



**ADVISING WORKSHEET**  
**BACHELOR OF SCIENCE MAJOR IN BIOLOGY**  
**MEDICAL LABORATORY SCIENCE OPTION**  
**General Bulletin 2007-2009**

TRANSFER INSTITUTION(S):

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Montana State University Billings  
 Advising Center  
 Phone: 406-657-2240  
 Fax: 406-657-2280  
 advising@msubillings.edu  
[www.msubillings.edu/advise/](http://www.msubillings.edu/advise/)

Name \_\_\_\_\_

Student ID # \_\_\_\_\_

**ACADEMIC FOUNDATIONS REQUIREMENTS – SEE PAGE 4 FOR SPECIFIC COURSES**

Academic Foundation Category	Course #	Credits	Grade	Semester	Equivalent
<b>Category I: Global Academic Skills</b> (12 credits) A. Mathematics (3 credits)  B. English (6 credits)	ENGL 150				
<b>Category II: Natural Sciences</b> (7 credits) 2 lectures (6 credits) & 1 lab (1 credit) (1 life science & 1 physical science & 1 lab)					
<b>Category III: Social Sciences</b> (6 credits) Courses must be from separate prefixes					
<b>Category IV: History &amp; Cultural Diversity</b> (6 credits) A. History (3 credits)  B. Cultural Diversity (3 credits)					
<b>Category V: Arts &amp; Humanities</b> (6 credits) A. Arts (3 credits)  B. Humanities (3 credits)					

A minimum grade of "C-" required in all Academic Foundations courses. *Note: Certain degrees may require a minimum grade of "C" in Academic Foundations courses.*

**Students should consult with their advisors to determine if specific courses are necessary in order to satisfy the Academic Foundations requirements within this program.**

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

**Reviewed:**

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## ACADEMIC FOUNDATIONS REQUIREMENTS

CATEGORY I: GLOBAL ACADEMIC SKILLS			12 credits
<b>Subcategory A - Mathematics</b>			<b>3 credits</b>
MATH	106	College Algebra	3
MATH	107	Precalculus	5
MATH	112	Calculus I	4
MATH	121	Finite Mathematics	4
MATH	122	College Mathematics for Technology	3
MATH	141	Contemporary Mathematics	3
MATH	202	Fundamentals of Mathematics II	3
STAT	141	Introduction to Statistics	3
STAT	241	Statistical Methods	4
<b>Subcategory B - English</b>			<b>6 credits</b>
<i>ENGL</i>	<i>150</i>	<i>College Composition</i>	<b>3</b>
ENGL	201	Business Communication	3
ENGL	226	Research Writing	3
ENGL	140	Business Writing	3
ENGL	145	Technical Communication	3
<b>Subcategory C - Information Literacy</b>			<b>3 credits</b>
COMT	130	Introduction to Public Speaking	3
LS	125	Research in the Information Age	3
MIS	150	Information Access and Organization	3

CATEGORY II: NATURAL SCIENCES			6 cr. lecture & 1 cr. lab
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*Students are required to take one course from each subcategory and at least one corresponding lab or SCIN 101, 102, 103 & 104*

<b>Subcategory A – Life Sciences</b>			
BIOL	101	Survey of Biology	3
BIOL	115	Survey of Biology Lab	1
BIOL	178	Principles of Biology	3
BIOL	188	Principles of Biology Lab	1
<b>Subcategory B – Physical Sciences</b>			
CHEM	104	Fund of General Chemistry	3
CHEM	105	Fund of General Chem Lab	1
CHEM	115	General Chemistry I	3
CHEM	118	General Chemistry I Lab	1
EASC	100	Lithosphere and Hydrosphere	3
EASC	101	Lithosphere and Hydrosphere Lab	1
GEOG	100	Physical Geography Lab	1
GEOG	101	Physical Geography	3
PHYS	101	Earth, Air, Fire and Water	3
PHYS	102	Earth, Air, Fire and Water Lab	1
PHYS	110	College Physics I	3
PHYS	111	College Physics I Lab	1
PHYS	201	Introduction to Astronomy	3
PHYS	203	Introduction to Astronomy Lab	1
PSSC	101	Physical World Around Us	3
PSSC	102	Physical World Around Us Lab	1
<b>Subcategories A and B – Integrated Sciences</b>			
SCIN	101, 102, 103 & 104	Integrated Sciences	3, ½, 3, ½

CATEGORY III: SOCIAL SCIENCES			6 credits
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*Two courses from separate prefixes*

BUS	101	Introduction to Business	3
COMT	109	Human Relations	3
COMT	110	Interpersonal Communication	3
ECON	200	Principles of Microeconomics	3
ECON	201	Principles of Macroeconomics	3
EDF	100	Education and Democracy	3
GEOG	102	World Geography	3
HHP	101	Health Sciences	3
POLS	101/200	Intro to Gov't/Intro to Comparative Gov't	3
POLS	212	United States Government	3
PSYC	101	General Psychology	3
PSYC	271	Human Relations	3
SOCL	101	Introduction to Sociology	3
SOCL	212	Physical Anthropology & Archeology	3
SOCL	221	Social Problems	3

CATEGORY IV: HISTORY & CULTURAL DIVERSITY			6 credits
<b>Subcategory A - History</b>			<b>3 credits</b>
HIST	104	The West and the World to 1648	3
HIST	105	The West and the World since 1648	3
HIST	106	Honors: History of Western Civ to 1500	3
HIST	107	Honors: History of Western Civ since 1500	3
HIST	204	United States History to 1877	3
HIST	205	United States History Since 1877	3
POLS	221	International Relations	3
<b>Subcategory B - Cultural Diversity</b>			<b>3 credits</b>
ART	131	Global Visual Culture	3
COMT	160	Introduction to Intercultural Communication	3
ENGL	260	World Foundations of Literature	3
GEOG	120	Environment and Culture	3
HHP	270	Global Health Issues	3
NAMS	181	Introduction to Native American Studies	3
NAMS	211	Social Issues of the Native American	3
PHIL	105	The Religious Quest	3
REHA	201	Introduction to Diversity	3
SOCL	211	Cultural Anthropology	3
A&SC/SOCL	250	Women, Culture and Society	3
SPAN	150	The Hispanic Tradition	3

CATEGORY V: ARTS & HUMANITIES			6 credits
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<b>Subcategory A - Arts</b>			<b>3 credits</b>
ART	110	Art Studio Essentials for the Non-Art Major	3
ART	142	Introduction to Pottery	3
ART	161	Introduction to Drawing	3
COMT	150	Introduction to Theatre and Performance	3
COMT	155	Global Cinema	3
COMT	250	Introduction to Acting	3
ENGL	204	Fundamentals of Creative Writing	3
ENGL	280	Fiction into Film	3
MUSC	100	Music Appreciation	3
MUSC	150	Musics of the World	3
DSGN	248	Computer Presentation and Animation	3
<b>Subcategory B - Humanities</b>			<b>3 credits</b>
ART	132	Art History Survey	3
ENGL	160	Reading and Responding to Literature	3
ENGL/PHIL	240	The Bible as Literature	3
HON	181	The Ancient and Medieval Worlds	3
HON	182	The Renaissance and Modern Worlds	3
HON	281	Humanistic Thought of the U.S. to 1877	3
HON	282	Humanistic Thought of the U.S. since 1877	3
PHIL	115	Ethics	3
PHIL	117	Philosophies of Life	3

Course		Credits	Grade	Semester	Equivalent
<b>Biology Requirements</b>					
*BIOL	178	Principles of Biology	3		
*BIOL	188	Principles of Biology Lab	1		
BIOL	241	Human Physiology and Anatomy I	3		
BIOL	243	Human Physiology and Anatomy Lab	1		
BIOL	245	Human Physiology and Anatomy II	3		
BIOL	246	Human Physiology and Anatomy II Lab	1		
BIOL	263	Introduction to Cell Biology	3		
BIOL	273	Introduction to Cell Biology Lab	1		
BIOL	340	General Microbiology	3		
BIOL	350	General Microbiology Lab	1		
BIOL	353	Genetics	3		
BIOL	354	Genetics Lab	1		
BIOL	425	Hematology	3		
BIOL	426	Hematology Lab	1		
BIOL	427	Parasitology	2		
BIOL	443	Immunology	3		
BIOL	452	Medical Microbiology	3		
BIOL	462	Medical Microbiology Lab	1		
BIOL	498	Capstone Seminar	1		
Unrestricted BIOL Elective			2		
<b>Biology Total</b>			<b>40</b>		

<b>Chemistry Requirements</b>					
*CHEM	115	General Chemistry I	3		
*CHEM	118	General Chemistry I Lab	1		
CHEM	116	General Chemistry II	3		
CHEM	119	General Chemistry II Lab	1		
CHEM	220	Principles of Organic Chemistry	3		
CHEM	221	Principles of Organic Chemistry I	1		
BIOL/ CHEM	361	Biochemistry	3		
BIOL/ CHEM	371	Biochemistry Lab	1		
<b>Chemistry Total</b>			<b>16</b>		

**NOTE:** Students wishing to obtain a minor in Chemistry will need to take CHEM 330, 331, 334, 335 instead of CHEM 220, 221 and CHEM 320, 325.

**Mathematics/Statistics Requirement** (choose one)

*STAT	241	Statistical Methods	4			
STAT	242	Statistical Methods II	4			

**Mathematics/Statistics Total** **4****Physics Requirement** (choose one Physics course with lab)

*PHYS	110	College Physics I	3			
*PHYS	111	College Physics I Lab	1			
PHYS	210	University Physics I	3			
PHYS	211	University Physics I Lab	1			

**Physics Total** **4****Recommended Electives**

CHEM	320	Quantitative Chemical Analysis	3			
CHEM	325	Quantitative Chemical Analysis Lab	1			

\*May satisfy Academic Foundations requirements.

**Professional Medical Lab Training Core – 37 credits**

^BIOL	435	Summer Clinical Laboratory	V 10-15			
^BIOL	436	Professional Training I Fall Semester	V 10-15			
^BIOL	437	Professional Training II Spring Semester	V 10-15			

^These courses require an extra fee.

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**BACHELOR OF SCIENCE DEGREE IN BIOLOGY – MEDICAL LABORATORY SCIENCE OPTION**

Categories	Credits	Earned
Academic Foundations	37	_____
Biology Major	**54	_____
Professional Core	37	_____
Total	128	_____

**\*\*10 credits that also satisfy Academic Foundations 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).****Note:**