

University of Missouri
Bachelor of Science in Biology
Transfer Guide for St. Louis Community 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/>)

For more information about the Biological Sciences degree, please contact the Biology Advising Office at (573) 882-4068.

University of Missouri		St. Louis Community College		
COURSE	CREDITS	EQUIVALENT COURSE (CREDITS)		
College Algebra (3)				
MATH 1100 College Algebra	3	MTH 160 College Algebra (4)		
Mathematical Sciences (5-6)				
Select one option:				
MATH 1400 Calculus for Social/Natural Sciences and MATH 2100 Calculus for Social/Natural Sciences I	6	MTH 186 Survey Calculus (4) and MATH 2100 at MU		
MATH 1500 Analytic Geometry and Calculus I	5	MTH 210 Anl Geom/Calc I (5)		
STAT 1400 Elem Stat for Life Sciences and CMP SC 1040 Intro to Problem Solving & Programming	6	BUS 201 Elem Statistics (MRP) (3) and IS 227 C Programming (3), IS 246 Visual Basic Prog (3), IS 107 Intro to Programming (3), or IS 251 Intro Java (3)		
Chemistry (16 credits)				
CHEM 1320 College Chemistry I	4	CHM 105 Gen Chemistry I (5)		
CHEM 1330 College Chemistry II	4	CHM 106 Gen Chemistry II (5)		
CHEM 2100 Organic Chemistry I	3	CHM 206 Org Chem Lecture I (3)		
CHEM 2110 Organic Chemistry II	3	CHM 207 Org Chem-Lec II (3)		
CHEM 2130 Organic Chemistry I Lab	2	CHM 210 Org Chem-Lab I (2)		
Physics (8-10 credits)				
Select one option:				
PHYS 1210 College Physics I and Lab and PHYS 1220 College Physics II and Lab	8	PHY 111 Coll Physics I (4) and PHY 112 Coll Physics II (4)		
PHYS 2750 University Physics I and Lab and PHYS 2760 University Physics II and Lab	10	PHY 122 Engr Physics I (5) and PHY 223 Engr Physics II (5)		
English Exposition and Argumentation (3 credits)				
ENGLSH 1000 Exposition and Argumentation	3	ENG 102 College Comp II (3)		
*Behavioral Sciences (5 credits)				
Behavioral Science 1	3	Select behavioral sciences from the general education list.		
Behavioral Science 2	2-3			
*Social Sciences (9 credits) Courses from at least two different departments.				
State Requirement in Government or History	3	Select state requirement from the general education list.		
Social Science 2	3			
Social Science 3	3			
*Humanities/Fine Arts (12 credits) Courses from at least three different areas.				
Humanity 1	3	Select humanities from the general education list.		
Humanity 2	3			
Humanity 3	3			
Humanity 4	3			
Foreign Language (12-13 credits) Must be in the same language.				
<i>Requirement is waived if level 4 of single foreign language was completed in high school.</i>				
Language 1	5	Select language courses from the general education list.		
Language 2	5			
Language 3	3			
Upper Level General Education (9 credits) At least 9 credits of behavioral science, social science, or humanities must be at the 2000-level or above.				

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COURSE	CREDITS	EQUIVALENT COURSE (CREDITS)			
<input checked="" type="checkbox"/> <i>Upper-level general education courses may also count toward other general education requirements (behavioral sciences, social sciences, or humanities).</i>					
*Upper Level 1	3	Select 200-level/2000-level A&S courses from behavioral science, social science, or humanity on the general education list. Level is based upon the community college course number, NOT the MU equivalent.			
*Upper Level 2	3				
Upper Level 3	3	Must be taken at MU.			
Writing Intensive (2 courses) Must be completed with a C- or better.					
*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 must be completed at the 3000-level or higher					
BIO SC 1500 Introduction to Biological Systems	5	BIO 140 & 141 Prin of Biology I & II (8)			
BIO SC 2200 General Genetics	4	BIO 225 Genetics (5)			
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	BIO 207 & 208 Anat & Phys I & II (max credit of 4 hours) or			
Bio Elective Credit (Microbiology)		BIO 216 Human Physiology (4)			
Other Bio Elective Credit		BIO 203 Gen Microbiology or BIO 218 Microbiology for Biotech (4)			
		BIO 219 Bio Tech I (5), BIO 220 Bio Tech II (5), or BIO 215 Human Body Systems (5)			
Electives					
Choose electives to reach the total of 120 credits required for graduation.					
Total Hours for BS in Biological Sciences	120				

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

General Education Courses

St. Louis Community College

<u>St. Louis Community College Course</u>	<u>MU Equivalent</u>	<u>St. Louis Community College Course</u>	<u>MU Equivalent</u>
Behavioral Sciences		Humanities (continued)	
ANT 102 Intro to Cultural Anthropology (3)	ANTHRO 2030	ENG 228 Studies in Lit (3)	ENGLSH LIT
ANT 103 Cultural Variations (3)	ANTHRO BEH	ENG 230 Environ Lit (3)	ENGLSH LIT
ANT 105 Found Archaeology (3)	ANTHRO 2021	ENG 231 World Lit (3)	ENGLSH LIT
ANT 201 North Amer Archeaology (3)	ANTHRO 4620	GLE 101 Global Educ Studies (1-3)	MISC HUM
ANT 202 Ethnogr/Nrth Amer Indians (3)	ANTHRO 3600	HUM 101 Humanities I (4)	MISC HUM
ANT 206 Incan, Aztec & Mayan (3)	ANTHRO 3650	HUM 102 Humanities II (4)	MISC HUM
ANT 207 Ancient Civ of Old World (3)	ANTHRO 4720	HUM 106 Black Humanities (3)	MISC HUM
BIO 122 Human Sexuality (3)	PSYCH 2810	HUM 109 Art & Idea: Anct Wrld (3)	MISC HUM
COM 103 Sm Group Comm (3)	COMMUN 3571	HUM 110 Mid Age & Renaiss (3)	MISC HUM
COM 110 Organiztn Comm (3)	COMMUN 4476	HUM 112 Creative Thinking (3)	MISC HUM
COM 120 Gender Communication (3)	COMMUN 4412	HUM 113 Intro Irish Stds (3)	MISC HUM
COM 200 Comm-Cultures (3)	COMMUN 3470	HUM 114 Exploring the Arts (3)	MISC HUM
COM 201 Intrprsnl Comm (3)	COMMUN 3561	HUM 115 Life&Death:Nazi Era (3)	MISC HUM
ECE 125 Child Growth &Devel I (3)	H_D_FS 2400A	HUM 208 Lib Arts:Themes (3)	MISC HUM
PSY 100 Psych of Grief (2)	PSYCH BEH	HUM 209 Blacks & World of Cinema (3)	MISC HUM
PSY 125 Human Sexuality (3)	PSYCH 2810	MCM 130 Film Apprectn (3)	FILM_S HUM
PSY 200 Gen Psychology (3)	PSYCH 1000	MCM 131 History of Film (3)	FILM_S HUM
PSY 203 Child Psychology (3)	PSYCH 2410	MCM 132 Major Them in Film (3)	FILM_S HUM
PSY 205 Hum Growth & Dev (3)	PSYCH BEH	MCM 209 Blacks & World of Cinema (3)	FILM_S HUM
PSY 206 Intro Soc Psych (3)	PSYCH 2310	MCM 215 Major Film Directors (3)	FILM_S HUM
PSY 207 Applied Psych (3)	PSYCH 1020	MUS 101 Music Theory I (4)	MUSIC_N1211
PSY 208 Abnormal Psych (3)	PSYCH 2510	MUS 102 Music Theory II (4)	MUSIC_N1212
PSY 210 Personality & Adjust (3)	PSYCH BEH	MUS 113 Hist of Jazz (3)	MUSIC_N1312
PSY 214 Adolescent Psych (3)	PSYCH BEH	MUS 114 Enjoyment-Music (3)	MUSIC_N1310
PSY 215 Brain & Behavior (3)	PSYCH 2210	MUS 128 Surv of Rock Music (3)	MUSIC_NHUM
PSY 216 Psych of Gender (3)	PSYCH BEH	MUS 211 Music History I (3)	MUSIC_NHUM
PSY 218 Add/Compul Beh (3)	PSYCH BEH	MUS 212 Music History II (3)	MUSIC_NHUM
SOC 100 Human Relations (3)	SOCIOL BEH	PHL 101 Intro Philosophy (3)	PHIL 1000
SOC 101 Intro to Soc (3)	SOCIOL 1000	PHL 102 Intro to Logic (3)	PHIL 1200
SOC 102 Intro Soc-Honors (3)	SOCIOL 1000	PHL 103 World Religions (3)	REL_ST 2110
SOC 103 Hum Beh Wrk/Bus (3)	SOCIOL BEH	PHL 104 Ethics (3)	PHIL 1100
SOC 126 Psychodynam Subst (3)	SOCIOL BEH	PHL 105 Black Philosophy (3)	PHIL HUM
SOC 201 Aspects Aging (3)	SOCIOL 2230	PHL 106 Black Religion (3)	BL_STU 2570
SOC 202 Amer Soc Prob Issues (3)	SOCIOL BEH	PHL 109 Bio-Med Ethics (3)	PHIL 1150
SOC 203 Crim & Deviance (3)	SOCIOL 1650	PHL 111 Environ Ethics (3)	PHIL HUM
SOC 204 Marriage & Family (3)	SOCIOL 3420	PHL 112 Business Ethics (3)	PHIL 2420
SOC 212 Race & Ethnicity (3)	SOCIOL BEH	THT 101 Intro Theatre (3)	THEATR 1100
Humanities		THT 108 Acting I (3)	THEATR 1400
ANT 203 Biblical Archaeology (3)	REL_ST HUM	THT 110 History-Theatre (3)	THEATR 1100
ANT 205 Clt Cntxt Erly Christian (3)	REL_ST HUM		
ARC 114 Archt Hist & Theory (3)	ARCHST 1600		
ART 100 Art Appreciation (3)	ART_GNR1020	Social Sciences (◆=State Requirement)	
ART 101 Art History I (3)	AR_H_A 1110	ECO 140 Intro to Econ (3)	ECONOM SSC
ART 102 Art History II (3)	AR_H_A 1120	ECO 151 Prin of Macroeconomics (3)	ECONOM 1015
ART 103 Hist of Modern Art (3)	AR_H_A HUM	ECO 152 Prin of Microeconomics (3)	ECONOM 1014
ART 104 Major Black Artists (3)	AR_H_A HUM	FIN 100 Personal Finance (3)	FINANC 1000
ART 105 Intro to Art (3)	ART_GNR1010	FIN 201 Fund of Finance (3)	FINANC 2000
ART 153 Hist of Cultural Env (3)	AR_H_A HUM	GEG 100 Reg Geog-East (3)	GEOG 1200
ART 168 Hist of Photography (3)	ART_PHOHUM	GEG 101 Reg Geog-West (3)	GEOG 1100
ART 254 Hlst of Cult Environ II (3)	AR_H_A HUM	GEG 103 Physical Geog (3)	GEOG 2610
COM 107 Public Speaking (3)	COMMUN 1200	GEG 106 US & World Geog (3)	GEOG SSC
ENG 201 Intro Fiction (3)	ENGLSH LIT	◆HST 100 Amer Civilization (3)	HIST SSC_ST
ENG 202 Intro Poetry/Play (3)	ENGLSH LIT	◆HST 101 Amer Hist I (3)	HIST 1100
ENG 203 American Lit (3)	ENGLSH LIT	◆HST 102 Amer Hist II (3)	HIST 1200
ENG 204 Amer Lit Before 1865 (3)	ENGLSH LIT	◆HST 103 Am Hist I-Hon (3)	HIST 1100
ENG 205 Amer Lit Between 1865 and 1945 (3)	ENGLSH LIT	◆HST 104 Am Hist II-Hon (3)	HIST 1200
ENG 206 Amer Lit after 1945 (3)	ENGLSH LIT	◆HST 105 US in 20th Cent (3)	HIST 2210
ENG 207 Humor in Amer Lit (3)	ENGLSH LIT	HST 107 Hist of Black Amer (3)	HIST 1410
ENG 210 British Lit to 1800 (3)	ENGLSH LIT	HST 115 Anc/Med Heritage (3)	HIST 1500
ENG 213 Short Novel (3)	ENGLSH LIT	HST 117 Early Mod Europe (3)	HIST 1510
ENG 214 Contemp Fiction (3)	ENGLSH LIT	HST 119 Modern World (3)	HIST SSC
ENG 215 Pop Lit: Fan/Hor (3)	ENGLSH LIT	HST 128 Western Tradition II (3)	HIST SSC
ENG 216 Women in Lit (3)	ENGLSH 2180	HST 130 African History I (3)	HIST SSC
ENG 217 Major Black Writers (3)	ENGLSH LIT	HST 131 African Hist II (3)	HIST SSC
ENG 218 Lit: Amer Minorities (3)	ENGLSH LIT	HST 137 African Amer Hist I (3)	HIST SSC
ENG 226 Children's Lit (3)	ENGLSH LIT	HST 138 African Amer Hist II (3)	HIST SSC
		HST 139 British History (3)	HIST 1540

Social Sciences (continued) (◆=State Law Course)

Foreign Language

St. Louis Community College Course

HST 201 History of the Far East (3)
HST 204 US in Crisis & Civ Wr (3)
HST 205 Hist Mod Mid East (3)
HST 206 Women in 20th Cent (3)
HST 207 Amer in Vietnam (3)
◆PSC 101 Intro Amer Politics (3)
◆PSC 103 State & Urban Pol (3)
PSC 104 British Pol & Soc (3)
PSC 106 Blacks & Amer Pol Pr (3)
PSC 201 Internat Relations (3)
PSC 204 Pol African Nations (3)
◆PSC 205 Constit Issues (3)
PSC 211 US Foreign Policy (3)
PSC 212 Russian Pol & Soc (3)
WMS 100 Intro Women's Studies (3)

MU Equivalent

HIST SSC
HIST SSC
HIST SSC
HIST SSC
HIST SSC
HIST SSC
POL_SC 1100
POL_SC 2100
POL_SC SSC
POL_SC SSC
POL_SC SSC_ST
POL_SC 4540
POL_SC SSC
WGST 1120

St. Louis Community College Course

FRE 101 Elem French I (4)
FRE 102 Elem French II (4)
FRE 201 Interm French I (4)
GER 101 Elem German I (4)
GER 102 Elem German II (4)
GER 201 Intermed German I (4)
ITL 103 Elem Italian I (4)
ITL 104 Elem Italian II (4)
JPN 101 Mod Japanese I (4)
JPN 102 Mod Japanese II (4)
RUS 101 Elem Russian I (4)
RUS 102 Elem Russian II (4)
SPA 101 Elem Spanish I (4)
SPA 102 Elem Spanish II (4)
SPA 201 Interm Span I (4)

MU Equivalent

FRENCH 1100
FRENCH 1200
FRENCH 2100
GERMAN 1100
GERMAN 1200
GERMAN 2100
ITAL 1100A
ITAL 1100B
JAPNSE 1100A
JAPNSE 1100B
RUSS 1100A
RUSS 1100B
SPAN 1100
SPAN 1200
SPAN 2100