### MILLERSVILLE UNIVERSITY

Student Name:	Student I.D.#

DEGREE: BSE MAJOR REQUIREMENTS FOR A BSE DEGREE IN

MAJOR: CHEM CHEMISTRY

OPTION: Total credit hours required: 126.0 minimum

#### REQUIREMENTS AND POLICIES FOR THE BSE CHEMISTRY MAJOR

## A. Policies for Admission to the Major

- 1. New students (freshmen and transfers) must be admitted to the Chemistry major by the Office of Admissions upon admission to the University.
- 2. Admission into the Chemistry major from other departments is upon approval of the chairperson of the Chemistry Department.
- 3. Non-degree and continuing education students must be admitted to the Chemistry major by the Office of Admissions.

## B. Policies for Retention in the Major

- 1. University requirements for retention.
- 2. The student is required to have a 2.00 grade point average in the major courses by the end of the sophomore year. If not, it is recommended that courses be repeated to achieve a 2.00 average in the major or that there be a change of major.
- 3. Chemistry majors are required to have a 2.00 grade or better in Chemistry courses required for the major at the 100 and 200 level before proceeding to a course for which it is a prerequisite. (Currently, these courses include: CHEM 111, 112, 231, 232, 251, and 265).

## C. Policies for Completion of the Major

1. Completion of all University curricular requirements.

### D. Admission to Advanced Professional Studies and Certification (Education Majors)

All students enrolled in teacher preparation programs must be admitted to Advanced Professional Studies and meet Pennsylvania State requirements and university requirements prior to being enrolled in their initial Advanced Professional Studies course. Students must meet additional Pennsylvania State requirements in order to be certified. A listing of Advanced Professional Studies courses and requirements is available in each department office, the Early Field Experience office, and on the Early Field Experience website.

**Note to the student:** This form is provided as a guide. It is your responsibility to consult regularly with your adviser to be aware of changes and curriculum details which are not incorporated on this form.

# MAJOR SEQUENCE AND DEGREE REQUIREMENTS

Major: **BSE CHEMISTRY** 

Option:

Major Field Requirements: **40.0 credits** Other Requirements: **55.0 credits** 

When applicable, up to six of the **REQUIRED RELATED** courses may be credited toward the Liberal Arts Core subject to normal distribution rules.

Course No.	Short Title	C.H.	Grade	Q.P.	Course No.	Short Title	C.H.	Grade	Q.P.
REQUIRED CHEMISTRY COURSES (41.0 credits)					REQUIRED RELATED (22.0 credits)				
CHEM 111	Intro Chemistry I		Mathematics (12.0 credits)						
CHEM 112	Intro Chemistry II	4.0			MATH 161	Calculus I	4.0		
CHEM 188		1.0			MATH 211		4.0		
CHEM 231	Organic Chem I	4.0			MATH 311	Calculus III	4.0		
CHEM 232 CHEM 251	Organic Chem II Inorganic Chem I	4.0 3.0			Physics (10	0.0 credits)			
CHEM 265		4.0			,	·			
CHEM 326		4.0			PHYS 231	•	5.0		
CHEM 341		4.0			PHYS 232	Physics II with Calc	5.0		
CHEM 342	,	4.0			Biology				
CHEM 375									
CHEM 487		0.5			Demons	trate competency in Bi	ology 10	00*	
	Seminar in Chem	0.5							
	FESSIONAL EDUCAT		3.0 credit	ts)	General Electives (as necessary)				
EDFN 211	Found. Modern Ed.	3.0				(4.5		- · · · · · · · · · · · · · · · · · · ·	
EDFN 241	Psyc. Found. Teach.								
EDSE 321 EDFN 330	Issues in Sec. Educ. Instr. Techn. Design	3.0 3.0							
EDSE 435	•	3.0							
EDSE 340	•	3.0							
EDSE 471	Differentiating Instruction	3.0							
SPED 346	Sec. Students w/Disabilities	3.0							
EDSC 461	Student Teaching	9.0							
					*Competency may be demonstrated by one of the following				
					1) a course grade of "A" or "B" in AP Biology				
	2) a score of 3 or better in the national AP exam								
					· '	ssful score on the CLE			
					4) a passir	ng grade for General B	iology (E	BIOL 100)	)
					l				
				General Education Perspectives requirement not required for BSE majors declared as of Fall 2006.					
					ior BSE maj	ors declared as of Fall	2006.		

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