



**California State Polytechnic University, Pomona
Degree Curriculum Sheet**

Plan (Major) PHYSICS
Subplan/Option _____

Catalog Year 2012-2013 Name _____
Minimum Units Required 180 Student ID _____

TGA _____
GWT Satisfied _____ Yes _____ No _____

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

Required Support Courses		
Course		Units
Life Science (B2, B3)	BIO 110/111L	3/1
or Foundations of Biology (B2, B3)	BIO 121/121L	(3/2)
General Chemistry (B1, B3)	CHM 121/121L	3/1
General Chemistry	CHM 122/122L	3/1
General Chemistry	CHM 123/123L	3/1
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

General Education Requirements	
Area	Units
Area A Communication & Critical Thinking	12
1 Oral Communication	
2 Written Communication	
3 Critical Thinking	
Area B Mathematics & Natural Sciences	16
<i>Select at least one lab course from sub-area 1 or 2.</i>	
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 D1	8

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

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	CHM 121/121L	B1, B3
Life Science	BIO 110/111L	B2, B3
or Foundations of Biology	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.