



**ADVISING WORKSHEET**  
**BACHELOR OF SCIENCE IN BIOLOGY**  
**TEACHING CERTIFICATE OPTION**  
**General Bulletin 2007-2009**

TRANSFER INSTITUTION(S):  
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Name \_\_\_\_\_  
 Student ID # \_\_\_\_\_

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

Academic Foundations Category	Course #	Credits	Grade	Semester	Equivalent
<b>Category I: Global Academic Skills</b> (12 credits) A. Mathematics (3 credits) <i>MATH 112, STAT 141 or STAT 241 – Major Requirement</i> B. English (6 credits)					
	ENGL 150				
C. Information Literacy (3 credits)					
<b>Category II: Natural Sciences</b> (7 credits) 2 lectures (6 credits) & 1 lab (1 credit) (1 life science & 1 physical science & 1 lab) <i>BIOL 178/188 and CHEM 115 – Major Requirements</i>					
<b>Category III: Social Sciences</b> (6 credits) Courses must be from separate prefixes <i>EDF 100 – Education Core Requirement</i>	EDF 100				
<b>Category IV: History &amp; Cultural Diversity</b> (6 credits) A. History (3 credits)	HIST 204 or 205				
	NAMS 181 or 211				
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.

**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

<b>CATEGORY I: GLOBAL ACADEMIC SKILLS</b>		<b>12 credits</b>
<b>Subcategory A - Mathematics</b>		<b>3 credits</b>
MATH 106	College Algebra	3
MATH 107	Precalculus	5
<b>MATH 112</b>	<b>Calculus I</b>	<b>4</b>
MATH 121	Finite Mathematics	4
MATH 122	College Mathematics for Technology	3
MATH 141	Contemporary Mathematics	3
MATH 202	Fundamentals of Mathematics II	3
<b>STAT 141</b>	<b>Introduction to Statistics</b>	<b>3</b>
<b>STAT 241</b>	<b>Statistical Methods</b>	<b>4</b>

<b>Subcategory B - English</b>		<b>6 credits</b>
<b>ENGL 150</b>	<b>College Composition</b>	<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**  
*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
<b>BIOL 178</b>	<b>Principles of Biology</b>	<b>3</b>
<b>BIOL 188</b>	<b>Principles of Biology Lab</b>	<b>1</b>
<b>Subcategory B – Physical Sciences</b>		
CHEM 104	Fund of General Chemistry	3
CHEM 105	Fund of General Chem Lab	1
<b>CHEM 115</b>	<b>General Chemistry I</b>	<b>3</b>
<b>CHEM 118</b>	<b>General Chemistry I Lab</b>	<b>1</b>
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

<b>CATEGORY III: SOCIAL SCIENCES</b>		<b>6 credits</b>
<i>Two courses from separate prefixes</i>		
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
<b>EDF 100</b>	<b>Education and Democracy</b>	<b>3</b>
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

<b>CATEGORY IV: HISTORY &amp; CULTURAL DIVERSITY</b>		<b>6 credits</b>
<b>Subcategory A - History</b>		<b>3 credits</b>
<b>HIST 204</b>	<b>United States History to 1877</b>	<b>3</b>
<b>OR</b>		
<b>HIST 205</b>	<b>United States History Since 1877</b>	<b>3</b>
<b>Subcategory B - Cultural Diversity</b>		<b>3 credits</b>
<b>NAMS 181</b>	<b>Introduction to Native American Studies</b>	<b>3</b>
<b>OR</b>		
<b>NAMS 211</b>	<b>Social Issues of the Native American</b>	<b>3</b>

<b>CATEGORY V: ARTS &amp; HUMANITIES</b>		<b>6 credits</b>
<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

	<b>Course</b>	<b>Credits</b>	<b>Grade</b>	<b>Semester</b>	<b>Equivalent</b>
<b>Professional Education Core</b>					
*#EDF	100	Education & Democracy	3		
#EDF	225	Human Development in Education	3		
#EDF	250	Educational Psychology	3		
#SPED	260	Introduction to Teaching Exceptional Learners	3		
#HHP	201	Core Concepts in Health	3		
RD	310	Reading and Writing Across the Curriculum	3		
EDCI	310	Curriculum & Instruction for Middle School, High School & K-12 Teachers	3		
EDCI	314	Teaching Science in the Middle & Secondary School	3		
EDF	450	Philosophical, Legal & Ethical Issues in Education	3		
EDCI	486	Student Teaching Secondary	9		

**#Required for Admission to the Teacher Education Program**

**Biology Requirements**

*BIOL	178	Principles of Biology	3		
*BIOL	188	Principles of Biology Lab	1		
BIOL	179	Biodiversity	3		
BIOL	189	Biodiversity Lab	1		
BIOL	263	Introduction to Cell Biology	3		
BIOL	273	Introduction to Cell Biology Lab	1		
BIOL	353	Genetics	3		
BIOL	354	Genetics Lab	1		
BIOL	355	Ecology and Evolution	3		
BIOL	356	Ecology and Evolution Lab	1		
BIOL	490	Internship	1		
BIOL	498	Capstone Seminar	1		
Biology electives selected in consultation with an advisor to include upper division course work from each of the following areas: Botany, Zoology, Microbiology, and Molecular Biology.			15		

**Chemistry Requirements**

*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 Lab	1		

CHEM	320	Quantitative Chemical Analysis	3			
CHEM	325	Quantitative Chemical Analysis Lab	1			
BIOL/ CHEM	361	Biochemistry	3			
BIOL/ CHEM	371	Biochemistry Lab	1			

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

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

*MATH	112	Calculus I	4			
MATH	113	Calculus II	4			
*STAT	141	Introduction to Statistics	3			
*STAT	241	Statistical Methods	4			
STAT	242	Statistical Methods II	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			

**Electives**


\*This course may meet Academic Foundations requirements. Students should consult with an academic advisor before registering for courses in order to minimize the number of credits required for graduation.

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**BACHELOR OF SCIENCE DEGREE IN BIOLOGY – TEACHING CERTIFICATE OPTION**

Categories	Credits	Earned
Academic Foundations	37	_____
Professional Education Core	33-36	_____
Biology Major	33-37	_____
Chemistry/Mathematics/Physics	25-32	_____
Electives (variable)	V	_____
Total	128	_____

**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).**

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**NOTES:**