

Student Name:

SID:

Course Number (bold = common core) (Updated 5/25)		Current Catalog (2025/26) (may differ for older)					Semester / Grade	Notes
		BA	BA - TPC	BS	BS - AP	BS- Bio		
Lower Division	PHYS 11A							
	PHYS 11B							
	PHYS 11C							
	MATH 30							
	MATH 31							
	MATH 32							
	MATH 45							
	CHEM 1A / CHEM 1E (AP)							
	CHEM 1B / ENGR 45 (AP)							
	BIO 1							
	BIO 2							
	ASTR 4A or 4B or 4C + ASTR 6							
	GEOL 10 + GEOL 10L							
	ENVS 10							
	CSC 25 (not gen. offered, sub or waive)							
Upper Division	PHYS 105							
	PHYS 106							
	PHYS 110							
	PHYS 115	Choose		Choose				
	PHYS 145							
	PHYS 124							
	PHYS 135							
	PHYS 136							
	PHYS 150							
	PHYS 151							
	PHYS 156							
	PHYS 162							
	PHYS 172							
	PHYS 175							
	PHYS 191 (or 116/163 for AP/Bio)							
	PHYS 199 (1 unit min)							
	UD Elective Units in Consultation with Adviser/Chair	8	6	3	9	1-4		
Seminar Attendance							Attend at least 20. Register for PHYS 190 for CR when complete.	

Notes:

Prerequisites for "Major" Courses

Course	Title	Prerequisites
PHYS 11A	Mechanics	MATH 30; MATH 31 (May be taken concurrently)
PHYS 11B	Thermo / Optics	PHYS 11A; MATH 31
PHYS 11C	Electricity and Magnetism	PHYS 11A; MATH 31
MATH 30	Calculus I	MATH 29 (or HS Precalculus); Passing Score on Diagnostic Exam
MATH 31	Calculus II	MATH 30
MATH 32	Calculus III	MATH 31
MATH 45	Differential Eqns	MATH 31
CHEM 1A	General Chem I	CHEM 4 or Satisfactory Score on Diagnostic Exam
CHEM 1B	General Chem II	CHEM 1A
PHYS 105 / MATH 105A	Mathematical Methods in Physics/ Advanced Mathematics for Scientists and Engineers	MATH 32; MATH 45
MATH 105B	Advanced Mathematics for Scientists and Engineers II	M105A
PHYS 106	Intro to Modern Physics	MATH 31; PHYS 11A, PHYS 11B, PHYS 11C or PHYS 5A, PHYS 5B
PHYS 110	Classical Mechanics	MATH 45; PHYS 11C; PHYS 105
PHYS 115	Electronics and Instrumentation	PHYS 11C (PHYS 5B with instructor permission)
PHYS 116	Advanced Electronics and Instrumentation	PHYS 115
PHYS 124	Thermodynamics and Statistical Mech.	MATH 45; PHYS 11A; PHYS 11B; PHYS 11C
PHYS 130	Acoustics	MATH 45; PHYS 11A; PHYS 11B; PHYS 11C
PHYS 135	Electricity and Magnetism	MATH 45; PHYS 11C; PHYS 105
PHYS 136	Electrodynamics of Waves, Radiation, and Materials	PHYS 135
PHYS 145	Optics	MATH 45; PHYS 11A; PHYS 11B; PHYS 11C
PHYS 150	Quantum Mechanics	MATH 45; PHYS 106; PHYS 110
PHYS 151	Advanced Modern Physics	PHYS 150
PHYS 156	Classical and Statistical Mechanics	PHYS 110; PHYS 124
PHYS 162	Scientific Computing: Basic Methods	MATH 26A or MATH 30 and PHYS 5A; or MATH 30 and PHYS 11A; or MATH 105A concurrently.
PHYS 163	Scientific Computing: Modeling, Simulation, and Visualization	PHYS 162
PHYS 175	Advanced Physics Lab	12 units UD Physics, including PHYS 106 and either PHYS 115 or PHYS 145 and a satisfaction of the University Advanced Writing requirement.
PHYS 191	Senior Project	Chair Permission
PHYS 195	Teaching Internship	All Lower Division Physics/Math Requirements for BA
PHYS 197	Laboratory Teaching Assistant	All Lower Division Physics/Math Requirements for BA

COURSE EQUIVALENCIES FOR LOCAL COLLEGES

updated 10/17/11

Sac State	American River	Cosumnes River	Folsom Lake	Sac City	Sierra
ASTR 4 (old)	ASTR 300	ASTR 300	ASTR 300		ASTR 10
ASTR 4A	ASTR 310			ASTR 310	ASTR 2
ASTR 4B	ASTR 320			ASTR 320	ASTR 5
ASTR 4C	ASTR 330			ASTR 330	Interdis. 11
ASTR 6	ASTR 400	ASTR 400	ASTR 400	ASTR 400	ASTR 11
PHYS 1	PHYS 311	PHYS 311	PHYS 311		
PHYS 2					
PHYS 5A	PHYS 350	PHYS 350 / 370	PHYS 350	PHYS 350	PHYS 2A
PHYS 5B	PHYS 360	PHYS 360 / 380	PHYS 360	PHYS 360	PHYS 2B
PHYS 10	PHYS 310	PHYS 310	PHYS 310	PHYS 310	PHYS 10
PHYS 10L	PHYS 312				PHYS 11
PHYS 11A	PHYS 410	PHYS 411	PHYS 411	PHYS 410	PHYS 4A
PHYS 11B	PHYS 431	PHYS 431	PHYS 431	PHYS 430	PHYS 4C
PHYS 11C	PHYS 421	PHYS 421	PHYS 421	PHYS 420	PHYS 4B
PHYS 107					
MATH 30	MATH 400	MATH 400	MATH 400	MATH 400	MATH 30
MATH 31	MATH 401	MATH 401	MATH 401	MATH 401	MATH 31
MATH 32	MATH 402	MATH 402	MATH 402	MATH 402	MATH 32
MATH 45	MATH 420	MATH 420	MATH 420	MATH 420	MATH 33
CHEM 1A	CHEM 400	CHEM 400	CHEM 400	CHEM 400	CHEM 1A <i>or</i> CHEM 3A + CHEM 3B
CHEM 1B	CHEM 401	CHEM 401	CHEM 401	CHEM 401	CHEM 1B