Simmons UNIVERSITY

Physics
Academic Planning Worksheet
2019-2020

Notes
- Students are required to complete 66-68 credit hours.
- See PLAN Requirements on next page for all-college requirements.
- Although not required, it is highly recommended that Physics major also complete CS 112.

Major Core Requirements
Majors will complete a core of the following courses.

Course #	Course Title	Credits	Completed
First Year			
CHEM 111/113/ 115	Principles of Chemistry or Advanced General Chemistry (Fall)	4	
CHEM 216	Quantitative Analysis (Spring)	4	
CHEM 112 OR CHEM 224	Introductory Chemistry: Organic (Spring) or Organic Chemistry I (Sophomore Fall)	4	
MATH 120	Calculus I (Fall)	4	
MATH 121	Calculus II (Fall or Spring, must be completed by end of first year, prerequisite for MATH 220)	4	
Sophomore Year			
PHYS 114	Fundamentals of Physics I (Fall)	4	
PHYS 115	Fundamentals of Physics II (Spring)	4	
MATH 220	Multivariable Calculus (Fall)	4	
MATH 225	Differential Equations (Spring)	4	
Junior Year			
PHYS 231	Classical Waves (Fall semester – first half)	2	
PHYS 232	Modern Physics (Fall semester – second half)	2	
PHYS 331	Thermodynamics and Kinetics (Fall)	4	
PHYS 332	Quantum Mechanics and Molecular Structure (Spring)	4	
Junior or Senior Year			
PHYS 300	Mechanics (Spring, offered every other year)	4	
PHYS 305	Electricity and Magnetism (Spring, offered every other year)	4	
Senior Year			
PHYS 390	Physics Seminar (Fall or Spring)	0	

Physics Elective
Complete ONE PHYS course from the list below.

Courses Selected	Credits	Completed
	2-4	

PHYS 210	Imaging of Materials & Lab	2
PHYS 233	Introduction to Medical Imaging & Lab	4
PHYS 245	Introduction to Biophysics	4
PHYS 310	Imaging of Materials with Independent Project & Lab	2
PHYS 333	Advanced Topics in Modern Physics (Biomedical Ultrasound Physics in AY20/21)	4

Capstone
Complete 4-8 credit hours in PHYS 350 to fulfill the Capstone Requirement.

Course #	Course Title	Credits	Completed
PHYS 350	Independent Study with Thesis	8	

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PLAN Requirements

Year	Semester	Course Title		Credits	Complete
One	Fall	**BOS 101:** The Boston Course		4	
		SIM 101: The Simmons Course: Explore		2	
	Spring	**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 111/113/115	4	
		Social and Historical (SH)		4	

***3D–** Design Across Diverse Disciplines– requirement may be met with one course in your major, and two additional courses that may also count as KCAs.
****KCAs** – May be covered by Major, Learning Community and/or 3D courses.

Department Contact

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