

BIOTECHNOLOGY: AAS

Full-Time Academic Plan

Missouri Civics Examination. Students entering college for the very first time in fall 2019 and who intend to complete an associate's degree must successfully complete a civics examination. **Information on who is eligible for a waiver**

can be found on the STLC website (<https://stlcc.edu/programs-academics/missouri-civics-exam.aspx>).

PLEASE NOTE: If you originally enrolled at STLC prior to Fall 2024, you may need to view an **archived catalog** (<http://catalog.stlcc.edu/archived-catalogs/>) for your correct program requirements. Please speak with an advisor or the program coordinator for more information.

Code	Title	Hours	Prerequisites	Milestones/Notes
First Year				
Fall				
ENG 101	College Composition I (MOTR ENGL 100)	3	Placement score or ENG 030 or ENG 070 with a grade of "C" or better or recommendation of department and Reading Proficiency or concurrent enrollment in RDG 079	
CHM 105	General Chemistry I (MOTR CHEM 150L)	5	MTH 140 (or MTH 140S or at least one and a half years of high school algebra) and CHM 101 with a minimum grade of "C" or one year of high school chemistry, and Reading Proficiency	
BIO 104	Basic Laboratory Methods for Biotechnology	3	Placement into MTH 140 or higher or completion of MTH 140S with a minimum grade of "C", and Reading Proficiency	
BIO 140	Principles of Biology I (MOTR BIOL 150L)	5	MTH 140 or MTH 140S or MTH 160S with a minimum grade of "C" or placement into MTH 160, and Reading Proficiency	
	Credit Hours	16		
Spring				
MTH 160	Precalculus Algebra (MOTR MATH 130)	3	MTH 140 (or MTH 140S) with a grade of "C" or better or satisfactory score on placement test, and Reading Proficiency	
BIO 219	Biotechnology I	5	BIO 104 with a minimum grade of "C" or concurrent or prior enrollment in BIO 180 with a minimum grade of "C", BIO 140 with a minimum grade of "C", and Reading Proficiency	
BIO 152	Quantitative Methods in Biotechnology	2	Placement into MTH 140 or completion of MTH 140S with a minimum grade of "C" or better, CHM 101 with a minimum grade of "C" or one year of high school chemistry, and Reading Proficiency	
BIO 218	Microbiology for Biotechnology	4	BIO 140 with a minimum grade of "C", CHM 105 with a minimum grade of "C", and Reading Proficiency	*Currently only offered in Spring
	Credit Hours	14		
Second Year				
Fall				
BIO 225	Genetics	3	BIO 140 with a minimum grade of "C" and Reading Proficiency	

BIO 235	Genetics Laboratory	2	BIO 140 with a minimum grade of "C", concurrent or prior enrollment in BIO 225 with a minimum grade of "C", and Reading Proficiency	
BIO 220	Biotechnology II	5	BIO 219 with a minimum grade of "C" and Reading Proficiency	
BIO 226	Advanced Topics in Biotechnology ¹	3	Concurrent or prior enrollment in BIO 219 with a minimum grade of "C" and Reading Proficiency	A minimum of two Advanced Topics must be taken. Possible topics may include QPCR, Advanced Cell Culture Techniques, Bioinformatics. The third Advanced Topics may be substituted with HRT 134 Micropropagation of Plants or BIO 231 Cell Biology.
BIO 228	Research and Presentation Skills for the Life Sciences	2	Entry into this course must be approved by the program coordinator, and Reading Proficiency	
	Credit Hours	15		
Spring				
XXX xxx	Social & Behavioral Sciences: Civics Requirement (http://catalog.stlcc.edu/general-education/)	3		
BIO 226	Advanced Topics in Biotechnology ¹	3	Concurrent or prior enrollment in BIO 219 with a minimum grade of "C" and Reading Proficiency	A minimum of two Advanced Topics must be taken. Possible topics may include QPCR, Advanced Cell Culture Techniques, Bioinformatics. The third Advanced Topics may be substituted with HRT 134 Micropropagation of Plants or BIO 231 Cell Biology.
BIO 226	Advanced Topics in Biotechnology ¹	3	Concurrent or prior enrollment in BIO 219 with a minimum grade of "C" and Reading Proficiency	A minimum of two Advanced Topics must be taken. Possible topics may include QPCR, Advanced Cell Culture Techniques, Bioinformatics. The third Advanced Topics may be substituted with HRT 134 Micropropagation of Plants or BIO 231 Cell Biology.
COM 101 or 201	Oral Communication I (MOTR COMM 100) or Interpersonal Communication (MOTR COMM 120)	3	Concurrent enrollment in ENG 070 or Reading Proficiency	
BIO 221	Workplace Learning: Biotechnology	3-6	Concurrent or prior enrollment in BIO 220 with a minimum grade of "C" and Reading Proficiency	
	Credit Hours	15-18		
	Total Credit Hours	60-63		

¹ BIO 226 Advanced Topics in Biotechnology, choose three 3-hour classes: Plant Transformation, Bio Processing, Forensics, QPCR Techniques, RNA Interference or Clinical Histology