

**COURSE SEQUENCE GUIDE FOR FULL-TIME ENROLLMENT [Method of Entry - Associate in Arts Pathway]****Secondary Science Education - Biology
Bachelor of Science | Code: S9210 | 120 credits
Effective Term: Fall 2024 (2247)****Prerequisite Courses**

Course ID	Course Title	Credits	Pre/Co-requisites
BSC 2010	Principles of Biology 1	3	Prerequisite: CHM 1045 Corequisite: BSC 2010L
BSC 2010L	Principles of Biology Lab	2	Pre/Corequisite: BSC 2010
CHM 1045	General Chemistry	3	Prerequisites: CHM 1025, MAC 1105 Corequisite: CHM 1045L
CHM 1045L	General Chemistry Lab	2	Prerequisites: CHM 1025, MAC 1105 Corequisite: CHM 1045
CHM 1046	General Chemistry and Qualitative Analysis	3	Prerequisites: CHM 1045; CHM 1045L Corequisite: CHM 1046L
CHM 1046L	General Chemistry and Qualitative Analysis Lab	2	Prerequisites: CHM 1045, CHM 1045L Corequisite: CHM 1046
BSC 2011	Principles of Biology 2	3	Prerequisites: BSC 2010, BSC 2010L, BSC 2011L Pre/Corequisite: BSC 2011L
BSC 2011L	Principles of Biology 2 Lab	2	Prerequisite: BSC 2010L Pre/Corequisite: BSC 2011
EDF 1005	Introduction to Education	3	
EDF 2085	Introduction to Diversity	3	
EME 2040	Creativity, Innovation, and Technology for the 21st Century Learner	3	
EEX 2000	Introduction to Exceptional Student Education	3	Prerequisite: EDF 1005
Semester Credits		32	

Semester 1

Course ID	Course Title	Credits	Pre/Co-requisites
EDG 3321	General Teaching Skills	3	
EDG 3443	Classroom and Behavior Management	3	Pre/Corequisite: EDG 3321
EDF 4430	Measurement and Assessment in Education	3	Prerequisite: EDG 3321
MCB 2010	Microbiology	3	Prerequisites: BSC 2010, BSC 2010L or BSC 2085, BSC 2085L and CHM 1033, CHM 1033L or CHM 1045, CHM 1045L
MCB 2010L	Microbiology Lab	2	Prerequisites: BSC 2010, BSC 2010L or BSC 2085, BSC 2085L and CHM 1033, CHM 1033L or CHM 1045, CHM 1045L
Semester Credits		14	

Semester 2

Course ID	Course Title	Credits	Pre/Co-requisites
RED 3393	Differentiated Instruction in Content Reading	3	
SCE 4362	Methods of Teaching Science	3	Pre/Corequisite: EDF 4430
EEX 3071	Teaching Students with Exceptionalities in Inclusive Settings	3	Prerequisites: EEX 2000, EDG 3321
PCB 3060	Principles of Genetics	3	Prerequisite: BSC 2010 Pre/Corequisite: BSC 2010L
Semester Credits		12	

Semester 3

Course ID	Course Title	Credits	Pre/Co-requisites
CHM 2200	Survey of Organic Chemistry	3	Prerequisites: CHM 1046, CHM 1046L Corequisite: CHM 2200L
CHM 2200L	Survey of Organic Chemistry Lab	1	Prerequisites: CHM 1046, CHM 1046L Corequisite: CHM 2200
PCB 3043	Fundamentals of Ecology	3	Prerequisites: BSC 2011, BSC 2011L
BSC 2020	Human Biology	3	
Semester Credits		10	

Semester 4

Course ID	Course Title	Credits	Pre/Co-requisites
TSL 4324C	ESOL for Content Area Teachers	3	
SCE 4363	Addressing Scientific Misconceptions in the Secondary Science Classroom (Practicum)	3	Prerequisites: EDF 4430, EDG3321, RED3393, SCE4362, TSL 4324C, EEX 3071 Corequisite: EEX3071
BSC3930	Biological Sciences Seminar	1	
BCH 3023	Introduction to Biochemistry	3	Prerequisites: BSC 2010, BSC 2010L, BSC 2011, BSC 2011L and CHM 2211, CHM 2211L or CHM 2200 Corequisite: BCH 3023L
BCH 3023L	Introduction to Biochemistry Lab	2	Prerequisites: BSC 2010, BSC 2010L, BSC 2011, BSC 2011L and CHM 2211, CHM 2211L or CHM 2200 Corequisite: BCH 3023
Semester Credits		12	

Semester 5

Course ID	Course Title	Credits	Pre/Co-requisites
SCE 4945	Student Internship	9	Prerequisite: All coursework Corequisite: SCE 4943
SCE 4943	Seminar in Science Education	3	Prerequisite: All coursework Corequisite: SCE 4943
Semester Credits		12	
PROGRAM TOTAL		60	

Academic Pathway at MDC: The four-year baccalaureate degree in Secondary Science Education: Biology is designed to prepare students to become teachers and pass state professional certification exams. An internship in a school setting is required to provide practical experience. The completer will earn a professional teaching certificate in Secondary Science Education: Biology. The program requires 12 credits of education prerequisites, and all education courses require a grade of "C" or better. To learn more about program courses, see the [College Catalog](#).