University of Missouri Bachelor of Science in Biology Transfer Guide for North Central Missouri College

This plan is intended only as a general guide based on requirements in the 2013-2014 University of Missouri undergraduate catalog. You will need to complete a total of 120 hours in order to graduate. It will take roughly 90 to 110 credit hours to fulfill the requirements specific to the degrees offered in Biological Sciences. You may use elective courses to bring your total credit hours to 120.

At least 30 of the hours must be in courses at the 3000-level or higher. (Biology 2200 and 2300 and Chemistry 2100, 2110 and 2130 may be used to meet the 3000-level requirement.)

Check the following web sites for current course descriptions, prerequisites, course equivalencies and other specific details about the Biology major:

- 1) College Catalog (http://registrar.missouri.edu)
- 2) Transfer Equivalencies (http://transfercourses.missouri.edu or http://transfer.org)
- 3) General Education (http://generaleducation.missouri.edu)
- 4) Biological Sciences (http://biology.missouri.edu/undergrad/)

University of Missouri		North Central Missouri College	
COURSE	CREDITS	EQUIVALENT COURSE (CREDITS)	
College Algebra (3)		NAT 422 Cellere Alexber (2)	
MATH 1100 College Algebra	3	MT 122 College Algebra (3)	
Mathematical Sciences (5-6)	1		
Select one option:			
MATH 1400 Calculus for Social/Natural Sciences and	6	None	
MATH 2100 Calculus for Social/Natural Sciences I	_		
MATH 1500 Analytic Geometry and Calculus I	5	MT 150 Geom & Calc I (5)	
STAT 1400 Elem Stat for Life Sciences and	6	MT 125 Elementary Statistics (3) and	
CMP SC 1040 Intro to Problem Solving & Programming		IT 182 Prog in Visual Basic I (3) or IT 243 Programming I (3)	
Chemistry (16 credits)	1		
CHEM 1320 College Chemistry I	4	CH 110 Gen Chemistry I (5)	
CHEM 1330 College Chemistry II	4	CH 112 Gen Chemistry II (5)	
CHEM 2100 Organic Chemistry I	3	None	
CHEM 2110 Organic Chemistry II	3	None	
CHEM 2130 Organic Chemistry I Lab	2	None	
Physics (8-10 credits)			
Select one option:			
PHYS 1210 College Physics I and Lab and		PS 185 College Physics I (4) and	
PHYS 1220 College Physics II and Lab	8	PS 186 College Physics II (4)	
PHYS 2750 University Physics I and Lab and	10	PS 210 Gen Physics I (5) and	
PHYS 2760 University Physics II and Lab	10	PS 212 Gen Physics II (5)	
English Exposition and Argumentation (3 credits)			
ENGLSH 1000 Exposition and Argumentation	3	EN 102 English II (3)	
Behavioral Sciences (5 credits)			
Behavioral Science 1	3	Select <u>behavioral sciences</u> from the general education list.	
Behavioral Science 2	2-3		
*Social Sciences (9 credits) Courses from at least two different a	lepartments	5.	
State Requirement in Government or History	3	Select <u>state requirement</u> from the general education list.	
Social Science 2	3		
Social Science 3	3	Select <u>social sciences</u> from the general education list.	
Humanities/Fine Arts (12 credits) Courses from at least three of	different are	eas.	
Humanity 1	3		
Humanity 2	3	1	
Humanity 3	3	Select <u>humanities</u> from the general education list.	
Humanity 4	3	-	
Foreign Language (12-13 credits) Must be in the same language.			
Requirement is waived if level 4 of single foreign language was co	ompleted in	high school.	
Language 1	5		
Language 2	5	Select language courses from the general education list.	
Language 3	3		

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COURSE	CREDITS	EQUIVALENT COURSE (CREDITS)
★ Upper Level 1	3	Select 200-level/2000-level A&S courses from behavioral science, social science, or humanity of the general education list. Level is based upon the community college course number, NOT the
★ Upper Level 2	3	MU equivalent.
Upper Level 3	3	Must be taken at MU.
Writing Intensive (2 courses) Must be completed with a C- or be	tter.	
★Writing Intensive course from anywhere in the curriculum	3	Must be taken at MU unless waived via completion of an AA degree.
Writing Intensive course numbered 3000 or above in biology	3	Must be taken at MU.
Biological Sciences (33 credits) At least 14 credits in Biology mus	st be comp	leted at the 3000-level or higher
DIO CC 1500 Introduction to Biological Customs	_	BIO 101 Gen Botany (5) and
OSC 1500 Introduction to Biological Systems	5	BIO 103 Gen Zoology (5)
BIO SC 2200 General Genetics	4	None
BIO SC 2300 Cell Biology	4	None
Evolutionary Biology (select one course)		
BIO SC 3400 Evolution and Ecology	3	None
BIO SC 4600 Evolution		
Biological Diversity (select one course)		
BIO SC 2600 Ornithology		
BIO SC 2700 Ichthyology		
MICROB 3200 - Medical Microbiology and Immunology		
BIO SC 3210 Plant Systematics	3-5	None
BIO SC 3260 Invertebrate Zoology		
BIO SC 3510 Biology of Fungi		
BIO SC 3660 Mammalogy		
BIO SC 3710 & 3715 Intro Entomology/Insect Diversity		
Capstone (select one course)		
BIO SC 4950/4952 Undergraduate Research in Biology		
BIO SC 4976 Molecular Biology		
BIO SC 4978 Cancer Biology		
BIO SC 4982 Human Inherited Diseases		
BIO SC 4983 Molecular Ecology	3-5	None
BIO SC 4984 Mammalian Reproductive Biology		
BIO SC 4986 Neurology of Motor Systems		
BIO SC 4988 Nerve Cells and Behavior		
BIO SC 4990 Vertebrate Histology & Microscopic Anat		
BIO SC 4994 Senior Seminar		
Biology Electives		
Bio Elective Credit (Physiology)	7-11	BI 242 Human Physiology (4)
Bio Elective Credit (Microbiology)		BI 243 Microbiology (4)
Other Bio Elective Credit		
Electives	<u>'</u>	

Total Hours for BS in Biological Sciences

#Requirement is automatically satisfied upon the completion of an Associate of Arts (AA) degree.

General Education Courses North Central Missouri College

North Central Missouri College Course	MU Equivalent	North Central Missouri College Course	MU Equivalent
Behavioral Sciences		Social Sciences (◆=State Requirement)	
PY 121 Gen Psychology (3)	PSYCH 1000	AG 148 Agric Sales	AG EC 2223
PY 214 Social Psych (3)	PSYCH 2310	BA 103 Consumer Finance (3)	FINPLN 2183
PY 219 Adult Dev & Aging (2)	PSYCH BEH	EC 223 Agric Econ (3)	AG_EC 1041
PY 225 Child Psych (3)	PSYCH 2410	EC 252 Microeconomics (3)	ECONOM 1014
PY 226 Adolescent Psych (3)	PSYCH BEH	EC 253 Macroeconomics (3)	ECONOM 1015
PY 230 Abnormal Psych (3)	PSYCH 2510	GE 106 Intro World Geog (3)	GEOG SSC
PY 233 Human Growth & Dev (3)	PSYCH BEH	HI 101 West Civ to 1700 (3)	HIST 1500
PY 245 Adv Gen Psych (3)	PSYCH BEH	HI 102 West Civ Since 1700 (3)	HIST 1510
SO 107 Gen Sociology (3)	SOCIOL 1000	◆HI 103 Amer Hist to 1877 (3)	HIST 1100
SO 201 Marriage & the Family (3)	SOCIOL 3420	◆HI 104 Amer Hist Since 1877 (3)	HIST 1200
		PE 220 Intro to Recreation (3)	P_R_TR 1010
Humanities		PL 105 Missouri Constitution (1)	POL_SC SSC
AR 102 Apprec of the Arts (1-3)	ART GNR 1020	◆PL 116 State & Local Govt (3)	POL_SC 2100
AR 104 Art Appreciation (3)	ART_GNR1020	◆PL 216 National Government (3)	POL_SC 1100
EN 196 Lit for Children (3)	ENGLSH LIT	SO 210 Social Problems (3)	SOCIOL 3010
EN 211 Studies in Literature (3)	ENGLSH 1160		
EN 230 English Lit I (3)	ENGLSH 2200	Foreign Language	
EN 240 English Lit II (3)	ENGLSH 2200	FL 100 Elem Spanish I (3)	SPAN 1100A
EN 251 World Lit I: Beg to Renaiss (3)	ENGLSH LIT	FL 101 Elem Spanish II (3)	SPAN 1100B
EN 252 World Lit II: Enlight to Pres (3)	ENGLSH LIT	FL 110 Elem German (4)	GERMAN 1100A
EN 261 Amer Lit Before 1865 (3)	ENGLSH 2300	FL 111 Elem Germ II (3)	GERMAN 1100B
EN 262 Amer Lit After 1865 (3)	ENGLSH 2300	FL 120 Elem French I (3)	FRENCH 1100A
EN 280 Intro to Literature (3)	ENGLSH LIT	FL 122 Elem French II (3)	FRENCH 1100B
HU 110 Hum: Pre-Renaiss (3)	MISC HUM		
HU 111 Hum: Renaiss to Pres (3)	MISC HUM		
MU 109 Music Apprec (3)	MUSIC_NHUM		
PH 101 Ethics (3)	PHIL 1100		
PH 102 Intro to Philosophy (3)	PHIL 1000		
RL 101 Intro to Religion (3)	REL_ST 1100		
RL 110 Intro Old Testament (3)	REL_ST 2500		
RL 131 New Testament Survey (3)	REL_ST 2510		
SP 175 Speech Comm (3)	COMMUN 1200		
TH 111 Intro Theatre (3)	THEATR 1100		
TH 113 Begin Acting (2)	THEATR 1400		