

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

**Bachelor of Science  
Degree in Chemistry with Minor in Biology (1-18-06)  
Marshall University**

<b>YEAR ONE</b>			
<b>Fall Semester</b>	<b>Hours</b>	<b>Spring Semester</b>	<b>Hours</b>
CHE 105	3	CHE 107	3
CIS 100	3	CHE 115	3
ENG 101	3	ENG 102	3
PHI 130	3	MT 155 or STA 291	3
MT 150 or MA 113	(3) – 4	COM 181	3
Free Elective**	(1) - 0	Free Elective**	1
Total Hours	<b>16</b>	Total Hours	<b>16</b>
<b>YEAR TWO</b>			
<b>Fall Semester</b>	<b>Hours</b>	<b>Spring Semester</b>	<b>Hours</b>
BIO 150/151	5	BIO 152/153	5
PY 110 (or other social science)	3	SOC 101 (multicultural)	3
PHY 211	5	PHY 213	5
GEO 160 (international)	3	HIS 104 (or other social science elective)	3
Total Hours	<b>16</b>	Total Hours	<b>16</b>
<b>YEAR THREE</b>			
<b>Fall Semester</b>	<b>Hours</b>	<b>Spring Semester</b>	<b>Hours</b>
BSC 322 (or other 300-400 BSC course)	4	CHM 307	4
CHM 345	4	CHM 356	3
CHM 355	3	CHM 361	3
Foreign Language*	3	Foreign Language*	3
Free Elective**	1	HST 103 (international, social science)	3
Total Hours	<b>15</b>	Total Hours	<b>16</b>
<b>YEAR FOUR</b>			
<b>Fall Semester</b>	<b>Hours</b>	<b>Spring Semester</b>	<b>Hours</b>
CHM 365 (or other CHM elective)	3	BSC 324 (or other 300-400 BSC course)	4
CHM 448	4	CHM 432	0
CHM 491	2	CHM 366 (or other CHM elective)	2
ENG 319 <sup>†</sup> (or other literature elective)	3	ENG 317 <sup>†</sup> (or other literature elective)	3
Foreign Language*	3	Foreign Language*	3
Free Electives**	1	Free Electives** <sup>†</sup>	5
Total Hours	<b>16</b>	Total Hours	<b>17</b>

\*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. This sample schedule requires 3 hours of upper division electives to be taken during Year Four. No additional COS hours are required.

<sup>†</sup>One of these should be a designated Writing Intensive course.