

# 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
<b>First Year</b>				
<b>Fall</b>				
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	
	<b>Credit Hours</b>	<b>16</b>		
<b>Spring</b>				
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
	<b>Credit Hours</b>	<b>14</b>		
<b>Second Year</b>				
<b>Fall</b>				
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 <sup>1</sup>	3	Concurrent or prior enrollment in BIO 219 with a minimum grade of "C" and Reading Proficiency	A minimum of two Adv. Topics must be taken. Possible topics may include QPCR, Adv. Cell Culture Techniques, Bioinformatics. The third Adv. 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	
	<b>Credit Hours</b>	<b>15</b>		
<b>Spring</b>				
XXX xxx	Social & Behavioral Sciences: Civics Requirement ( <a href="http://catalog.stlcc.edu/general-education/">http://catalog.stlcc.edu/general-education/</a> )	3		
BIO 226	Advanced Topics in Biotechnology <sup>1</sup>	3	Concurrent or prior enrollment in BIO 219 with a minimum grade of "C" and Reading Proficiency	A minimum of two Adv. Topics must be taken. Possible topics may include QPCR, Adv. Cell Culture Techniques, Bioinformatics. The third Adv. Topics may be substituted with HRT:134 Micropropagation of Plants or BIO:231 Cell Biology.
BIO 226	Advanced Topics in Biotechnology <sup>1</sup>	3	Concurrent or prior enrollment in BIO 219 with a minimum grade of "C" and Reading Proficiency	A minimum of two Adv. Topics must be taken. Possible topics may include QPCR, Adv. Cell Culture Techniques, Bioinformatics. The third Adv. 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	
	<b>Credit Hours</b>	<b>15-18</b>		
	<b>Total Credit Hours</b>	<b>60-63</b>		

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