Simmons UNIVERSITY

Chemistry
Academic Planning Worksheet
2019-2020

Notes

- Students are required to complete 68 credit hours in the Chemistry major.
- To meet the American Chemical Society (ACS) Certification, the student must include:
  - CHEM 248- Inorganic Chemistry (Junior or Senior Year)
  - CHEM 345- Biochemistry OR CHEM 223- Introduction to Biochemistry (Senior Year)
  - The two 300-level electives must be chosen from: CHEM 325, 341, 343, 345, 346, 347 or 354.
- See PLAN Requirements section on next page for all-college requirements.

Major Core

Course #	Course Title	Credits	Completed
First Year			
CHEM 113/ 115	Principles of Chemistry or Intensive General Chemistry (all Fall, based on placement test)	4	
CHEM 216	General Chemistry II & Quantitative Analysis (Spring)	4	
MATH 120	Calculus I (Fall or Spring)	4	
MATH 121	Calculus II (Fall or Spring)*	4	
Sophomore Year			
CHEM 224	Organic Chemistry I (Fall)	4	
CHEM 225	Organic Chemistry II (Spring)	4	
PHYS 114	Fundamentals of Physics I (Fall)*	4	
PHYS 115	Fundamentals of Physics II (Spring)	4	
Junior Year			
CHEM 331	Thermodynamics and Kinetics (Fall)	4	
MATH 220	Multivariable Calculus (offered Fall and Spring, must complete prior to Junior Spring- prerequisite for CHEM 332 in Spring)	4	
CHEM 332	Quantum Mechanics and Molecular Structure (Spring)	4	
Junior or Senior Year			
CHEM 248	Descriptive Inorganic Chemistry (Fall, every other year)	4	
Senior Year			
CHEM 390	Chemistry Seminar (Fall or Spring)	4	

**Students may choose to fulfill their Learning Community requirement with the MATH 121/PHYS 114 LC in the Fall of their sophomore year. The prerequisite for both courses is MATH 120 (or placement into MATH 121)*

Complete 8-credits of 300-level Chemistry courses from the list below.

Courses Selected	Credits	Completed
	4	
	4	

CHEM 325	Green Asymmetric Synthesis (every other Spring)	2 credits
CHEM 341	Advanced Analytical Chemistry (every other Fall)	4 credits
CHEM 343	Advanced Topics in Modern Chemistry (TBA)	4 credits
CHEM 345	Biochemistry (Fall)	4 credits
CHEM 346	Advanced Organic Spectral Interpretation (every other Fall)	4 credits
CHEM 347	Advanced Topics in Biochemistry (every other Spring)	4 credits
CHEM 354	Research Methods (every other Spring)	2 credits
PHYS 310	Imaging of Materials with Independent Project (Spring)	2 credits

Simmons UNIVERSITY

Chemistry
Academic Planning Worksheet
2019-2020

Capstone

Complete 8 credit hours in CHEM 355 or CHEM 370 to fulfill the Capstone Requirement in Chemistry.

Course #	Course Title	Credits	Completed
CHEM 355 or CHEM 370	Independent Study with Thesis or Internship	8	

PLAN Requirements

Year	Semester	Course Title		Credits	Completed
One	Fall	BOS 101: The Boston Course		4	
	Spring	SIM 101: The Simmons Course: Explore		2	
		LDR 101: The Leadership Course		4	
Two	Fall or Spring	The Learning Community: Two discipline courses & one integrative seminar		8	
		SIM 201: The Simmons Course: Experience		1	
Three	Fall or Spring	SIM 301: The Simmons Course: Excel		1	
Three & Four	Fall or Spring	3D – Design Across Diverse Disciplines		12	
Any	Requirements		Course Selected		
	Language: Two semesters in the same language, taken sequentially and strongly encouraged to complete within their first two years.			4	
				4	
	Quantitative Literacy (QL)		MATH 120 or higher	4	
	Key Content Areas (KCAs)	Aesthetic, Literary and Artistic (ALA)		4	
		Global Cultural (GC)		4	
		Scientific Inquiry (SCI)	CHEM 113/115	4	
		Social and Historical (SH)		4	

Department Contact:

Rich Gurney
Professor of Chemistry, Department Co-Chair
Department of Chemistry and Physics
College of Natural, Behavioral, and Health Sciences
617-521-2729
gurney@simmons.edu