-Drawing	credits 3 3
BIOB BIOB	101 102	– Life Sciences Discover Biology Discover Biology Lab	3 1 Health 3	Subcate ARTZ ARTZ ARTZ	gory A 101 105 131	- Fine Arts Art Fundamentals Visual Language-Drawing Ceramics for Non-majors	credits 3 3 3
BIOB BIOB	101 102 121	 Life Sciences Discover Biology Discover Biology Lab Fundamentals of Biology for Allied Fund of Biology: Evolution, Ecology Biodiversity 	3 1 Health 3 7, and 3	Subcate ARTZ ARTZ ARTZ CRWR	gory A 101 105 131 240	- Fine Arts Art Fundamentals Visual Language-Drawing Ceramics for Non-majors Intro Creative Writing Workshop	3 3 3 3 3
BIOB BIOB	101 102 121 122 123	- Life Sciences Discover Biology Discover Biology Lab Fundamentals of Biology for Allied Fund of Biology: Evolution, Ecology	3 1 Health 3 3 4, and 3 3	Subcate ARTZ ARTZ ARTZ CRWR FILM	gory A 101 105 131 240 160	- Fine Arts Art Fundamentals Visual Language-Drawing Ceramics for Non-majors Intro Creative Writing Workshop Introduction to World Cinema	3 3 3 3 3 3 3
BIOB BIOB BIOB	101 102 121 122	 Life Sciences Discover Biology Discover Biology Lab Fundamentals of Biology for Allied Fund of Biology: Evolution, Ecology Biodiversity Fund of Biology: The Nature of Nutr Principles of Living Systems 	3 1 Health 3 , and 3 ; ition 3 3	Subcate ARTZ ARTZ ARTZ CRWR FILM LIT	gory A 101 105 131 240 160 270	- Fine Arts Art Fundamentals Visual Language-Drawing Ceramics for Non-majors Intro Creative Writing Workshop Introduction to World Cinema Film & Literature	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3
BIOB BIOB BIOB BIOB	101 102 121 122 123	 Life Sciences Discover Biology Discover Biology Lab Fundamentals of Biology for Allied Fund of Biology: Evolution, Ecology Biodiversity Fund of Biology: The Nature of Nutrel 	3 1 Health 3 3 4, and 3 3	Subcate ARTZ ARTZ ARTZ ARTZ CRWR FILM LIT MART	gory A 101 105 131 240 160 270 260	- Fine Arts Art Fundamentals Visual Language-Drawing Ceramics for Non-majors Intro Creative Writing Workshop Introduction to World Cinema Film & Literature Computer Presentation and Animation	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3
BIOB BIOB BIOB BIOB	101 102 121 122 123 160	- Life Sciences Discover Biology Discover Biology Lab Fundamentals of Biology for Allied Fund of Biology: Evolution, Ecology Biodiversity Fund of Biology: The Nature of Nutr Principles of Living Systems Principles of Living Systems Lab	3 1 Health 3 7, and 3 itition 3 3 1	Subcate ARTZ ARTZ ARTZ CRWR FILM LIT MART MUSI	gory A 101 105 131 240 160 270 260 101	- Fine Arts Art Fundamentals Visual Language-Drawing Ceramics for Non-majors Intro Creative Writing Workshop Introduction to World Cinema Film & Literature Computer Presentation and Animation Enjoyment of Music	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3
BIOB BIOB BIOB BIOB BIOB BIOB Subcate	101 102 121 122 123 160 161 gory B	 Life Sciences Discover Biology Discover Biology Lab Fundamentals of Biology for Allied Fund of Biology: Evolution, Ecology Biodiversity Fund of Biology: The Nature of Nutrest Principles of Living Systems Principles of Living Systems Lab Physical Sciences 	3 1 Health 3 7, and 3 ition 3 3 1 3-4 credits	Subcate ARTZ ARTZ ARTZ CRWR FILM LIT MART MUSI MUSI	gory A 101 105 131 240 160 270 260 101 114	- Fine Arts Art Fundamentals Visual Language-Drawing Ceramics for Non-majors Intro Creative Writing Workshop Introduction to World Cinema Film & Literature Computer Presentation and Animation Enjoyment of Music Band: MSUB Symphonic	3 3 3 3 3 3 3 1
BIOB BIOB BIOB BIOB BIOB BIOB Subcate ASTR	101 102 121 122 123 160 161	- Life Sciences Discover Biology Discover Biology Lab Fundamentals of Biology for Allied Fund of Biology: Evolution, Ecology Biodiversity Fund of Biology: The Nature of Nutr Principles of Living Systems Principles of Living Systems Lab - Physical Sciences Introduction to Astronomy	3 1 Health 3 7, and 3 ition 3 3 1 3-4 credits 3	Subcate ARTZ ARTZ ARTZ CRWR FILM LIT MART MUSI MUSI MUSI	90ry A 101 105 131 240 160 270 260 101 114 131	- Fine Arts Art Fundamentals Visual Language-Drawing Ceramics for Non-majors Intro Creative Writing Workshop Introduction to World Cinema Film & Literature Computer Presentation and Animation Enjoyment of Music Band: MSUB Symphonic Jazz Ensemble I: MSUB	3 3 3 3 3 3 3 3 1 1 1
BIOB BIOB BIOB BIOB BIOB BIOB Subcate ASTR ASTR	101 102 121 122 123 160 161 gory B	- Life Sciences Discover Biology Discover Biology Lab Fundamentals of Biology for Allied Fund of Biology: Evolution, Ecology Biodiversity Fund of Biology: The Nature of Nutr Principles of Living Systems Principles of Living Systems Lab - Physical Sciences Introduction to Astronomy Introduction to Astronomy Lab	3 1 Health 3 7, and 3 7ition 3 3 1 3-4 credits 3 1	Subcate ARTZ ARTZ ARTZ CRWR FILM LIT MART MUSI MUSI MUSI MUSI	gory A 101 105 131 240 160 270 260 101 114 131 147	- Fine Arts Art Fundamentals Visual Language-Drawing Ceramics for Non-majors Intro Creative Writing Workshop Introduction to World Cinema Film & Literature Computer Presentation and Animation Enjoyment of Music Band: MSUB Symphonic Jazz Ensemble I: MSUB Choral Ensemble: University Chorus	3 3 3 3 3 3 3 1 1 1 1
BIOB BIOB BIOB BIOB BIOB BIOB Subcate ASTR ASTR CHMY	101 102 121 122 123 160 161 gory B 110 111 121	- Life Sciences Discover Biology Discover Biology Lab Fundamentals of Biology for Allied Fund of Biology: Evolution, Ecology Biodiversity Fund of Biology: The Nature of Nutr Principles of Living Systems Principles of Living Systems Lab - Physical Sciences Introduction to Astronomy Introduction to General Chemistry	3 1 Health 3 7, and 3 7 ition 3 3 1 3-4 credits 3 1 3	Subcate ARTZ ARTZ ARTZ CRWR FILM LIT MART MUSI MUSI MUSI MUSI PHOT	gory A 101 105 131 240 160 270 260 101 114 131 147 154	- Fine Arts Art Fundamentals Visual Language-Drawing Ceramics for Non-majors Intro Creative Writing Workshop Introduction to World Cinema Film & Literature Computer Presentation and Animation Enjoyment of Music Band: MSUB Symphonic Jazz Ensemble I: MSUB Choral Ensemble: University Chorus Exploring Digital Photography	3 3 3 3 3 3 3 1 1 1 1 3 3
BIOB BIOB BIOB BIOB BIOB BIOB Subcate ASTR ASTR CHMY CHMY	101 102 121 122 123 160 161 gory B 110 111 121 122	- Life Sciences Discover Biology Discover Biology Lab Fundamentals of Biology for Allied Fund of Biology: Evolution, Ecology Biodiversity Fund of Biology: The Nature of Nutr Principles of Living Systems Principles of Living Systems Lab - Physical Sciences Introduction to Astronomy Introduction to General Chemistry	3 1 Health 3 7, and 3 7 ition 3 3 1 3-4 credits 3 1 3 ab 1	Subcate ARTZ ARTZ ARTZ CRWR FILM LIT MART MUSI MUSI MUSI MUSI PHOT THTR	gory A 101 105 131 240 160 270 260 101 114 131 147 154 101	- Fine Arts Art Fundamentals Visual Language-Drawing Ceramics for Non-majors Intro Creative Writing Workshop Introduction to World Cinema Film & Literature Computer Presentation and Animation Enjoyment of Music Band: MSUB Symphonic Jazz Ensemble I: MSUB Choral Ensemble: University Chorus Exploring Digital Photography Introduction to Theatre	3 3 3 3 3 3 3 3 1 1 1 1 3 3 3
BIOB BIOB BIOB BIOB BIOB BIOB Subcate ASTR ASTR CHMY CHMY	101 102 121 122 123 160 161 gory B 110 111 121 122 141	- Life Sciences Discover Biology Discover Biology Lab Fundamentals of Biology for Allied Fund of Biology: Evolution, Ecology Biodiversity Fund of Biology: The Nature of Nutr Principles of Living Systems Principles of Living Systems Lab - Physical Sciences Introduction to Astronomy Introduction to General Chemistry Introduction to General Chemistry L College Chemistry I	3 1 Health 3 7, and 3 7 ition 3 3 1 3-4 credits 3 1 3 ab 1 3	Subcate ARTZ ARTZ ARTZ CRWR FILM LIT MART MUSI MUSI MUSI MUSI PHOT	gory A 101 105 131 240 160 270 260 101 114 131 147 154	- Fine Arts Art Fundamentals Visual Language-Drawing Ceramics for Non-majors Intro Creative Writing Workshop Introduction to World Cinema Film & Literature Computer Presentation and Animation Enjoyment of Music Band: MSUB Symphonic Jazz Ensemble I: MSUB Choral Ensemble: University Chorus Exploring Digital Photography	3 3 3 3 3 3 3 1 1 1 1 3 3
BIOB BIOB BIOB BIOB BIOB BIOB Subcate ASTR CHMY CHMY CHMY	101 102 121 122 123 160 161 gory B 110 111 121 122 141 142	- Life Sciences Discover Biology Discover Biology Lab Fundamentals of Biology for Allied Fund of Biology: Evolution, Ecology Biodiversity Fund of Biology: The Nature of Nutr Principles of Living Systems Principles of Living Systems Lab - Physical Sciences Introduction to Astronomy Introduction to Astronomy Lab Introduction to General Chemistry Introduction to General Chemistry L College Chemistry I College Chemistry Laboratory I	3 1 Health 3 7, and 3 7 ition 3 3 1 3-4 credits 3 1 3 1 3 1 3 1 1	Subcate ARTZ ARTZ ARTZ CRWR FILM LIT MART MUSI MUSI MUSI MUSI PHOT THTR	gory A 101 105 131 240 160 270 260 101 114 131 147 154 101 120	- Fine Arts Art Fundamentals Visual Language-Drawing Ceramics for Non-majors Intro Creative Writing Workshop Introduction to World Cinema Film & Literature Computer Presentation and Animation Enjoyment of Music Band: MSUB Symphonic Jazz Ensemble I: MSUB Choral Ensemble: University Chorus Exploring Digital Photography Introduction to Theatre Introduction to Acting I	3 3 3 3 3 3 3 1 1 1 1 3 3 3 3 3 3 3 3 3
BIOB BIOB BIOB BIOB BIOB BIOB Subcate ASTR CHMY CHMY CHMY CHMY	101 102 121 122 123 160 161 gory B 110 111 121 122 141 142 101	- Life Sciences Discover Biology Discover Biology Lab Fundamentals of Biology for Allied Fund of Biology: Evolution, Ecology Biodiversity Fund of Biology: The Nature of Nutr Principles of Living Systems Principles of Living Systems Lab - Physical Sciences Introduction to Astronomy Introduction to General Chemistry Introduction to General Chemistry L College Chemistry I College Chemistry Laboratory I Introduction to Physical Geology	3 1 Health 3 7, and 3 3 7, and 3 7 1 3-4 credits 3 1 3 1 3 1 3 1 3 1	Subcate ARTZ ARTZ ARTZ CRWR FILM LIT MART MUSI MUSI MUSI FHOT THTR THTR	gory A 101 105 131 240 160 270 260 101 114 131 147 154 101 120 gory B	- Fine Arts Art Fundamentals Visual Language-Drawing Ceramics for Non-majors Intro Creative Writing Workshop Introduction to World Cinema Film & Literature Computer Presentation and Animation Enjoyment of Music Band: MSUB Symphonic Jazz Ensemble I: MSUB Choral Ensemble: University Chorus Exploring Digital Photography Introduction to Theatre Introduction to Acting I - Humanities 3	3 3 3 3 3 3 3 3 1 1 1 1 3 3 3 3 3 credits
BIOB BIOB BIOB BIOB BIOB BIOB Subcate ASTR CHMY CHMY CHMY GEO GEO	101 102 121 122 123 160 161 gory B 110 111 121 122 141 142 101 102	- Life Sciences Discover Biology Discover Biology Lab Fundamentals of Biology for Allied Fund of Biology: Evolution, Ecology Biodiversity Fund of Biology: The Nature of Nutr Principles of Living Systems Principles of Living Systems Lab - Physical Sciences Introduction to Astronomy Introduction to General Chemistry I College Chemistry Laboratory I Introduction to Physical Geology Introduct	3 1 Health 3 7, and 3	Subcate ARTZ ARTZ ARTZ CRWR FILM LIT MART MUSI MUSI MUSI MUSI THTR THTR Subcate ARTH	gory A 101 105 131 240 160 270 260 101 114 131 147 154 101 120 gory B 150	- Fine Arts Art Fundamentals Visual Language-Drawing Ceramics for Non-majors Intro Creative Writing Workshop Introduction to World Cinema Film & Literature Computer Presentation and Animation Enjoyment of Music Band: MSUB Symphonic Jazz Ensemble I: MSUB Choral Ensemble: University Chorus Exploring Digital Photography Introduction to Theatre Introduction to Acting I - Humanities Introduction to Art History	3 3 3 3 3 3 3 1 1 1 1 3 3 3 credits
BIOB BIOB BIOB BIOB BIOB BIOB Subcate ASTR ASTR CHMY CHMY CHMY GEO GEO GPHY	101 102 121 122 123 160 161 gory B 110 111 121 122 141 142 101 102 111	- Life Sciences Discover Biology Discover Biology Lab Fundamentals of Biology for Allied Fund of Biology: Evolution, Ecology Biodiversity Fund of Biology: The Nature of Nutr Principles of Living Systems Principles of Living Systems Principles of Living Systems Lab - Physical Sciences Introduction to Astronomy Introduction to General Chemistry Introduction to General Chemistry Introduction to General Chemistry L College Chemistry I College Chemistry Laboratory I Introduction to Physical Geology Introduction to Physical Ge	3 1 Health 3 7, and 3 7, and 3 7 3 1 3 3 4 3 1 3 4 5 5 6 6 7 7 8 7 8 8 7 8 8 8 8 8 8 8 8 8 8 8	Subcate ARTZ ARTZ ARTZ CRWR FILM LIT MART MUSI MUSI MUSI FHOT THTR THTR	gory A 101 105 131 240 160 270 260 101 114 131 147 154 101 120 gory B	- Fine Arts Art Fundamentals Visual Language-Drawing Ceramics for Non-majors Intro Creative Writing Workshop Introduction to World Cinema Film & Literature Computer Presentation and Animation Enjoyment of Music Band: MSUB Symphonic Jazz Ensemble I: MSUB Choral Ensemble: University Chorus Exploring Digital Photography Introduction to Theatre Introduction to Acting I - Humanities 3	3 3 3 3 3 3 3 3 1 1 1 1 3 3 3 3 3 credits
BIOB BIOB BIOB BIOB BIOB BIOB Subcate ASTR CHMY CHMY CHMY GEO GEO GPHY GPHY	101 102 121 122 123 160 161 gory B 110 111 121 122 141 142 101 102 111 112	- Life Sciences Discover Biology Discover Biology Lab Fundamentals of Biology for Allied Fund of Biology: Evolution, Ecology Biodiversity Fund of Biology: The Nature of Nutr Principles of Living Systems Principles of Living Systems - Physical Sciences Introduction to Astronomy Introduction to General Chemistry Introduction to General Chemistry Introduction to General Chemistry Introduction to General Chemistry Introduction to Physical Geology Introduction to Physical Geology Introduction to Physical Geography	3 1 Health 3 /, and 3 -ition 3 3 1 3-4 credits 3 1 3 ab 1 3 boratory 1 3 Lab 1	Subcate ARTZ ARTZ ARTZ CRWR FILM LIT MART MUSI MUSI MUSI MUSI PHOT THTR THTR Subcate ARTH HONR	gory A 101 105 131 240 160 270 260 101 114 131 147 154 101 120 gory B 150 111	- Fine Arts Art Fundamentals Visual Language-Drawing Ceramics for Non-majors Intro Creative Writing Workshop Introduction to World Cinema Film & Literature Computer Presentation and Animation Enjoyment of Music Band: MSUB Symphonic Jazz Ensemble I: MSUB Choral Ensemble: University Chorus Exploring Digital Photography Introduction to Theatre Introduction to Acting I - Humanities Introduction to Art History Perspectives and Understanding	3 3 3 3 3 3 3 3 1 1 1 1 3 3 3 credits 3 3
BIOB BIOB BIOB BIOB BIOB BIOB Subcate ASTR CHMY CHMY CHMY GEO GEO GPHY GPHY PHSX	101 102 121 122 123 160 161 gory B 110 111 121 122 141 142 101 102 111 112 103	- Life Sciences Discover Biology Discover Biology Lab Fundamentals of Biology for Allied Fund of Biology: Evolution, Ecology Biodiversity Fund of Biology: The Nature of Nutr Principles of Living Systems Principles of Living Systems Principles of Living Systems Lab - Physical Sciences Introduction to Astronomy Introduction to General Chemistry Introduction to General Chemistry L College Chemistry I College Chemistry I Introduction to Physical Geology Introduction to Physical Geology Introduction to Physical Geography Our Physical World	3 1 Health 3 /, and 3 3 ition 3 3 I 3-4 credits 3 1 3 ab 1 3 boratory 1 3 Lab 1 3	Subcate ARTZ ARTZ ARTZ CRWR FILM LIT MART MUSI MUSI MUSI MUSI THTR THTR Subcate ARTH HONR LIT	gory A 101 105 131 240 160 270 260 101 114 131 147 154 101 120 gory B 150 111 110	- Fine Arts Art Fundamentals Visual Language-Drawing Ceramics for Non-majors Intro Creative Writing Workshop Introduction to World Cinema Film & Literature Computer Presentation and Animation Enjoyment of Music Band: MSUB Symphonic Jazz Ensemble I: MSUB Choral Ensemble: University Chorus Exploring Digital Photography Introduction to Theatre Introduction to Acting I - Humanities Introduction to Art History Perspectives and Understanding Introduction to Literature	credits 3 3 3 3 3 3 3 1 1 1 1 3 3 3 credits 3 3 3 3
BIOB BIOB BIOB BIOB BIOB BIOB Subcate ASTR ASTR CHMY CHMY CHMY CHMY GEO GEO GPHY GPHY PHSX PHSX	101 102 121 122 123 160 161 gory B 110 111 122 141 142 101 102 111 112 103 104	- Life Sciences Discover Biology Discover Biology Lab Fundamentals of Biology for Allied Fund of Biology: Evolution, Ecology Biodiversity Fund of Biology: The Nature of Nutr Principles of Living Systems Principles of Living Systems Principles of Living Systems Lab - Physical Sciences Introduction to Astronomy Introduction to General Chemistry Introduction to General Chemistry L College Chemistry I College Chemistry I Introduction to Physical Geology Introduction to Physical Geology Introduction to Physical Geography Our Physical World Our Physical World Our Physical World	3 1 Health 3 /, and 3 3 ition 3 3 I 3-4 credits 3 ab 1 3 boratory 1 3 Lab 1 3 1	Subcate ARTZ ARTZ ARTZ CRWR FILM LIT MART MUSI MUSI MUSI MUSI PHOT THTR THTR Subcate ARTH HONR LIT LIT LIT PHL	gory A 101 105 131 240 160 270 260 101 114 131 147 154 101 120 gory B 150 111 110 240 110	- Fine Arts Art Fundamentals Visual Language-Drawing Ceramics for Non-majors Intro Creative Writing Workshop Introduction to World Cinema Film & Literature Computer Presentation and Animation Enjoyment of Music Band: MSUB Symphonic Jazz Ensemble I: MSUB Choral Ensemble I: MSUB Choral Ensemble: University Chorus Exploring Digital Photography Introduction to Theatre Introduction to Acting I - Humanities 3 Introduction to Art History Perspectives and Understanding Introduction to Literature The Bible as Literature Introduction to Ethics	credits 3 3 3 3 3 3 3 1 1 1 1 3 3 3 credits 3 3 3 3 3 3
BIOB BIOB BIOB BIOB BIOB BIOB Subcate ASTR ASTR CHMY CHMY CHMY CHMY GEO GEO GPHY GPHY PHSX PHSX PHSX	101 102 121 122 123 160 161 gory B 110 111 122 141 142 101 102 111 112 103 104 205	- Life Sciences Discover Biology Discover Biology Lab Fundamentals of Biology for Allied Fund of Biology: Evolution, Ecology Biodiversity Fund of Biology: The Nature of Nutr Principles of Living Systems Principles of Living Systems Principles of Living Systems Lab - Physical Sciences Introduction to Astronomy Introduction to General Chemistry Introduction to General Chemistry L College Chemistry I College Chemistry Laboratory I Introduction to Physical Geology Introduction to Physical Geology Introduction to Physical Geography Our Physical World Our Physical World College Physics I	3 1 Health 3 /, and 3 3 ition 3 3 I 3-4 credits 3 ab 1 3 boratory 1 3 Lab 1 3 1 3	Subcate ARTZ ARTZ ARTZ CRWR FILM LIT MART MUSI MUSI MUSI MUSI PHOT THTR THTR Subcate ARTH HONR LIT LIT PHL PHL	gory A 101 105 131 240 160 270 260 101 114 131 147 154 101 120 gory B 150 111 110 240 110 111	- Fine Arts Art Fundamentals Visual Language-Drawing Ceramics for Non-majors Intro Creative Writing Workshop Introduction to World Cinema Film & Literature Computer Presentation and Animation Enjoyment of Music Band: MSUB Symphonic Jazz Ensemble I: MSUB Choral Ensemble I: MSUB Choral Ensemble: University Chorus Exploring Digital Photography Introduction to Theatre Introduction to Acting I - Humanities 3 Introduction to Art History Perspectives and Understanding Introduction to Literature The Bible as Literature Introduction to Ethics Philosophies of Life	credits 3 3 3 3 3 3 3 1 1 1 1 3 3 3 credits 3 3 3 3
BIOB BIOB BIOB BIOB BIOB BIOB BIOB Subcate ASTR ASTR CHMY CHMY CHMY GEO GEO GPHY GPHY PHSX PHSX PHSX PHSX	101 102 121 122 123 160 161 gory B 110 111 121 122 141 142 101 102 111 112 103 104 205 206	- Life Sciences Discover Biology Discover Biology Lab Fundamentals of Biology for Allied Fund of Biology: Evolution, Ecology Biodiversity Fund of Biology: The Nature of Nutr Principles of Living Systems Principles of Living Systems Principles of Living Systems Lab - Physical Sciences Introduction to Astronomy Introduction to General Chemistry Introduction to General Chemistry L College Chemistry I College Chemistry Laboratory I Introduction to Physical Geology Introduction to Physical Geology Introduction to Physical Geography Introduction to Physical Geography Introduction to Physical Geography Introduction to Physical Geography Our Physical World Our Physical World College Physics I College Physics I Lab	3 1 Health 3 /, and 3 3 ition 3 3 I 3-4 credits 3 ab 1 3 boratory 1 3 Lab 1 3 1 3 1	Subcate ARTZ ARTZ ARTZ CRWR FILM LIT MART MUSI MUSI MUSI MUSI PHOT THTR THTR Subcate ARTH HONR LIT LIT LIT PHL	gory A 101 105 131 240 160 270 260 101 114 131 147 154 101 120 gory B 150 111 110 240 110	- Fine Arts Art Fundamentals Visual Language-Drawing Ceramics for Non-majors Intro Creative Writing Workshop Introduction to World Cinema Film & Literature Computer Presentation and Animation Enjoyment of Music Band: MSUB Symphonic Jazz Ensemble I: MSUB Choral Ensemble I: MSUB Choral Ensemble: University Chorus Exploring Digital Photography Introduction to Theatre Introduction to Acting I - Humanities 3 Introduction to Art History Perspectives and Understanding Introduction to Literature The Bible as Literature Introduction to Ethics	credits 3 3 3 3 3 3 3 1 1 1 1 3 3 3 credits 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3
BIOB BIOB BIOB BIOB BIOB BIOB BIOB Subcate ASTR ASTR CHMY CHMY CHMY GEO GEO GPHY GPHY PHSX PHSX PHSX PHSX PHSX	101 102 121 122 123 160 161 gory B 110 111 122 141 142 101 102 111 112 103 104 205 206 105	- Life Sciences Discover Biology Discover Biology Lab Fundamentals of Biology for Allied Fund of Biology: Evolution, Ecology Biodiversity Fund of Biology: The Nature of Nutr Principles of Living Systems Principles of Living Systems Principles of Living Systems Lab - Physical Sciences Introduction to Astronomy Introduction to General Chemistry Introduction to General Chemistry L College Chemistry I College Chemistry I aboratory I Introduction to Physical Geology Introduction to Physical Geography Introduction to Physical Geography Introduction to Physical Geography Introduction to Physical Geography Our Physical World Our Physical World College Physics I College Physics I Lab Fundamentals of Physical Science	3 1 Health 3 /, and 4	Subcate ARTZ ARTZ ARTZ CRWR FILM LIT MART MUSI MUSI MUSI MUSI PHOT THTR THTR Subcate ARTH HONR LIT LIT PHL PHL	gory A 101 105 131 240 160 270 260 101 114 131 147 154 101 120 gory B 150 111 110 240 110 111	- Fine Arts Art Fundamentals Visual Language-Drawing Ceramics for Non-majors Intro Creative Writing Workshop Introduction to World Cinema Film & Literature Computer Presentation and Animation Enjoyment of Music Band: MSUB Symphonic Jazz Ensemble I: MSUB Choral Ensemble I: MSUB Choral Ensemble: University Chorus Exploring Digital Photography Introduction to Theatre Introduction to Acting I - Humanities 3 Introduction to Art History Perspectives and Understanding Introduction to Literature The Bible as Literature Introduction to Ethics Philosophies of Life	credits 3 3 3 3 3 3 3 1 1 1 1 3 3 3 credits 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3
BIOB BIOB BIOB BIOB BIOB BIOB BIOB Subcate ASTR ASTR CHMY CHMY CHMY GEO GEO GPHY GPHY PHSX PHSX PHSX PHSX	101 102 121 122 123 160 161 gory B 110 111 121 122 141 142 101 102 111 112 103 104 205 206	- Life Sciences Discover Biology Discover Biology Lab Fundamentals of Biology for Allied Fund of Biology: Evolution, Ecology Biodiversity Fund of Biology: The Nature of Nutr Principles of Living Systems Principles of Living Systems Principles of Living Systems Lab - Physical Sciences Introduction to Astronomy Introduction to General Chemistry Introduction to General Chemistry L College Chemistry I College Chemistry Laboratory I Introduction to Physical Geology Introduction to Physical Geology Introduction to Physical Geography Introduction to Physical Geography Introduction to Physical Geography Introduction to Physical Geography Our Physical World Our Physical World College Physics I College Physics I Lab	3 1 Health 3 /, and 4	Subcate ARTZ ARTZ ARTZ CRWR FILM LIT MART MUSI MUSI MUSI MUSI PHOT THTR THTR Subcate ARTH HONR LIT LIT PHL PHL	gory A 101 105 131 240 160 270 260 101 114 131 147 154 101 120 gory B 150 111 110 240 110 111	- Fine Arts Art Fundamentals Visual Language-Drawing Ceramics for Non-majors Intro Creative Writing Workshop Introduction to World Cinema Film & Literature Computer Presentation and Animation Enjoyment of Music Band: MSUB Symphonic Jazz Ensemble I: MSUB Choral Ensemble I: MSUB Choral Ensemble: University Chorus Exploring Digital Photography Introduction to Theatre Introduction to Acting I - Humanities 3 Introduction to Art History Perspectives and Understanding Introduction to Literature The Bible as Literature Introduction to Ethics Philosophies of Life	credits 3 3 3 3 3 3 3 1 1 1 1 3 3 3 credits 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3

3, 1, 3, 1

SCIN 101, 102, 103, 104 Integrated Sciences

		Course	Credits	Grade	Semester	Equivalent
Duofossion	al Educati	A minimum grade of C or better is required	d in all mo	ijor cours	ework	
*#EDU	al Education 105	Education and Democracy	3			
^#EDU	220/ 220L	Human Growth and Development/ Lab (45 hour practicum required)	3			
#EDU	221	Educational Psychology and Measurement	3			
^#EDSP	204	Introduction to Teaching Exceptional Learners (15 hour practicum required)	3			
#HTH	412	Drugs and Alcohol	1			
EDU	333	Reading and Writing Across the Curriculum	3			
EDU	380	Introduction to Curriculum Planning/Practice	2			
EDU	354	Secondary Junior Field	2			
EDU	397G	Methods: 5-12 Science	2			
EDU	406	Philosophical, Legal & Ethical Issues in Education	3			
EDU	495C	Student Teaching: 5-12	9			
#Required	for Admis	ssion to the Educator Preparation Program				
Riology R	equirement	te				
*BIOB	160	Principles of Living Systems	3			
* BIOB	161	Principles of Living Systems Lab	1			
BIOB	170	Principles of Biological Diversity	3			
BIOB	171	Principles of Biological Diversity Lab	1			
BIOB	260	Cellular and Molecular Biology	3			
BIOB	261	Cellular and Molecular Biology Lab	1			
BIOE	370	General Ecology	3			
BIOE	371	General Ecology Lab	1			
BIOB	375	General Genetics	3			
BIOB	376	General Genetics Lab	1			
BIOB	498	Internship/Cooperative Education	2			
BIOB	499	Capstone	1			
Biology ele	ectives selec	cted in consultation with an advisor.	22			
Chamiater	Requirem	Biology Total	45			
*CHMY	141	College Chemistry I	3			
*CHMY	142	College Chemistry Laboratory I	1			
СНМҮ	143	College Chemistry II	3			
СНМҮ	144	College Chemistry Laboratory II	1			
		, y 				

Chemistry Requirements (continued)

CHMY	211	Elements of Organic Chemistry	3		
CHMY	212	Elements of Organic Chemistry Laboratory	1		
CHMY	311	Analytical Chemistry – Quantitative Analysis	3		
СНМҮ	312	Analytical Chemistry Laboratory – Quantitative Analysis	1		
ВСН	380	Biochemistry	3		
ВСН	381	Biochemistry Lab	1		

Chemistry Total

20

Students wishing to obtain a minor in Chemistry will need to take CHMY 321/322 and 323/324 instead of CHMY 211/212.

Mathematics and Statistics Requirement

*M	171	Calculus I	4		
*STAT	141	Introduction to Statistical Concepts	3		
OR					
*STAT	216	Introduction to Statistics	4		

Mathematics/Statistics Total 7-8

Physics Requirement (Choose one Physics course with lab)

* PHSX	205	College Physics I	3		
* PHSX	206	College Physics I Laboratory	1		
OR					
PHSX	220	Physics I	3		
PHSX	221	Physics I Laboratory	1		

Physics Total

4

BACHELOR OF SCIENCE DEGREE IN BIOLOGY - TEACHING LICENSURE OPTION

Categories	Credits	Earned	Remaining
General Education	31		
Professional Education Core	**31		
Biology Requirements	***41		
Chemistry Requirements	**17		
Math/Statistics Requirements	**4-5		
Physics Requirements	4		
Total	128-129		

^{**3} credits that also satisfy General Education requirements are not included in the total number of credits.

It is the student's responsibility to know and meet the requirements for graduation. A minimum of 36 credits must be upper division classes (300 and above).

NOTES:

^{***4} credits that also satisfy General Education requirements are not included in the total number of credits.

[^] Course requires a completed Federal Criminal Background Check in order to complete the required practicum hours within the class. Packets may be picked up at either the Advising Center in McMullen Hall or in the College of Education, or can be printed off the website at http://www.msubillings.edu/coe/etp/FieldExper/FingerprintInfo.htm. The background check is only valid for 24 months.