



SACRAMENTO STATE

Program Proposal Form B



Academic Group (<i>College</i>): Natural Science and Mathematics	Date of Submission to College Dean: 11/01/08
Academic Organization (<i>Department</i>): Physics and Astronomy	Requested Effective: Fall <u>x</u> , Spring <u> </u> , 2009 <u> </u> .
Department Chair: Gary Shoemaker	Contact if not Department Chair: Chris Taylor

Title of the Program: Minor In Astronomy

Type of Program Proposal:

- Modification in Existing Program:**
 Substantive Change
 Non-Substantive Change
 Deletion of Existing Program

- New Programs**
 Initiation (Projection) of New Program on to Master Plan
 New Degree Programs
 Regular Process
 Fast Track Process
 Pilot Process
 New Minor, Concentration, Option, Specialization, Emphasis
 New Certificate Program

PLEASE NOTE: Form B is to be used only as a Cover Form. Additional information is requested for each of the above as noted in the corresponding procedure in the Policies and Procedures for Initiation, Modification, Review and Approval of Courses and Academic Programs found at <http://www.csus.edu/acaf/univmanual/index.htm>

Briefly describe the program proposal (new or change) and provide a justification.
Astronomy 4 is a required course in the Astronomy Minor. In a separate submission it is proposed to create Astronomy 4A, 4B, and 4C, covering the topics of Planetary Science; Stars, Galaxies and Cosmology; and Astrobiology; respectively. The proposed change in the Astronomy Minor is to permit *any* of the three new Astronomy 4ABC courses to fulfill the requirement currently satisfied by Astronomy 4. A change in the Astronomy Minor is required because when the new courses are approved, Astronomy 4 as currently listed in the Catalog will be deleted and only Astronomy 4A, 4B, and 4C will be offered. This proposed program modification does not change the number of units required for completion of the minor, nor does it have a fiscal or programmatic impact on the offerings of any other academic unit.

Approvals:

Department Chair: Gary H. Shoemaker **Date:** 11/20/08

College Dean: Samuel Jefferson **Date:** 12/9/08

University Committee: _____ **Date:** _____

Associate Vice President and Dean for Academic Affairs: _____ **Date:** _____

Proposed Changes:

Itemize Each Change:

1. Delete from required courses: Astr 4
2. Add to required courses: Any one of Astr 4A, 4B, or 4C

NEW PROGRAM

A. Required Courses (12 units)

Any one of Astr 4A, 4B or 4C

Astr 4A: Introduction to the Solar System

Astr 4B: Introduction to Stars, Galaxies and
Cosmology

Astr 4C: Introduction to Astrobiology

Astr 6: Astronomical Observation Laboratory

Astr 131: The Solar System and Space Exploration

Astr 132: Stars, Galaxies and Cosmology

Astr 199: Special Problems (2 units)

B. Elective Courses (any 6 units from the following)

Chem 142: Introduction to Physical Chemistry

CSC 25: Introduction to C Programming

Geog 107: Remote Sensing

Geog 113: Climate

Geog 116: Global Climate Change

Geol 114: Volcanology

Geol 170: Geology of the Planets

Phil 125: Philosophy of Science

Phsc 107: History of the Physical Sciences

Phys 136: Electrodynamics of Waves, Radiation
and Materials

Phys 145: Optics

Phys 162: Computational Physics

Stat 50: Introduction to Probability and Statistics

Stat 115A: Introduction to Probability Theory

OLD PROGRAM

A. Required Courses (12 units)

Astr 4: Introduction to Astronomy

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Astr 6: Astronomical Observation Laboratory

Astr 131: The Solar System and Space Exploration

Astr 132: Stars, Galaxies and Cosmology

Astr 199: Special Problems (2 units)

B. Elective Courses (any 6 units from the following)

Chem 142: Introduction to Physical Chemistry

CSC 25: Introduction to C Programming

Geog 107: Remote Sensing

Geog 113: Climate

Geog 116: Global Climate Change

Geol 114: Volcanology

Geol 170: Geology of the Planets

Phil 125: Philosophy of Science

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Phys 136: Electrodynamics of Waves, Radiation
and Materials

Phys 145: Optics

Phys 162: Computational Physics

Stat 50: Introduction to Probability and Statistics

Stat 115A: Introduction to Probability Theory