

**California State University, Bakersfield
REQUIREMENTS FOR THE MAJOR: PHYSICS**

2016-2018 Catalog

Name		ID#
Phone	Email	

INTRODUCTORY COURSES (20 UNITS or equivalent)		Units	Institution	Date	Grade
PHYS 1010	Freshman Orientation I	1			
PHYS 1020	Freshman Orientation II	1			
PHYS 2010	Sophomore Orientation I	1			
PHYS 2020	Sophomore Orientation II	1			
PHYS 2070	Electrical Circuits	4			
PHYS 2210	Calculus-based Physics I	4			
PHYS 2220	Calculus-based Physics II	4			
PHYS 2230	Calculus-based Physics III	4			

INTERMEDIATE COURSES (29 UNITS or equivalent)		Units	Institution	Date	Grade
PHYS 3010	Intermediate Lab	3			
PHYS 3070	Circuit Theory and Electronics	3			
PHYS 3110	Classical Mechanics I	2			
PHYS 3120	Classical Mechanics II	2			
PHYS 3210	Electricity and Magnetism I	2			
PHYS 3220	Electricity and Magnetism II	2			
PHYS 3310	Thermal Physics	3			
PHYS 3500	Math Methods	2			
PHYS 3510	Modern Physics	2			
PHYS 4010	Advanced Lab	2			
PHYS 4410	Quantum Mechanics I	2			
PHYS 4420	Quantum Mechanics II	2			
PHYS 4900	Senior Seminar	2			

ELECTIVE COURSES (6 UNITS or equivalent)		Units	Institution	Date	Grade
Choose from: PHYS 3320, 3520, 4510, 4520, 4700, 4800; upper-division MATH, ECE, or ENGR with agreement from the academic advisor					

REQUIRED COGNATES (21 UNITS or equivalent)		Units	Institution	Date	Grade
MATH 2310 or 2510	Calculus I	4			
MATH 2320 or 2520	Calculus II	4			
MATH 2530	Calculus III	4			
MATH 2540	Ordinary Differential Equations	4			
CHEM 1000	Foundations of Chemistry	3			
CHEM 1001	Intro to Lab in Chemistry	2			

Approval:

Chair _____

Date _____