

# 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)
<b>College Algebra (3)</b>		
MATH 1100 College Algebra	3	MTH 160 College Algebra (4)
<b>Mathematical Sciences (5-6)</b>		
<b>Select one option:</b>		
MATH 1400 Calculus for Social/Natural Sciences <b>and</b> MATH 2100 Calculus for Social/Natural Sciences I	6	MTH 186 Survey Calculus (4) <b>and</b> 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 <b>and</b> CMP SC 1040 Intro to Problem Solving & Programming	6	BUS 201 Elem Statistics (MRP) (3) <b>and</b> IS 227 C Programming (3), IS 246 Visual Basic Prog (3), IS 107 Intro to Programmng (3), or IS 251 Intro Java (3)
<b>Chemistry (16 credits)</b>		
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)
<b>Physics (8-10 credits)</b>		
<b>Select one option:</b>		
PHYS 1210 College Physics I and Lab <b>and</b> PHYS 1220 College Physics II and Lab	8	PHY 111 Coll Physics I (4) <b>and</b> PHY 112 Coll Physics II (4)
PHYS 2750 University Physics I and Lab <b>and</b> PHYS 2760 University Physics II and Lab	10	PHY 122 Engr Physics I (5) <b>and</b> PHY 223 Engr Physics II (5)
<b>English Exposition and Argumentation (3 credits)</b>		
ENGLSH 1000 Exposition and Argumentation	3	ENG 102 College Comp II (3)
<b>*Behavioral Sciences (5 credits)</b>		
Behavioral Science 1	3	Select <a href="#">behavioral sciences</a> from the general education list.
Behavioral Science 2	2-3	
<b>*Social Sciences (9 credits) Courses from at least two different departments.</b>		
State Requirement in Government or History	3	Select <a href="#">state requirement</a> from the general education list.
Social Science 2	3	Select <a href="#">social sciences</a> from the general education list.
Social Science 3	3	
<b>*Humanities/Fine Arts (12 credits) Courses from at least three different areas.</b>		
Humanity 1	3	Select <a href="#">humanities</a> from the general education list.
Humanity 2	3	
Humanity 3	3	
Humanity 4	3	
<b>Foreign Language (12-13 credits) Must be in the same language.</b> <i>Requirement is waived if level 4 of single foreign language was completed in high school.</i>		
Language 1	5	Select <a href="#">language courses</a> from the general education list.
Language 2	5	
Language 3	3	
<b>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.</b>		

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COURSE	CREDITS	EQUIVALENT COURSE (CREDITS)
<input checked="" type="checkbox"/> Upper-level general education courses may also count toward other general education requirements (behavioral sciences, social sciences, or humanities).		
★Upper Level 1	3	Select <a href="#">200-level/2000-level A&amp;S courses</a> 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.
<b>Writing Intensive (2 courses)</b> 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.
<b>Biological Sciences (33 credits)</b> 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 ( <i>select one course</i> ) BIO SC 3400 Evolution and Ecology BIO SC 4600 Evolution	3	None
Biological Diversity ( <i>select one course</i> ) BIO SC 2600 Ornithology BIO SC 2700 Ichthyology MICROB 3200 - Medical Microbiology and Immunology BIO SC 3210 Plant Systematics BIO SC 3260 Invertebrate Zoology BIO SC 3510 Biology of Fungi BIO SC 3660 Mammalogy BIO SC 3710 & 3715 Intro Entomology/Insect Diversity	3-5	None
Capstone ( <i>select one course</i> ) 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 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	3-5	None
Biology Electives Bio Elective Credit (Physiology) Bio Elective Credit (Microbiology) Other Bio Elective Credit	7-11	BIO 207 & 208 Anat & Phys I & II (max credit of 4 hours) or BIO 216 Human Physiology (4) 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)
<b>Electives</b>		
Choose electives to reach the total of 120 credits required for graduation.		
<b>Total Hours for BS in Biological Sciences</b>	<b>120</b>	

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

**General Education Courses**  
**St. Louis Community College**

**St. Louis Community College Course**

## Behavioral Sciences

ANT 102 Intro to Cultural Anthropology (3)  
ANT 103 Cultural Variations (3)  
ANT 105 Found Archaeology (3)  
ANT 201 North Amer Archaeology (3)  
ANT 202 Ethnog:Nrth Amer Indians (3)  
ANT 206 Incan, Aztec & Mayan (3)  
ANT 207 Ancient Civ of Old World (3)  
BIO 122 Human Sexuality (3)  
COM 103 Sm Group Comm (3)  
COM 110 Organiztn Comm (3)  
COM 120 Gender Communication (3)  
COM 200 Comm-Cultures (3)  
COM 201 Intrprsnl Comm (3)  
ECE 125 Child Growth & Devel I (3)  
PSY 100 Psych of Grief (2)  
PSY 125 Human Sexuality (3)  
PSY 200 Gen Psychology (3)  
PSY 203 Child Psychology (3)  
PSY 205 Hum Growth & Dev (3)  
PSY 206 Intro Soc Psych (3)  
PSY 207 Applied Psych (3)  
PSY 208 Abnormal Psych (3)  
PSY 210 Personality & Adjust (3)  
PSY 214 Adolescent Psych (3)  
PSY 215 Brain & Behavior (3)  
PSY 216 Psych of Gender (3)  
PSY 218 Add/Compul Beh (3)  
SOC 100 Human Relations (3)  
SOC 101 Intro to Soc (3)  
SOC 102 Intro Soc-Honors (3)  
SOC 103 Hum Beh Wrk/Bus (3)  
SOC 126 Psychodym Subst (3)  
SOC 201 Aspects Aging (3)  
SOC 202 Amer Soc Prob Issues (3)  
SOC 203 Crim & Deviance (3)  
SOC 204 Marriage & Family (3)  
SOC 212 Race & Ethnicity (3)

## Humanities

ANT 203 Biblical Archaeology (3)  
ANT 205 Clt Cntxt Erly Christian (3)  
ARC 114 Archt Hist & Theory (3)  
ART 100 Art Appreciation (3)  
ART 101 Art History I (3)  
ART 102 Art History II (3)  
ART 103 Hist of Modern Art (3)  
ART 104 Major Black Artists (3)  
ART 105 Intro to Art (3)  
ART 153 Hist of Cultural Env (3)  
ART 168 Hist of Photography (3)  
ART 254 HlSt of Cult Environ II (3)  
COM 107 Public Speaking (3)  
ENG 201 Intro Fiction (3)  
ENG 202 Intro Poetry/Play (3)  
ENG 203 American Lit (3)  
ENG 204 Amer Lit Before 1865 (3)  
ENG 205 Amer Lit Between 1865 and 1945 (3)  
ENG 206 Amer Lit after 1945 (3)  
ENG 207 Humor in Amer Lit (3)  
ENG 210 British Lit to 1800 (3)  
ENG 213 Short Novel (3)  
ENG 214 Contemp Fiction (3)  
ENG 215 Pop Lit: Fan/Hor (3)  
ENG 216 Women in Lit (3)  
ENG 217 Major Black Writers (3)  
ENG 218 Lit: Amer Minorities (3)  
ENG 226 Children's Lit (3)

**MU Equivalent**

ANTHRO 2030  
ANTHRO BEH  
ANTHRO 2021  
ANTHRO 4620  
ANTHRO 3600  
ANTHRO 3650  
ANTHRO 4720  
PSYCH 2810  
COMMUN 3571  
COMMUN 4476  
COMMUN 4412  
COMMUN 3470  
COMMUN 3561  
H\_D\_FS 2400A  
PSYCH BEH  
PSYCH 2810  
PSYCH 1000  
PSYCH 2410  
PSYCH BEH  
PSYCH 2310  
PSYCH 1020  
PSYCH 2510  
PSYCH BEH  
PSYCH BEH  
PSYCH 2210  
PSYCH BEH  
PSYCH BEH  
SOCIAL BEH  
SOCIAL 1000  
SOCIAL 1000  
SOCIAL BEH  
SOCIAL BEH  
SOCIAL 2230  
SOCIAL BEH  
SOCIAL 1650  
SOCIAL 3420  
SOCIAL BEH

[illegible]**St. Louis Community College Course**

## Humanities (continued)

ENG 228 Studies in Lit (3)  
ENG 230 Environ Lit (3)  
ENG 231 World Lit (3)  
GLE 101 Global Educ Studies (1-3)  
HUM 101 Humanities I (4)  
HUM 102 Humanities II (4)  
HUM 106 Black Humanities (3)  
HUM 109 Art & Idea: Anct Wrld (3)  
HUM 110 Mid Age & Renaiss (3)  
HUM 112 Creative Thinking (3)  
HUM 113 Intro Irish Stds (3)  
HUM 114 Exploring the Arts (3)  
HUM 115 Life&Death:Nazi Era (3)  
HUM 208 Lib Arts:Themes (3)  
HUM 209 Blacks & World of Cinema (3)  
MCM 130 Film Apprectn (3)  
MCM 131 History of Film (3)  
MCM 132 Major Them in Film (3)  
MCM 209 Blacks & World of Cinema (3)  
MCM 215 Major Film Directors (3)  
MUS 101 Music Theory I (4)  
MUS 102 Music Theory II (4)  
MUS 113 Hist of Jazz (3)  
MUS 114 Enjoyment-Music (3)  
MUS 128 Surv of Rock Music (3)  
MUS 211 Music History I (3)  
MUS 212 Music History II (3)  
PHL 101 Intro Philosophy (3)  
PHL 102 Intro to Logic (3)  
PHL 103 World Religions (3)  
PHL 104 Ethics (3)  
PHL 105 Black Philosophy (3)  
PHL 106 Black Religion (3)  
PHL 109 Bio-Med Ethics (3)  
PHL 111 Environ Ethics (3)  
PHL 112 Business Ethics (3)  
THT 101 Intro Theatre (3)  
THT 108 Acting I (3)  
THT 110 History-Theatre (3)

**Social Sciences (◆=State Requirement)**

ECO 140 Intro to Econ (3)  
ECO 151 Prin of Macroeconomics (3)  
ECO 152 Prin of Microeconomics (3)  
FIN 100 Personal Finance (3)  
FIN 201 Fund of Finance (3)  
GEG 100 Reg Geog-East (3)  
GEG 101 Reg Geog-West (3)  
GEG 103 Physical Geog (3)  
GEG 106 US & World Geog (3)  
◆HST 100 Amer Civilization (3)  
◆HST 101 Amer Hist I (3)  
◆HST 102 Amer Hist II (3)  
◆HST 103 Am Hist I-Hon (3)  
◆HST 104 Am Hist II-Hon (3)  
◆HST 105 US in 20th Cent (3)  
HST 107 Hist of Black Amer (3)  
HST 115 Anc/Med Heritage (3)  
HST 117 Early Mod Europe (3)  
HST 119 Modern World (3)  
HST 128 Western Tradition II (3)  
HST 130 African History I (3)  
HST 131 African Hist II (3)  
HST 137 African Amer Hist I (3)  
HST 138 African Amer Hist II (3)  
HST 139 British History (3)

**MU Equivalent**

ENGLISH LIT  
ENGLISH LIT  
ENGLISH LIT  
MISC HUM  
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MUSIC\_NHUM  
PHIL 1000  
PHIL 1200  
REL\_ST 2110  
PHIL 1100  
PHIL HUM  
BL\_STU 2570  
PHIL 1150  
PHIL HUM  
PHIL 2420  
THEATR 1100  
THEATR 1400  
THEATR 1100

**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  
POL\_SC 1100  
POL\_SC 2100  
POL\_SC SSC  
POL\_SC SSC  
POL\_SC 1400  
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