ADVISING WORKSHEET

BACHELOR OF SCIENCE DEGREE MAJOR IN CHEMISTRY
TEACHING LICENSURE OPTION
General Bulletin 2018-2019

TRANSFER INSTITUTION(S): _____

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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 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) #	BIOB 160				
2 lectures (6 credits) & 1 lab (1 credit)					
(1 life science & 1 physical science & 1 lab)	BIOB 161				
CHMY 141 – Major Requirements					
Category III: Social Sciences and History (6 credits)	EDU 105				
A. Social Science (3 credits)					
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

Reviewed:

_____

_____

_____

GENERAL EDUCATION REQUIREMENTS

CATEGORY I: GLOBAL ACADEMIC SKILLS — 9 credits

Students are required to take one course from each subcategory

Subcategory A - Mathematics — 3 credits

M	105	Contemporary Mathematics	3
M	114	Extended Technical Mathematics	3
M	121	College Algebra	3
M	122	College Trigonometry	3
M	130	Mathematics for Elementary Teachers I	3
M	140	College Math for Healthcare	3
M	143	Finite Mathematics	4
M	161	Survey of Calculus	3
M	***171***	***Calculus I***	***4***
STAT	141	Introduction to Statistical Concepts	3
STAT	***216***	***Introduction to Statistics***	***4***

Subcategory 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

Subcategory C- Communication & Information Literacy — 3 credits

COMX	***111***	***Introduction to Public Speaking***	***3***
OR			
COMX	***115***	***Introduction to Interpersonal Communication***	***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 or Integrated Sciences

Subcategory A – Life Sciences — 3-4 credits

BIOB	101	Discover Biology	3
BIOB	102	Discover Biology Lab	1
BIOB	121	Fundamentals of Biology for Allied Health	3
BIOB	122	Fund of Biology: Evolution, Ecology, and Biodiversity	3
BIOB	123	Fund of Biology: The Nature of Nutrition	3
BIOB	***160***	***Principles of Living Systems***	***3***
BIOB	***161***	***Principles of Living Systems Lab***	***1***

Subcategory B – Physical Sciences — 3-4 credits

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 Laboratory	1
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	3
PHSX	206	College Physics I Lab	1
PHSX	105	Fundamentals of Physical Science	3
PHSX	106	Fundamentals of Physical Science Lab	1

Integrated Sciences

SCIN 101, 102, 103, 104 Integrated Sciences — 3, 1, 3, 1

CATEGORY III: SOCIAL SCIENCES AND HISTORY — 6 CREDITS

Students are required to take one course from each subcategory

Subcategory A – Social Sciences — 3 credits

ANTY	217	Physical Anthropology & Archeology	3
BGEN	105	Introduction to Business	3
COMX	106	Communicating in a Dynamic Workplace	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	210	Introduction to American Government	3
PSCI	220	Introduction to Comparative Government	3
PSYX	100	Introduction to Psychology	3
PSYX	231	Human Relations	3
SOCI	101	Introduction to Sociology	3
SOCI	201	Social Problems	3

Subcategory B - History — 3 credits

HSTA	***101***	***American History I***	***3***
OR			
HSTA	***102***	***American History II***	***3***

CATEGORY IV: CULTURAL DIVERSITY — 3 credits

NASX	***105***	***Introduction to Native American Studies***	***3***
OR			
NASX	***205***	***Native Americans in Contemporary Society***	***3***

CATEGORY V: ARTS & HUMANITIES — 6 credits

Students are required to take one course from each subcategory

Subcategory 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
FILM	160	Introduction to World Cinema	3
LIT	270	Film & Literature	3
MART	260	Computer Presentation and Animation	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

Subcategory 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
PHL	110	Introduction to Ethics	3
PHL	111	Philosophies of Life	3
PHL	254	People and Politics	3

		Course	Credits	Grade	Semester	Equivalent
		A minimum grade of C or better is required in all major coursework				
Professional Education Core						
*#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	Alcohol, Tobacco and Other Drug Awareness (ATOD)	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			
		Professional Core Total	**34**	**#Required for Admission to the Educator Preparation Program**		
Chemistry Requirements						
*CHMY	141	College Chemistry I	3			
*CHMY	142	College Chemistry Laboratory I	1			
CHMY	143	College Chemistry II	3			
CHMY	144	College Chemistry Laboratory II	1			
CHMY	311	Analytical Chemistry – Quantitative Analysis	3			
CHMY	312	Analytical Chemistry Laboratory – Quantitative Analysis	1			
CHMY	321	Organic Chemistry I	3			
CHMY	322	Organic Chemistry Laboratory I	1			
CHMY	323	Organic Chemistry II	3			
CHMY	324	Organic Chemistry Laboratory II	1			
CHMY	371	Physical Chemistry – Quantum Chemistry and Spectroscopy	3			
CHMY	372	Physical Chemistry Laboratory I	1			
CHMY	373	Physical Chemistry – Kinetics and Thermodynamics	3			
CHMY	374	Physical Chemistry Laboratory II	1			
BCH	380	Biochemistry	3			
BCH	381	Biochemistry Lab	1			
CHMY	498	Internship/Cooperative Education	2			
		Chemistry Total	**34**			
Chemistry Electives Choose 9 credits from the following:						
CHMY	401	Advanced Inorganic Chemistry	3			
CHMY	402	Advanced Inorganic Chemistry Laboratory	1			
CHMY	411	Advanced Organic Chemistry	3			
CHMY	412	Advanced Organic Chemistry laboratory	1			
CHMY	421	Advanced Instrument Analysis	3			
CHMY	422	Advanced Instrument Analysis Laboratory	2			
CHMY	490	Undergraduate Research	1-5			
CHMY	491	Special Topics	3			
BCH	480	Advanced Biochemistry I	3			
BCH	481	Advanced Biochemstry I Laboratory	1			
		Chemistry Electives Totals	**9**			

Mathematics Requirements

*M	171	Calculus I	4			
M	172	Calculus II	4			
*STAT	216	Introduction to Statistics	4			
		Mathematics Total	**12**			

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			
		Physics Total	**12**			

Science Electives (**4 credits** selected with advisor approval)

*May meet General Education requirements. Students should consult with an academic advisor before registering for courses in order to minimize the number of credits required for graduation.

BACHELOR OF SCIENCE DEGREE IN CHEMISTRY – TEACHING LICENSURE OPTION

Categories	**Credits**	**Earned**	**Remaining**
General Education	31	_____	_____
Professional Education Core	**31	_____	_____
Chemistry Requirements	**31	_____	_____
Chemistry Electives	9	_____	_____
Mathematics Requirements	**9	_____	_____
Physics Requirements	12	_____	_____
Science Electives	4	_____	_____
Total	127	_____	_____

****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:

^ 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.