

**Genesee Community College**  
 226-Liberal Arts and Science: Natural Sciences – A.S.  
 SEMESTER COURSE PLANNING WORKSHEET  
 FALL 2018-CURRENT

<b>Suggested First Semester</b>	<b>Credits</b>	<b>Suggested Second Semester</b>	<b>Credits</b>
ENG101 (By Placement)	3	ENG102	3
CHE101	4	CHE102	4
Concentration Requirement	4	Concentration Requirement	3
Concentration Requirement	4	Concentration Requirement	4
		HED/PED/ATH (not required for Physics concentration)	2
<b>Total</b>	<b>15</b>	<b>Total</b>	<b>16</b>
<b>Suggested Third Semester</b>	<b>Credits</b>	<b>Suggested Fourth Semester</b>	<b>Credits</b>
Concentration Requirement	4	Concentration Requirement	4
Concentration Requirement or Elective	3	Concentration Requirement	4
FOREIGN LANGUAGE	3	Concentration Requirement or Elective	3
ARTS/HUMANITIES	3	HISTORY	3
SPE103, 108 or 109	3	SOCIAL SCIENCE ELECTIVE	3
<b>Total</b>	<b>16</b>	<b>Total</b>	<b>17</b>
		<b>Program Total Credits</b>	<b>64</b>

**General Curriculum Information**

**Proficiency Requirements:** As outlined in Procedure 321 – Placement and Proficiency Requirements (see <http://www.genesee.edu/offices/advisement/placement-and-proficiency-guide> for details), all students are required to demonstrate proficiency in reading, math, and writing skills prior to earning a college degree or certificate from Genesee Community College.

**Electives:** Electives for this program should be selected with the transfer institution and program of interest in mind. For additional assistance with course selection, see the Transfer Coordinator in the Student Success Center.

226	Degree Requirements for Liberal Arts & Science: Natural Sciences		A.S.		
FALL 2018-CURRENT					
<b>1</b>	<b>BASIC COMMUNICATION</b>		<b>9</b>		
	ENG101 College Composition		3		
	ENG102 Composition in the Natural & Social Sciences		3		
	Select one: SPE103 or SPE108 or SPE109		3		
<b>2</b>	<b>HISTORY</b>		<b>3</b>		
	Select one : HIS 101, 102, 104, 105, 203 or 204 or GEO 101		3		
<b>3</b>	<b>SOCIAL SCIENCE ELECTIVE</b>		<b>3</b>		
	Select one: <a href="#"><u>SUNY Approved Social Sciences course</u></a>		3		
<b>4</b>	<b>FOREIGN LANGUAGE</b>		<b>3</b>		
	Select one: <a href="#"><u>SUNY Approved Foreign Language course</u></a>		3		
	Students having obtained an 85 or higher on the Regents B exam or an 85 or higher on a regional exam aligned with the former regents at Checkpoint B have met this requirement and may select a language or an additional 3-credit General Education Elective.		3		
<b>5</b>	<b>HUMANITIES &amp; THE ARTS</b>		<b>3</b>		
	Select one: <a href="#"><u>SUNY Approved Humanities course</u></a> OR <a href="#"><u>SUNY Approved The Arts course</u></a>		3		
<b>6</b>	<b>NATURAL SCIENCE</b>		<b>8</b>		
	CHE 101 General Chemistry 1		4		
	CHE 102 General Chemistry 2		4		
<b>7</b>	<b>PROGRAM CONCENTRATION REQUIREMENTS</b> <u>Select one concentration</u>		<b>33-35</b>		
	<b>RESTRICTED ELECTIVES:</b> BIO111,BIO115, BIO116, BIO152, BIO153, BIO201 or BIO206, BIO205, BIO211, CHE201, CHE202, CIS116, CIS125,CIS 127 CIS219,EGR 100 , EGR235, EGR236, MAT129, MAT 140, MAT141, MAT142, MAT245, MAT247, MAT255, MAT 246, PHY121 or PHY131, PHY122 or PHY132, PHY133				
	<b>Biology Concentration</b>	<b>33</b>		<b>Environmental Biology Concentration</b>	<b>33</b>
	BIO115 General Biology 1	4		BIO115 General Biology 1	4
	BIO116 General Biology 2	4		BIO116 General Biology 2	4
	BIO205 Genetics	4		BIO111 Ecology	4
	CHE201 Organic Chem 1 <b>and</b> CHE202 Organic Chem 2	8		BIO205 Genetics	4
	<b>OR</b>			CHE201 Organic Chemistry 1	4
	PHY 131 <b>and</b> PHY 132 <b>OR</b> PHY 121 <b>and</b> PHY 122	8		MAT140 Pre-Calculus	4
	MAT 140 Pre-Calculus	4		MAT141 Calculus 1	4
	MAT141 Calculus 1	4		MAT129 Statistics	3
	MAT129 Statistics	3		General or Restricted Electives	2
	General or Restricted Electives	2			
	<b>Physics Concentration</b>	<b>35</b>	<b>Chemistry Concentration</b>	<b>33</b>	
	PHY131 Physics with Calculus 1	4	CHE201 Organic Chemistry 1	4	
	PHY132 Physics with Calculus 2	4	CHE202 Organic Chemistry 2	4	
	PHY133 Physics with Calculus 3	4	PHY131 Physics with Calculus 1	4	
	MAT141 Calculus 1	4	PHY132 Physics with Calculus 2	4	
	MAT142 Calculus 2	4	MAT141 Calculus 1	4	
	MAT245 Calculus 3	4	MAT142 Calculus 2	4	
	MAT255 Differential Equations	4	General or Restricted Electives	9	
	MAT246 Linear Algebra	4			
	CIS127 Computing in Math, Science and Engineering	3			
	<b>Flexible STEM Concentration:</b> Select at least 27 credits of Restricted Electives including at least 4cr MAT and 8 credits sequential science, 6 credits General or Restricted electives and 2 credits HED/PED/ATH				
<b>8</b>	<b>HED/PED/ATH</b> (Not required for Physics concentration)		<b>2</b>		
	HED***, PED***, ATH***				
	<b>TOTAL</b>		<b>64</b>		
	<b>Reading and Math Proficiency Required</b>				
	<b>Minimum QPI: 2.00</b>				