

**BIOLOGY**  
**Associate in Science**  
**M.A.P.**

Student should consult the STARS Guide for specific course recommendations for the college/university to which the student plans to transfer.

Semester	Suggested Courses	Credit Hrs.
<b>Fall</b> <b>16 Credit Hours</b>	ENG 101-English Composition I	3
	BIO 103-Principles of Biology I	4
	MTH 113-Precalculus Trigonometry	3
	CHM 111-College Chemistry I	4
	ORI 101-Orientation	2
<b>Spring</b> <b>15 Credit Hours</b>	ENG 102-English Composition II	3
	BIO 104-Principles of Biology II	4
	MTH 125-Calculus I	4
	CHM 112-College Chemistry II	4
<b>Fall</b> <b>14 Credit Hours</b>	CHM 221-Organic Chemistry I	4
	PHY 201-General Physics I/Trig Based	4
	Literature, Fine Arts, or Humanities*	3
	History*	3
<b>Spring</b> <b>16 Credit Hours</b>	PHY 202-General Physics II/Trig Based	4
	SPH 107-Fundamentals of Public Speaking	3
	Literature, Fine Arts, or Humanities*	3
	History or Social/Behavioral Science*	3
	Social/Behavioral Science	3
<b>TOTAL HOURS</b>		<b>61</b>

\*Student must complete a six-hour sequence in literature or history.

AREA II				AREA III			AREA IV	
Literature	Fine Arts	Humanities		Natural Science w/Lab**		Mathematics	Social/Behavioral Science	History
ENG 251	ART 100	ENG 251	REL 100	BIO 103	PHY 201	MTH 112	ANT 200	HIS 101
ENG 252	ART 203	ENG 252	REL 151	BIO 104	PHY 202	MTH 113	ANT 220	HIS 102
ENG 261	ART 204	ENG 261	REL 152	CHM 111	PHY 213	MTH 115	ECO 231	HIS 201
ENG 262	MUS 101	ENG 262	SPA 101	CHM 112	PHY 214	MTH 120	ECO 232	HIS 202
ENG 271	THR 120	ENG 271	SPA 102	CHM 222		MTH 125	GEO 100	
ENG 272	THR 126	ENG 272		CHM 221		MTH 126	POL 211	
		HUM 299		CHM 222		MTH 227	PSY 200	
		PHL 206				MTH 237	PSY 210	
						MTH 238	SOC 200	
						MTH 265	SOC 210	

\*\* If you take PHY 213, you cannot take PHY 201. If you take PHY 214, you cannot take PHY 202.

AREA V	
CIS 146-Microcomputer Applications (3)	PHY 214-General Physics with Calculus II (4)
CIS 191/193A-Intro to Computer Prog Concepts w/lab (4)	MTH 100-Intermediate College Algebra (3)
CIS 202-Python Programming (3)	MTH 115-Precalculus Algebra and Trigonometry (4)
CIS 212-Visual Basic Programming (3)	MTH 125-Calculus I (4)
CIS 251/193B-C++ Programming w/lab (4)	MTH 126-Calculus II (4)
CIS 255/193F-Java Programming w/lab (4)	MTH 227-Calculus III (4)
BIO 103-Principles of Biology I (4)	MTH 237-Linear Algebra (3)
BIO 104-Principles of Biology II (4)	MTH 238-Applied Differential Equations I (3)
CHM 111-College Chemistry I (4)	MTH 265-Elementary Statistics (3)
CHM 112-College Chemistry II (4)	EGR 101-Engineering Foundations (3)
CHM 222-Organic Chemistry II (4)	EGR 125-Modern Graphics for Engineers (3)
PHY 201-General Physics I/Trig Based (4)	EGR 220-Engineering Mechanics-Statics (3)
PHY 202-General Physics II/Trig Based (4)	EGR 236-Engineering Mechanics-Dynamics (3)
PHY 213-General Physics with Calculus I (4)	