

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

ADVISING WORKSHEET

BACHELOR OF SCIENCE DEGREE MAJOR IN BROADFIELD SCIENCE General Bulletin 2015-2017 **TRANSFER INSTITUTION(S):**

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)					
M 171 is a major requirement					
B. English (3 credits)					
C. Communication & Information Literacy (3 credits)					
Category II: Natural Sciences (7 credits)					
2 lectures (6 credits) & 1 lab (1 credit)					
(1 life science & 1 physical science & 1 lab) BIOB 160/161 are major requirements					
BIOB 100/101 are major requirements					
Category III: Social Sciences and History (6 credits)					
A. Social Science (3 credits)					
B. History (3 credits)					
b. History (5 creatis)					
Category IV: Cultural Diversity (3 credits)					
Category V: Arts & Humanities (6 credits)					
A. Fine Arts (3 credits)					
B. Humanities (3 credits)					
		1			

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

Note: Certain degrees may require a minimum grade of "C" in General Education courses.

Reviewed:

GENERAL EDUCATION REQUIREMENTS

CATEGO	RYI: (GLOBAL ACADEMIC SKILLS	9 credits
Students	are req	uired to take one course from each subca	itegory
Subcateg	gory A	- Mathematics	3 credits
Μ	105	Contemporary Mathematics	3
Μ	114	Extended Technical Mathematics	3
Μ	121	College Algebra	3
Μ	122	College Trigonometry	3
Μ	131	Mathematics for Elementary Teachers	II 3
М	143	Finite Mathematics	4
М	161	Survey of Calculus	3
М	171	Calculus I	4
STAT	141	Introduction to Statistical Concepts	3
STAT	216	Introduction to Statistics	4
Subcateg	gory B	- English	3 credits
WRIT	101	College Writing I	3
WRIT	121	Introduction to Technical Writing	3
WRIT	122	Introduction to Business Writing	3
WRIT	201	College Writing II	3
WRIT	220	Business & Professional Writing	3
WRIT	221	Intermediate Technical Writing	3
Subcateg	gory C-	· Communication & Information Literacy	y 3 credits
COMX	111	Introduction to Public Speaking	3
COMX	115	Introduction to Interpersonal Commun	ication 3
LSCI	125	Research in the Information Age	3
BMIS	150	Computer Literacy	3

CATEGORY II: NATURAL SCIENCES 6 cr. lecture & 1 cr. lab

Students are required to take one course from each subcategory and at least one corresponding lab <u>or</u> Integrated Sciences

Subcategory A – Life Sciences 3-4 credits						
		over Biology	3			
BIOB 10	02 Disco	over Biology Lab	1			
BIOB 10	60 Princ	iples of Living Systems	3			
BIOB 10	61 Princ	iples of Living Systems Lab	1			
Subcategor	y B – Physi	ical Sciences 3-4	4 credits			
ASTR 1	10 Intro	duction to Astronomy	3			
ASTR 1	11 Intro	duction to Astronomy Lab	1			
CHMY 12	21 Intro	duction to General Chemistry	3			
CHMY 12	22 Intro	duction to General Chemistry Lab) 1			
CHMY 14	41 Colle	ege Chemistry I	3			
CHMY 14	42 Colle	ge Chemistry Laboratory I	1			
GEO 10	01 Intro	duction to Physical Geology	3			
GEO 10	02 Intro	duction to Physical Geology Labo	oratory 1			
GPHY 1	11 Intro	duction to Physical Geography	3			
GPHY 1	12 Intro	duction to Physical Geography La	ib 1			
PHSX 10	03 Our I	Physical World	3			
PHSX 10	04 Our I	Physical World Lab	1			
PHSX 20	05 Colle	ege Physics I	3			
PHSX 20	06 Colle	ege Physics I Lab	1			
PHSX 10	05 Fund	amentals of Physical Science	3			
PHSX 10	06 Fund	amentals of Physical Science Lab	1			
Integrated S	Sciences					
SCIN 101, 10)2, 103, 104 II	ntegrated Sciences	3, 1, 3, 1			

CATEGORY III: SOCIAL SCIENCES AND HISTORY 6 credits

Students are required to take one course from each subcategory						
Subcate	gory A -	– Social Sciences 3 c	redits			
ANTY	217	Physical Anthropology & Archeology	3			
BGEN	105	Introduction to Business	3			
COMX	106	Communicating in a Dynamic Workplace	e 3			
ECNS	201	Principles of Microeconomics	3			
ECNS	202	Principles of Macroeconomics	3			
EDU	105	Education and Democracy	3			
GPHY	141	Geography of World Regions	3			
HTH	110	Personal Health and Wellness	3			
PSCI	220	Introduction to Comparative Governmen	t 3			
PSCI	210	Introduction to American Government	3			
PSYX	100	Introduction to Psychology	3			
PSYX	231	Human Relations	3			
SOCI	101	Introduction to Sociology	3			
SOCI	201	Social Problems	3			
SOCI	201	Social Problems	3			

gory B -	- History	3 credits
101	American History I	3
102	American History II	3
101	Western Civilization I	3
102	Western Civilization II	3
103	Honors Western Civilization I	3
104	Honors Western Civilization II	3
230	Introduction to International Relations	3
	101 102 101 102 103 104	101American History I102American History II101Western Civilization I102Western Civilization II103Honors Western Civilization I104Honors Western Civilization II

CATEGO	RY IV:	CULTURAL DIVERSITY 3 cred	its
ANTY	220	Culture and Society	3
ARTH	160	Global Visual Culture	3
COMX	212	Introduction to Intercultural Communication	3
GPHY	121	Human Geography	3
HTH	270	Global Health Issues	3
LIT	230	World Literature Survey	3
MUSI	207	World Music	3
NASX	105	Introduction to Native American Studies	3
NASX	205	Native Americans in Contemporary Society	3
PHL	271	Indian Philosophies and Religions	3
PHL	272	Chinese Philosophies and Religions	3
REHA	201	Introduction to Diversity	3
RLST	170	The Religious Quest	3
A&SC/			
SOCI/W	S 274	Women, Culture, and Society	3
SPNS	150	The Hispanic Tradition	3

CATEGORY V: ARTS & HUMANITIES

CATEGO	RY V:	ARTS & HUMANITIES	6 credits
Students	are req	uired to take one course from each subc	ategory
Subcate	gory A	– Fine Arts	3 credits
ARTZ	101	Art Fundamentals	3
ARTZ	105	Visual Language-Drawing	3
ARTZ	131	Ceramics for Non-majors	3
CRWR	240	Intro Creative Writing Workshop	3 3 3 3
FILM	160	Introduction to World Cinema	3
LIT	270	Film & Literature	3
MART	260	Computer Presentation and Animation	n 3
MUSI	101	Enjoyment of Music	3
MUSI	114	Band: MSUB Symphonic	1
MUSI	131	Jazz Ensemble I: MSUB	1
MUSI	147	Choral Ensemble: University Chorus	1
PHOT	154	Exploring Digital Photography	3
THTR	101	Introduction to Theatre	3
THTR	120	Introduction to Acting I	3
Subcate	gory B	- Humanities	3 credits
ARTH	150	Introduction to Art History	3
HONR	111	Perspectives and Understanding	3
LIT	110	Introduction to Literature	3
LIT	240	The Bible as Literature	3 3 3
PHL	110	Introduction to Ethics	3
PHL	111	Philosophies of Life	3
Total			31

		Course	Credits	Grade	Semester	Equivalent
		A minimum grade of C- or better is rea	quired in all m	ajor cours	ework	
Biology R	lequirem	ents				
*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			
BIOB	375	General Genetics	3			
BIOB	376	General Genetics Lab	1			
BIOE	370	General Ecology	3			
BIOE	371	General Ecology Lab	1			

Biology Total

Chemistry Requirements

CHMY	324	Organic Chemistry Laboratory II	1	
CHMY	323	Organic Chemistry II	3	
CHMY	322	Organic Chemistry Laboratory I	1	
CHMY	321	Organic Chemistry I	3	
CHMY	144	College Chemistry Laboratory II	1	
CHMY	143	College Chemistry II	3	
*CHMY	142	College Chemistry Laboratory I	1	
*CHMY	141	College Chemistry I	3	

20

Earth Science Requirements

ERTH	491	Special Topics Earth Science Total	3 18-19	
EDTH	401	Second Topics	2	
ERTH	401	Geological Field Methods	4	
ERTH	303	Weather and Climate	4	
Choose on	ne course fi	rom the following:		
GEO	309	Sedimentation and Stratigraphy	3	
GEO	212	Earth History and Evolution Laboratory	1	
GEO	211	Earth History and Evolution	3	
GEO	205	Mineralogy	4	
*GEO	102	Introduction to Physical Geology Laboratory	1	
*GEO	101	Introduction to Physical Geology	3	

Earth Science Total

Physics Requirements

*ASTR	110	Introduction to Astronomy	3			
* ASTR	111	Introduction to Astronomy Lab	1			
PHSX	220	Physics I	3			
PHSX	221	Physics I Lab	1			
PHSX	232	Physics II and Thermodynamics	3			
PHSX	233	Physics II and Thermodynamics Lab	1			

PHSX	343	Modern Physics	3		
PHSX	391	Special Topics	3		
PHSX	491	Special Topics	3		
		Physics Total	21		

Physics Total

Biological or Physical Science Electives (12 credits) - at least 3 credits must be upper division

Total	12		

Mathematics Requirements

*M	1/1	Calculus I		4		
М	172	Calculus II		4		
			Mathematics Total	8		

*May satisfy General Education requirements.

Certain courses in this program have prerequisites; students should check course descriptions for required prerequisites.

Electives				
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BACHELOR OF SCIENCE DEGREE MAJOR IN BROADFIELD SCIENCE

Categories	Credits	Earned	Remaining
General Education	31		
Biology	**16		
Chemistry	***17		
Earth Science	18-19		
Physics	21		
Biological or Physical Science El	ect 12		
Mathematics	***5		
Electives	0-V		
Total	120		

4 credits that also satisfy General Education requirements are not included in the total credits for the major. *3 credits that also satisfy General Education requirements are not included in the total credits for the major.

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).