

## California State Polytechnic University, Pomona Degree Curriculum Sheet

180

Plan (Major) PHYSICS
Subplan/Option

Catalog Year 2010-2011

Minimum Units Required

Name\_\_\_\_ Student ID

Required Core Courses Units Course General Physics/Lab PHY 131/131L 3/1 General Physics/Lab PHY 132/132L 3/1 General Physics/Lab PHY 133/133L 3/1 General Physics PHY 234/234L 3/1 Elem Mod Physics/Lab PHY 235/235L 3/1 Fund of Math Physics PHY 308 4 Fund of Math Physics 4 PHY 309 Physics of E&M PHY 314 4 Physics of E&M PHY 315 4 Mechanics 4 PHY 321 Mechanics PHY 322 4 Thermal Physics PHY 333 Quantum Mechanics PHY 401 4 Quantum Mechanics PHY 402 4 3 Optics PHY 417 Optics Lab PHY 417L Advanced Physics Lab PHY 430L Solid State Physics Lab PHY 431L Nuclear Physics Lab PHY 432L 1 Senior Project 2 PHY 461 Senior Project PHY 462 2 Undergraduate Seminar PHY 463 Total Units 69

Required Support Courses		
Course		Units
Life Science/Lab (B2, B3)	BIO 110/111L	3/1
or Foundations of Biology/Lab (B2, B3)	BIO 121/121L	(3/2)
General Chemistry/Lab (B1, B3)	CHM 121/121L	3/1
General Chemistry/Lab	CHM 122/122L	3/1
General Chemistry/Lab	CHM 123/123L	3/1
FORTRAN	CS 125	4
or Intro to C++	CS 128	(4)
Analytic Geom & Calc I (B4)	MAT 114	4
Analytic Geom & Calc II	MAT 115	4
Analytic Geom & Calc III	MAT 116	4
Calc of Sev Variables	MAT 214	3
Calc of Sev Variables	MAT 215	3
Differential Equations	MAT 216	4
	Total Units	42-43

Elective Support Courses	
Course	Units
Advanced Electives (To be chosen from upper division courses in Physics or related fields in consultation with advisor; at least 4 of these units must be in Physics).	12
Total Units	12

Unrestricted Electives	
Course	Units
Unrestricted Electives Select a sufficient number of courses so that the total from "Required Support", "GE", and "Unrestricted Electives" is at least 99 units.	0-1
Total Units	0-1

Area	•	Units
	Communication & Critical Thinking	12
1		
2	Written Communication	
3	Critical Thinking	
Area B	Mathematics & Natural Sciences	16
Select a	t least one lab course from sub-area 1 or 2.	
1	Physical Science	
2	Biological Science	
3	Laboratory Activity	
4	Math/Quantitative Reasoning	
5	Science & Technology Synthesis	
Area C	Humanities	16
1	Visual and Performing Arts	
2	Philosophy and Civilization	
3	Literature and Foreign Language	
4	Humanities Synthesis	
Area D	Social Sciences	20
1	U.S. History, Constitution, American Ideals:	
2	History, Economics and Political Science	
3	Sociology, Anthropology, Ethnic & Gender Studies	
4	Social Science Synthesis	
Area E	Lifelong Understanding & Self Development	4
	Total Units	68

American Institutions	
Courses that satisfy this requirement may also satisfy G.E. Area	8
D1	

American Cultural Perspectives Requirement	
Refer to catalog for list of courses that satisfy this requirement.	4
Course may also satisfy major, minor, GE, or unrestricted elective	
requirements.	

The following required support courses should be taken to satisfy the indicated GE Requirements to achieve the minimum units to degree listed at the top of this sheet.

Course		GE Area
General Chemistry /Lab	CHM 121/121L	B1, B3
Life Science/Lab	BIO 110/111L	B2, B3
or Foundations of Biology/Lab	BIO 121/121L	(B2, B3)
Analytic Geom & Calc I	MAT 114	B4

The remaining GE requirements may be satisfied by any course approved for that area.