

## **MCC to MU Transfer Agreement for BA in Biological Sciences**

A maximum of 64 hours credit will be accepted by MU from MCC to be applied to the Bachelor of Arts in Biological Sciences. Transfer students from MCC who have completed the Associate in Science with an Emphasis in Biology degree, upon acceptance into the Bachelor of Arts in Biological Sciences program at MU, will have junior standing at MU.

### **Section III: Program Plan**

Students falling under this program articulation agreement will be responsible for successfully completing the following requirements.

#### **Year 1 and 2**

### **Associate in Science Degree with an Emphasis in Biology at MCC**

#### **Communications - 9 credits**

ENGL 101 Composition and Reading I (3 credits)  
ENGL 102 Composition and Reading II (3 credits)  
SPDR 100 Fundamentals of Speech (3 credits)

#### **American Institutions - 6 credits**

*Complete either option A or B:*

- A. HIST 120 American History I (3 credits) *and*  
HIST 121 American History II (3 credits), *or*
- B. POLS 135 Introduction to Political Science (3 credits) *and*  
POLS 137 Introduction to State and Local Politics (3 credits)

#### **Biology - 13 credits**

BIOL 104 General Botany (5 credits)  
BIOL 106 General Zoology (5 credits)  
BIOL 204 Genetics (3 credits)

#### **Chemistry - 20 credits**

CHEM 111 General College Chemistry I (5 credits)  
CHEM 112 General College Chemistry II (5 credits)  
CHEM 221 Organic Chemistry I (5 credits)  
CHEM 222 Organic Chemistry II (5 credits)

#### **Mathematics - 11 credits**

MATH 120 College Algebra (3 credits)  
MATH 130 Trigonometry (3 credits)  
MATH 180 Analytic Geometry & Calculus I (5 credits)

#### **General Education Electives in Behavioral Science - 3 credits**

Any course in Psychology, Sociology or Anthropology except problems, readings, research and independent study is acceptable.

*Students that enter MCC with advanced standing in a foreign language, or that test into advanced semesters of a foreign language sequence at MCC, are encouraged to complete the foreign language sequence at MCC in lieu of this behavioral science course.*

\*Learning Enhancements from the above courses: One course designated as Writing Intensive and a course designated as a Learning Community or Human Diversity.

**Total credits required for an Associate in Science with an Emphasis in Biology at MCC: 62**

### **Years 3 and 4 Bachelor of Arts in Biological Sciences at MU**

Students must complete a total of 120 hours in order to graduate with a Bachelor of Arts in Biological Sciences from the MU College of Arts & Science. It will take approximately 51-64 credit hours beyond the credits from the Associate of Science degree at MCC to fulfill the requirements specific to the Bachelor of Arts degree at MU. Elective courses may be used, if necessary, to bring the total credit hours at MCC and MU to 120.

#### **Requirements in the Sciences and Mathematics:**

##### **BIOLOGICAL SCIENCES**

##### ***Cell Biology - 4 credits***

BIO SCI 2300 Cell Biology (4 credits)

##### ***Population Biology - Choose one of the following:***

BIO SCI 3100 Community Biology (3 credits)

BIO SCI 3650 General Ecology (5 credits)

BIO SCI 4600 Evolution (3 credits)

BIO SCI 4640 Behavioral Biology (3 credits)

BIO SCI 4660 Plant Population Biology (4 credits)

##### ***Biological Diversity - Choose one of the following:***

BIO SCI 2600 Ornithology (4 credits)

BIO SCI 2700 Ichthyology (4 credits)

MICROB 3200 Introduction to Medical Microbiology (4 credits)

BIO SCI 3210 Plant Taxonomy (4 credits)

BIO SCI 3250 Parasitology (4 credits)

BIO SCI 3260 Invertebrate Zoology (4 credits)

BIO SCI 3360 Herpetology (4 credits)

BIO SCI 3510 Biology of Fungi (3 credits)  
BIO SCI 3660 Mammalogy (4 credits)  
BIO SCI 3710 and 3715 Entomology (3 credits total for both courses)

***Capstone (Required for graduation) - Choose one of the following:***

BIO SCI 4950 and 4952 Undergraduate Research (3 credits)  
BIO SCI 4972 Developmental Biology (3 credits)  
BIO SCI 4974 Molecular Biology Laboratory (3 credits)  
BIO SCI 4976 Molecular biology (3 credits)  
BIO SCI 4980 Cellular Physiology (3 credits)  
BIO SCI 4982 Human Inherited Disease (3 credits)  
BIO SCI 4984 Mammalian Reproductive Biology (3 credits)  
BIO SCI 4986 Neural Control and Regeneration (3 credits)  
BIO SCI 4988 Nerve Cells and Behavior (3 credits)  
BIO SCI 4990 Vertebrate Histology and Microscopic Anatomy (5 credits)  
BIO SCI 4994 Senior Seminar (3 credits)

***Biology Electives (3-8 credits)***

Select from any Biological Sciences courses at the 2000 level or higher to reach a **total of 21 credits in Biological Sciences at MU**. Must include a total of at least 14 credits at the 3000 level or higher and one 3000 or higher level course in Biological Sciences at MU with a formal lab or field experience. May not include reading or problems courses or BIO SCI 2100 to meet this requirement.

Elective course options include, in addition to the courses already listed above, the following courses:

BIO SCI 3050 Genetics and Human Affairs (3 credits)  
BIO SCI 3700 Animal Physiology (5 credits)  
BIO SCI 3750 Basic Microbiology (4 credits)  
BIO SCI 4500 Neurobiology (3 credits)

**PHYSICAL SCIENCES**

***Choose one of the following - 4 credits***

PHYSICS 1210 College Physics I (4 credits) *or*  
GEOL 1100 Principles of Geology (4 credits) *or*  
GEOL 1200 Environmental Geology (4 credits) *or*  
ASTRON 1010 Introduction to Astronomy (4 credits)

**Additional Courses to Complete Graduation, MU General Education, and Arts & Science Foundation Requirements for a Bachelor of Arts in Biological Sciences at MU:**

**WRITING INTENSIVE COURSES**

Complete one Writing Intensive (WI) course with a grade of C- or better. The WI course must be numbered 3000 or higher and must be a science or math course. WI

courses may be used to fulfill other graduation requirements and thus do not necessarily add to the total hours required.

#### FOREIGN LANGUAGE

Complete either three semesters of a single foreign language (I, II and III = 13 credit hours) or the equivalent. Select languages may require only two semesters (I and II = 12 credit hours). This requirement is waived if four units of a single foreign language were completed in high school. International students from non-English speaking countries do not need to take additional foreign language courses.

#### BREADTH OF STUDY REQUIREMENTS

**Behavioral Sciences (2 to 3 credit hours if 3 hour behavioral science course taken at MCC; 5 to 6 credit hours if foreign language course taken at MCC in lieu of behavioral science course.)**

*Select from courses in departments in the following list:*

Anthropology (except biological anthropology courses)  
Linguistics (selected courses)  
Psychology  
Rural Sociology 1000, 1120 and 1150  
Sociology

#### **Social Sciences (3 credit hours)**

*Select from courses in departments in the following list other than those in the subject area used to fulfill the American Institutions requirement at MCC:*

Economics  
Geography (except 1050)  
History  
Political Science

#### **Humanities and Fine Arts (9 credit hours)**

*Select from courses in a total of at least three of the following subject areas [including courses taken at MCC]:*

Art 1020 (Art Appreciation)  
Art History and Archaeology  
Classical Humanities  
Communication 1200, 2100, 3100  
Creative and Performing Arts (numbered over 2000, maximum of two)  
Foreign Civilizations  
Humanities Sequence (GN HON 2111H, 2112H, 2113H, 2114H)  
Linguistics (selected courses)  
Literature (in the English or Foreign Language departments)  
Music History and Literature  
Philosophy  
Religious Studies  
Theatre 1100, 1400, 1720 and other select courses

#### DEPTH OF STUDY REQUIREMENTS

All students must complete 9 hours of coursework at the 2000-level or higher in at least two of the three Breadth of Study categories (Behavioral Sciences, Social Sciences, Humanities and Fine Arts) listed immediately above. These courses can also fulfill the Breadth of Study requirements above and thus do not necessarily add to the total hours required.

**Total Credits Required for Bachelor of Arts in Biological Sciences at MU: 120**