

Slippery Rock University of Pennsylvania – Curriculum Guide

Bachelor of Science in Chemistry BioInformatics - Computational Chemistry Track

LIBERAL STUDIES REQUIREMENTS (45–46 credits) See Liberal Studies Guide for Goal and Enrichment choices

GOAL COURSE REQUIREMENTS

Complete Goal requirements as indicated below (36-37 credits)

✓	Course	Title	Cr	Gr
Basic Requirements – ENGL101&103 required if student entered SRU prior to Fall 2011. ENGL102 required if student entered SRU Fall 2011 forward.				
	ENGL 101 and ENGL 103 or ENGL 102	College Writing I and College Writing II or College Writing	3	
	COMM 200	Public Speaking ★	3	
	ENGL 210	Interpreting Literature★	3	
The Arts				
	Goal		3	
Global Community				
	Goal – Non-US		3	
	Goal – Non-US		3	
	Goal – US		3	
Human Institutions/Interpersonal Relationships				
	Goal		3	
Science, Technology & Math				
	Goal – Sci		◇ 3	
	Goal – Sci		◇ 3	
	Lab – Sci		◇ 3	
	Goal – Math		◇ 3	
Challenges of the Modern Age				
	Goal		3	
ENRICHMENT COURSE REQUIREMENTS Choose one course from three of the following Enrichment areas. (9 credits)				
The Arts Enrichment				
Global Community Enrichment				
Human Institutions/Interpersonal Relationships Enrichment				
Science, Technology & Math				
			◇	

OTHER BASIC REQUIREMENTS

(Check with your advisor or a current degree audit report to see if you have been exempted from this course.) The credit earned in this course will be counted toward the 120 credit hour minimum needed to earn a degree.

	ACSD 110	Beginning Algebra	3	
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IMPORTANT CURRICULUM GUIDE NOTES

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisors to ensure accurate progress towards degree completion. *The information on this guide is current as of the date below. Students are responsible for curriculum requirements at the time of enrollment at the University.*

- ★ Indicates this course may have a prerequisite. Refer to the Undergraduate Online Catalog.
- + A 'C' or better must be earned in course to register for Chemistry courses number 300 or above.
- ◇ Indicates this course may count as a Major Requirement and a Liberal Studies Requirement, **but you will only receive credit once towards your 120 credit total.**

Student Name: _____ Date: _____

Advisor's Name: _____

MAJOR REQUIREMENTS (67 credits)

✓	Course	Title	Cr	Gr
Required Chemistry Courses (32 credits)				
	CHEM 107	General Chemistry I★ +	3	
	CHEM 111	General Chemistry I Lab	1	
	CHEM 108	General Chemistry II ★+	3	
	CHEM 112	General Chemistry II Lab ★	1	
	CHEM 201	Organic Chemistry I ★+	3	
	CHEM 211	Organic Chemistry I Lab ★	1	
	CHEM 202	Organic Chemistry II ★+	3	
	CHEM 212	Organic Chemistry II Lab ★	1	
	CHEM 301	Physical Chemistry I ★	3	
	CHEM 321	Physical Chemistry I Lab ★	1	
	CHEM 335	Biochemistry I ★	3	
	CHEM 336	Biochemistry I Lab ★	1	
	CHEM 350	Analytical Chemistry ★	3	
	CHEM 351	Analytical Chemistry Lab★	1	
	CHEM 425	Instrumental Chemistry★	3	
	CHEM 426	Instrumental Chemistry Lab★	1	
Additional Chemistry Requirements (3 credits)				
	CHEM 302	Physical Chemistry II ★	3	
Computer Science Courses (13 credits)				
	CPSC 140	Intro to Computing★	3	
	CPSC 150	Advanced Programming Principles★	4	
	CPSC 374	Algorithms and Data Structures★	3	
	CPSC 498	Special Topics: Machine Learning & Bioinformatics★		
	MATH 240	Linear Algebra and Differential Equations★	3	
	PHYS 385	Computational Physics★	3	
Required Math and Science Courses (19 credits)				
	BIOL 104	Principles of Biology	4	
	PHYS 211	General Physics I / Lab ★◇	3	
	PHYS 212	General Physics II / Lab★	4	
	PHYS 213	General Physics III / Lab ★	3	
	PHYS 385	Computation Physics	3	
	MATH 152	Elementary Statistics	3	
	MATH 225	Calculus I★	4	
	MATH 230	Calculus II★	4	
	MATH 240	Linear Algebra & Differential Equations	3	

COMPUTER COMPETENCY (for students entering Fall 2008 and after) Students must demonstrate "computer competency" by:

	Passed Exam	Pass Computer Competency Exam at SRU Orientation		
OR	CPSC ____	Complete one of the following courses: CPSC 100, 110, 130 or 210 at SRU or another post-secondary institution	1 - 3	

ELECTIVES (7-8)

QPA REQUIREMENT
2.00 or higher Major QPA
2.00 or higher Overall QPA



CHEMISTRY – BS
BioInformatics – Computational Chemistry Track
Effective Fall 2011 to present
Enrollment Services
Revised 9-2011