CALIFORNIA STATE POLYTECHNIC UNIVERSITY, POMONA
ACADEMIC SENATE

ACADEMIC PROGRAMS COMMITTEE
REPORT TO
THE ACADEMIC SENATE

AP-004-267
New Astrophysics Option in the B.S. in Physics

Academic Programs Committee Date: 09/02/2026
Executive Committee Received and Forwarded Date: 10/21/2026
Academic Senate Date: 11/4/2026
First Reading

BACKGROUND

The proposed Astrophysics Option in the B.S. in Physics establishes a structured pathway for students interested in astronomy, astrophysics, space science, and related fields. It prepares students for graduate study, research at observatories and government agencies, educational and outreach roles, and careers in aerospace industries developing astronomical instruments, satellites, and space probes.

RESOURCES CONSULTED:

- College Deans
- College Associate Deans
- Chair, Department of Physics and Astronomy

DISCUSSION:

The 120-unit degree option retains the foundational Physics curriculum and adds focused study in Astrophysics. It includes 50 units of major requirements, 27 units of option requirements, and 6 units of option electives, with overlapping degree requirements counted toward the 120-unit total.

The department reports substantial existing student interest. The Tableau minor dashboard identifies 20 Physics majors pursuing the Astronomy minor, approximately 10% of Physics majors. In Fall 2026, 23 of the 24 students enrolled in AST 4240, which will be required for the new option, are General Physics majors. Historical enrollment in the upper-division astrophysics sequence suggests that approximately 18–24% of Physics majors may select the option, potentially making it the department's second-largest option. These estimates reflect existing participation rather than guaranteed future enrollment.

The option formalizes an astrophysics emphasis already available through the General Physics pathway. AST 3240/A, AST 4240/A, and AST 4250/A (11 units) have been offered annually since semester conversion as requirements for the Astronomy minor. The department reports that these courses, along with existing upper-division Physics lectures, have sufficient capacity to accommodate anticipated enrollment without new courses or additional sections. The proposed option is not expected to displace General Physics course offerings;

shifting interested students into Astrophysics may also ease pressure on equipment- and space-constrained upper-division laboratories.

The option is planned for Fall 2027 in a face-to-face format. The proposal indicates that existing faculty, equipment, and laboratory space can sustain the option. Student learning will be evaluated through the existing Physics assessment processes and option-specific coursework. The Committee supports the academic coherence of the proposed pathway and its contribution to student preparation for advanced study and professional opportunities in astronomy, astrophysics, space science, and related fields.

RECOMMENDATION:

The Academic Programs Committee recommends approval of the new Astrophysics Option in the Bachelor of Science in Physics, recognizing its contribution to specialized undergraduate education, graduate preparation, and career readiness.