

To: Administrative Boards of the College of Arts and Science

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BS Astrophysics Option

The following tables summarize the current requirements, which we propose to rename the Standard Option, and the proposed requirements for a new Astrophysics Option:

- Preliminaries:

Current (Standard Option)	Proposed Astrophysics Option
PHYS 116, 117, 128, 128L 12	PHYS 116, 117, 128, 128L
MATH 231, 232, 233, 383 12	MATH 231, 232, 233, 383
CHEM 101, 101L, 102, 102L	CHEM 101, 101L*
	ASTR 102, 301*

*We propose to replace four credits of introductory chemistry (CHEM 102, 102L) with four credits of introductory astronomy (ASTR 102, 301). ASTR 102, 301 are necessary to take many of our 500-level ASTR courses (see additional explanation in §1). We will continue to recommend, but not require, CHEM 102, 102L.

- All of the following courses:

Current (Standard Option)	Proposed Astrophysics Option
PHYS 301	PHYS 301
PHYS 311, 312	PHYS 311, 312
PHYS 321, 521	PHYS 321, 521
PHYS 331	PHYS 331 with astrophysics project*
PHYS 341	PHYS 341
PHYS 351	PHYS 351
PHYS 481L, 482L	ASTR 519**
PHYS 631, 632 or MATH 528, 529	PHYS 631, 632 or MATH 528, 529

*PHYS 331 (Introduction to Numerical Techniques in Physics), where the student completes his/her project on an astrophysics topic, is included because of the importance of numerical techniques to modern astrophysics.

**We propose to replace four credits of advanced physics laboratory (PHYS 481L, 482L) with four credits of advanced observational astronomy (ASTR 519).

- Two of the following courses:

Current (Proposed Standard Option)	Proposed Astrophysics Option
Any physics or astronomy course numbered above 300	ASTR 501
Any physics or astronomy course numbered above 300	ASTR 502
	ASTR 503
	ASTR 505

Language:

We propose to label the current language “Standard Option” and add the following language:

Astrophysics Option

Preliminary Requirements

- PHYS 116, 117, 128, 128L
- MATH 231, 232, 233, 383
- CHEM 101, 101L. CHEM 102, 102L are recommended but not required.
- ASTR 102, 301. Students who sign up for ASTR 301, which is a 1-credit add-on to ASTR 102 for minors and majors, are excused from ASTR 102’s prerequisite of ASTR 101.

Physics Requirements

- PHYS 301, 311, 312, 321, 331, 341, 351, 521. PHYS 331’s project should be on an astrophysics topic.
- PHYS 631, 632 or MATH 528, 529

Astronomy Requirements

- ASTR 519
- Two of ASTR 501, 502, 503, 505