

ADVISING WORKSHEET

BACHELOR OF SCIENCE DEGREE MAJOR IN BIOLOGY TEACHING LICENSURE OPTION General Bulletin 2013-2015

TRANSFER INSTITUTION(S):	

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${\bf General\ Education\ Requirements-See\ Attached\ Page\ for\ Specific\ Courses}$

General Education Category	Course #	Credits	Grade	Semester	Equivalent
Category I: Global Academic Skills (9 credits) A. Mathematics (3 credits) STAT 216 or 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)					
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 Teacher Education Program

Reviewed:		

GENERAL EDUCATION REQUIREMENTS

CATEGORY I: GLOBAL ACADEMIC SKILLS 9 credits	M	105	Contemporary Mathematics	3
Students are required to take one course from each subcategory	M	114	Extended Technical Mathematics	3
Subcategory A - Mathematics 3 credits	M	121	College Algebra	3

M	122	College Trigonometry	3
M	131	Mathematics for Elementary Teachers II	3
M	143	Finite Mathematics	4
M	171	Calculus I	4
STAT	141	Introduction to Statistical Concepts	3
STAT	216	Introduction to Statistics	4
Subcate	gory B	- English 3 cre	dits
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
		Communication & Information Literacy 3 c	
COMX OR	111	Introduction to Public Speaking	3
COMX	115	Introduction to International Communica	tion 3
COMA	113	Introduction to Interpersonal Communica	แบทร
CATEGO	ORY II:	NATURAL SCIENCES 6 cr. lecture & 1 cr.	lab
Students	are req	uired to take one course from each subcatego	ry and
at least o	ne corr	responding lab <u>or</u> SCIN 101, 102, 103 & 104	
Subcate	gory A	 Life Sciences 3-4 cre 	dits
BIOB	101	Discover Biology	3
BIOB	102	Discover Biology Lab	1
BIOB	160	Principles of Living Systems	3
BIOB	161	Principles of Living Systems Lab	1
Subcate	gory B	– Physical Sciences 3-4 cre	dits
ASTR	110	Introduction to Astronomy	3
ASTR	111	Introduction to Astronomy Lab	1
CHMY	121	Introduction to General Chemistry	3
CHMY	122	Introduction to General Chemistry Lab	1
CHMY	141	College Chemistry I	3
CHMY	142	College Chemistry Laboratory I	1
GEO	101	Introduction to Physical Geology	3
GEO	102	Introduction to Physical Geology Laborator	
GPHY	111	Introduction to Physical Geography	3
GPHY	112	Introduction to Physical Geography Lab	1
PHSX	103	Our Physical World	3
PHSX	104	Our Physical World Lab	1
PHSX	205	College Physics I Lab	3
PHSX	206	College Physics I Lab	1
PHSX PHSX	105 106	Fundamentals of Phys Sci Fundamentals of Phys Sci Lab	3 1
		A and B – Integrated Sciences 7 cre	
SCIN 10	guiles A	$3 & 104 \text{ Integrated Sciences}$ 7 Creating 3 & 104 Integrated Sciences 3, $\frac{1}{2}$, $\frac{1}{2}$	
		SOCIAL SCIENCES AND HISTORY 6 cre	
		uired to take one course from each subcatego	
ANTY	gory A 217	- Social Sciences 3 cre	
	105	Physical Anthropology & Archeology Introduction to Business	3
BGEN COMX	105	Communicating in a Dynamic Workplace	3
ECNS	201	Principles of Microeconomics	3
ECNS	201	Principles of Macroeconomics	3
ECNS EDU	105	Education and Democracy	3 3
GPHY	103 141	Geography of World Regions	3
HTH	110	Personal Health and Wellness	3
PSCI	210	Introduction to American Government	3
PSCI	220	Introduction to American Government Introduction to Comparative Government	3
PSYX	100	Introduction to Psychology	3
PSYX	231	Human Relations	3
SOCI			_
	101	Introduction to Sociology	3
SOCI	101 201	Introduction to Sociology Social Problems	3

Subcate	gory B	- History	3 credits
HSTA	101	American History I	3
OR			
HSTA	102	American History II	3
CATEGO	RY IV:	CULTURAL DIVERSITY	3 credits
NASX	105	Introduction to Native American Stu	dies 3
OR			
NASX	205	Native Americans in Contemporary S	Society 3
CATEGO	RY V:	ARTS & HUMANITIES	6 credits
		uired to take one course from each subc	
,	_ •	– 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
FILM	160	Introduction to World Cinema	3 3 3 3 3
LIT	270	Film & Literature	
MART	260	Computer Presentation and Animation	
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
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

			Credits Gra		Equivalent
Profession	nal Educatio	A minimum grade of C or better is required on Core	ın all major ce	oursework	
*#EDU	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	l for Admis	sion to the Teacher Education Program			
*BIOB	equirement	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 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		
BIOB	498	Internship/Cooperative Education	2		
BIOB	499	Capstone	1		
division co	ourse work f	cted in consultation with an advisor to include upper from each of the following areas: Botany, Zoology, elecular Biology.	16		
			20		
Clh ave tot		Biology Total	39		
	y Requirem 141	ents			
*CHMY	141	ents College Chemistry I	3		
*CHMY *CHMY	141 142	ents College Chemistry I College Chemistry Laboratory I	3 1		
*CHMY *CHMY	141 142 143	College Chemistry I College Chemistry Laboratory I College Chemistry II	3 1 3		
*CHMY *CHMY CHMY	141 142 143 144	ents College Chemistry I College Chemistry Laboratory I	3 1		

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.

Physics Requirement (Choose one Physics course with lab)

* PHSX	205	College Physics I	3		
* PHSX	206	College Physics I Lab	1		
<u>OR</u>			·	•	
PHSX	220	Physics I	3		
PHSX	221	Physics I Lab	1		

Physics Total

4

Mathematics and Statistics Requirement (choose two of the following, one from each prefix)

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

Mathematics/Statistics Total 7-8

Restricted Electives - selected with advisor approval - 6 credits

BACHELOR OF SCIENCE DEGREE IN BIOLOGY - TEACHING LICENSURE OPTION

Categories	Credits	Earned	Remaining
General Education	31		
Professional Education Core	**31		
Biology Requirements	***35		
Chemistry Requirements	**17		
Physics Requirements	4		
Math/Statistics Requirements	**4-5		
Restricted Electives Selected with advisor	6		
Total	128		

^{**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.