

**Associate in Science Degree
Ashland Community & Technical College**

**Bachelor of Science
Degree in Biology with Minor in Chemistry (5-18-06)
Marshall University**

YEAR ONE			
Fall Semester	Hours	Spring Semester	Hours
CHE 105 General College Chemistry I	3	CHE 107 General College Chemistry II	3
CIS 100 Introduction to Computers	3	CHE 115 General Chemistry Lab	3
ENG 101 Writing I	3	ENG 102 Writing II	3
GEO 160 Lands/Peoples (international)	3	HIS 104 (or other history course)	3
MT 150, MA 123 or (113) Alg/Calc	3(4)	MA 123, MT 155, or ST 291 Math	3
Free Elective**	1-(0)	Free Elective**	1
Total Hours	16(17)	Total Hours	16
YEAR TWO			
Fall Semester	Hours	Spring Semester	Hours
BIO 150 Principles of Biology I	3	BIO 152 Principles of Biology II	3
BIO 151 Principles of Biology Lab I	2	BIO 153 Principles of Biology Lab II	2
COM 181 Basic Public Speaking	3	PHI 130 Introduction to Philosophy	3
PHY 211 General Physics	5	PHY 213 General Physics	5
PY 110 Psych (or other social science elective)	3	SOC 101 Intro to Sociology (multicultural)	3
Total Hours	16	Total Hours	16
YEAR THREE			
Fall Semester	Hours	Spring Semester	Hours
BSC 302 Principles of Microbiology	3	BSC 320 Principles of Ecology	4
BSC 304 Microbiology Lab	2	BSC 413 (or other Ecology BSC elective)	3
BSC 322 Principles of Cell Biology	4	CHM 356 Organic Chemistry II	3
CHM 355 Organic Chemistry I	3	CHM 361 Intro Organic Chemistry Lab	3
Foreign Language*	3	Foreign Language*	3
UNI 101 New Student Seminar	1		
Total Hours	16	Total Hours	16
YEAR FOUR			
Fall Semester	Hours	Spring Semester	Hours
BSC 301 (or other Biomed BSC elective)	4	BSC 324 Principles of Genetics	4
BSC 365 (or other Cellular BSC elective)	3	BSC 491 Capstone Experience	2
BSC 417 (or other BSC elective**)	3	ENG 319 [†] (or other literature elective)	3
ENG 317 [†] (or other literature elective)	3	GEO 317 (international, social science, 300+)	3
Foreign Language*	3	Foreign Language*	3
		Free Elective**	1
Total Hours	16	Total Hours	16

*Students are required to complete a 12-hour sequence in a foreign language. Depending on high school background, this will require 3-12 hours at the college level.

**128 hours of total college credit are required for graduation, 64 must be in the College of Science. 48 of the total hours must be numbered 300-499.

***BSC 104, BSC 105, BSC 227, BSC 228, & BSC 250 do not count as electives for biology majors.

[†]One of these should be a designated Writing Intensive course.