



Bachelor of Science

APPLIED PHYSICS: Physical Sciences Emphasis

Advisement Form 2008-2009

Name _____ ID _____

Physics Curriculum	Un.	Instit.	Course	Units	Grade	Term	Prerequisites, GE & Comments
Lower Division Requirements (32-33 Units)							
PHYS 106 Applied Physics and Modern Society	3						GE: B1
PHYS 200 General Physics I	4						Prereq: MATH 150; GE: B1
PHYS 201 General Physics II	4						Prereq: PHYS 200; GE: B1
MATH 150 Calculus I	4						Prereq: Passing scores on the Calculus Placement Exam or MATH 105; GE: B3
MATH 151 Calculus II	4						Prereq: MATH 150
CHEM 105 Introduction to Chemistry	3						Prereq: A passing score on the ELM; GE: B1
<i>Select <u>one</u> of the following:</i>							
PHYS/ART 208 Physics of Art and Visual Perception	3						GE: B1, C1
PHSC 170 Foundations in Physical Science <i>(Required for teachers)</i>	4						GE: B1
<i>Select <u>one</u> of the following:</i>							
BIOL 100 Exploring the Living World	4						GE: B2
BIOL 170 Foundations of Life Science <i>(required for teachers)</i>	4						GE: B2
<i>Select <u>one</u> of the following:</i>							
COMP 102 Web Development	3						GE: B4
COMP 105 Computer Programming Introduction	3						GE: B4 <u>Note:</u> Not open to students who have completed COMP 150
Upper Division Requirements (30 Units)							
PHYS 304 Electromagnetism	4						Prereq: PHYS 101 or 201, MATH 151
PHYS 306 Modern Physics	3						Prereq: PHYS 101 or 201, MATH 151
PHYS/PAMU 335 Physics of Music	3						GE: B1, C1, INTD
PHYS/ENGL 338 Science and Conscience	3						GE: B1, C2, INTD
PHYS/CHEM 344 Energy and Society	3						GE: B1, INTD
PHYS/BIOL/HLTH 434 Introduction to Biomedical Imaging	4						Prereq: BIOL 210 or PHYS 200; GE: B1, E, INTD
PHYS 448 Team-Based Research	3						Prereq: Upper division standing; GE: B1, INTD
PHYS 499 Senior Colloquium	1						Prereq: Senior standing
MGT 325 Entrepreneurial Management	3						

	Un.	Instit.	Course	Units	Grade	Term	Prerequisites, GE & Comments
Select 3 units (any combination) from the following:							
PHYS 492 Internship (Required for teachers)	3						Prereq: Upper division standing and consent of the instructor; Graded or CR/NC
PHYS 494 Independent Research	1-3						Prereq: Senior standing and consent of the instructor
PHYS 497 Directed Studies	1-3						Prereq: Senior standing and program approval
Upper Division Electives in the Major Courses (15-16 units) Chosen with advisor's approval							
EDUC 330 Introduction to Secondary Schooling (recommended for teachers)	3						GE: D, INTD
MATH 240 Linear Algebra	3						Prereq: MATH 151
MATH 250 Calculus III	3						Prereq: MATH 151 with a grade of C or better
MATH 350 Differential Equations and Dynamical Systems	3						Prereq: MATH 250 (may be taken concurrently)
MATH 352 Probability and Statistics	3						Prereq: MATH 151
MATH 448 Scientific Computing	3						Prereq: MATH 151 and 350 or COMP 151; GE: B3, B4, INTD
MATH 450 Partial Differential Equations and Mathematical Physics	3						Prereq: MATH 350 or consent of instructor
MATH 451 Complex Analysis	3						Prereq: MATH 240 and 250
PHYS 310 Electronics	4						Prereq: PHYS 101 or 201
PHYS/COMP/MATH 345 Digital Imaging Processing	3						Prereq: Consent of the instructor; GE: B1, B4, INTD
PHYS/PA 436 Physics of the Performing Arts	3						Prereq: PA 202; GE: B1, INTD
PHYS/COMP/MATH 445 Image Analysis and Pattern Recognition	3						Prereq: PHYS/COMP/MATH 345 or consent of the instructor; GE: B1, B4 & INTD
PHYS/BIOL 464 Medical Instrumentation	4						Prereq: PHYS/BIOL/HLTH 434
PHYS 490 Topics in Physics	3						Prereq: Upper division standing and consent of the instructor
PHYS 492 Internship (If not taken as a required course)	3						Prereq: Upper division standing and consent of the instructor; Graded or CR/NC
PHYS 494* Independent Research (If not taken as a required course)	1-3						Prereq: Senior standing and consent of the instructor
PHYS 497* Directed Studies (If not taken as a required course)	1-3						Prereq: Senior standing and program approval

*Cannot exceed a total of three units, when added to units taken within the upper division requirements

Additional University Graduation Requirements

9 Units Upper Division Interdisciplinary GE at CSUCI (courses numbered 330-349 or 430-449)

Course 1 PHYS 335 Course 2 PHYS 338 Course 3 _____
(major course) (major course) (outside major)

American Institutions Requirements: US History _____ State and Local Gov't _____
(Choose from HIST 270, 271, 272, 275 or 350) (Choose POLS 150)

Students must receive a grade of C or better in the language and Multicultural Requirements

Language Requirement: GE C3a _____
(one semester of college level language)

Multicultural Requirement: GE C3b _____

Minimum total units to graduate: 120 of which 40 must be upper division. Please see catalog for a complete list of graduation requirements.

Advisor _____ Date Completed: _____

Advisor Comments: _____
