## BACHELOR OF SECONDARY EDUCATION IN CHEMISTRY RECOMMENDED PROGRAM

		FIRST SEMESTER				SECOND SEMESTER		
CHEM	111	Intro Chem I	4.0	CHEM	112	Intro Chem II	4.0	
<b>CHEM</b>	188	Freshman Seminar	1.0	<b>CHEM</b>	251	Inorganic Chem I	3.0	
<b>ENGL</b>	110	<b>English Composition</b>	3.0	COMM	100	Fund. of Speech	3.0	
MATH	161	Calculus I	4.0			Humanities Course #1	3.0	
WELL	175	Wellness Course	3.0	MATH	211	Calculus II	4.0	
		TOTAL S.H.	15.0			TOTAL S.H.	17.0	
		THIRD SEMESTER				FOURTH SEMESTER		
CHEM	231	Organic I	4.0	CHEM	232	Organic II	4.0	
		Social Sciences Course #1	3.0	CHEM	265	Quant. Analysis (or G1) *	4.0	
MATH	311	Calculus III	4.0	PHYS	232	Physics II w/ Calculus	5.0	
PHYS	231	Physics I w/ Calculus	5.0	<b>EDFN</b>	211	Found Modern Ed	3.0	
		Humanities Course #2	<u>3.0</u>	EDFN	241	Psych Fnd Tchg	<u>3.0</u>	
		TOTAL S.H.	19.0			TOTAL S.H.	19.0	
		FIFTH SEMESTER				SIXTH SEMESTER		
CHEM	341	Physical Chem I	4.0	<b>CHEM</b>	342	Physical Chem II	4.0	
CHEM	375	Environ Chem (D)	4.0	CHEM	488	Chemistry Seminar	0.5	
CHEM	487	Chemistry Seminar	0.5	<b>ENGL</b>	3XX	Advanced Writing ***	3.0	
<b>EDSE</b>	340	Cntnt. Area Litr. Diver.Class 3.0				Humanities Course #3	3.0	
SPED	346	Sec.Stdnts w Disab.Incl.Sttgs3.0				Social Sciences Course #3	3.0	
		Social Sciences Course #2	<u>3.0</u>			TOTAL S.H.	13.5	
		TOTAL S.H.	17.5					
SEVENTH SEMESTER						EIGHTH SEMESTER		
CHEM	326	Biochemistry I **	4.0	<b>EDSE</b>	461	Student Teaching	9.0	
<b>EDFN</b>	321	Issues in Secondary Ed	3.0	<b>EDSE</b>	471	Different Instr. in Class	3.0	
<b>EDFN</b>	330	Instructional Technology	3.0			TOTAL S.H.	12.0	
EDFN	435	Teaching Science <i>TOTAL S.H.</i>	3.0 13.0					

## **COMMENTS, NOTES OR RECOMMENDATIONS:**

- \* It is recommended that CHEM 265 (or a G1 course) be taken during the summer session prior to CHEM 341.
- \*\* It is highly recommended that you take CHEM 326 because the Praxis exam contains questions from the material covered in biochemistry.
- \*\*\* ENGL 312 (Technical Writing) is highly recommended.
- 1. Connections & Exploration (C&E) courses #1 and #4 can be satisfied with any approved GenEd course.
- 2. Cultural Diversity & Community (D) course may be satisfied with approved courses from the GenEd requirements (including Perspectives), the major, the minor, the required related area, or general electives.
- Note 1: The BSE-Chemistry curriculum as a whole satisfies the Perspectives (P) requirement in the general education curriculum. This means that BSE-Chemistry majors do not need to take a perspectives course to satisfy this requirement.
- Note 2: The Pennsylvania Dept. of Education requires 6 credits of English; 3 in writing and 3 in literature. Therefore, each BSE student MUST take 3 credits of writing (ENGL 110 meets this requirement) AND 3 credits of literature in the English Dept. A "G1" English literature course fulfills this requirement. This is a prerequisite requirement and MUST be completed before you can do Junior Block and Student Teaching.