

Course Change Request

Date Submitted: 04/20/19 12:07 pm

Viewing: **ASTR 402 : RS: Methods of Observational Astronomy**

Last approved: 04/20/19 4:30 am

Last edit: 04/28/19 5:52 pm

Changes proposed by: prubin

Catalog Pages referencing this course

- [Astronomy \(ASTR\)](#)
- [Department of Physics and Astronomy](#)

Programs referencing this course

- [ASTR: Astronomy Minor](#)
- [SC-BS-ASTR: Astronomy, BS](#)

In Workflow

1. **PHYS UG Committee**
2. **PHYS Chair**
3. **SC Curriculum Committee**
4. SC Associate Dean
5. Assoc Provost-Undergraduate
6. Registrar-Courses
7. Banner

Select modification type:

~~Simple~~

Substantial

Approval Path

1. 05/15/19 1:02 pm
Philip Rubin (prubin): Approved for PHYS UG Committee
2. 05/15/19 4:37 pm
Paul So (paso): Approved for PHYS Chair

Are you completing this form on someone else's behalf?

No

Effective Term: Fall 2019

Subject Code: ASTR - Astronomy

Course Number: 402

Bundled Courses:

Is this course replacing another course? No

Equivalent Courses:

Catalog Title: RS: Methods of Observational Astronomy

Banner Title: RS:Methods Observational Astro

Will section titles vary by semester? No

Credits: 4

Schedule Type: Lecture w/Lab

Hours of Lecture or Seminar per week: 3

Hours of Lab or Studio per week: 3

Repeatable: May be only taken once for credit, limited to 3 attempts (N3)

Max Allowable Credits: 12

Default Grade Mode: Undergraduate Regular

Recommended Prerequisite(s):

Recommended Corequisite(s):

History

1. Aug 25, 2017 by pchampan
2. Nov 13, 2017 by Philip Rubin (prubin)
3. Oct 19, 2018 by Philip Rubin (prubin)
4. Feb 22, 2019 by Gregory Craft (gcraft)
5. Apr 20, 2019 by Tory Sarro (vsarro)

Required Prerequisite(s) / Corequisite(s) (Updates only): **(PHYS 260 or PHYS 270) and ~~260~~, ASTR 124 and ~~124~~, ASTR 210 and ~~210~~, and at least one of ASTR 401* and (ASTR 328, ASTR 403, ASTR 420, or ASTR 480)**
***corequisite, may be taken concurrently**

All courses C or better ~~480 ASTR 401 (corequisite)~~

Registrar's Office Use Only - Required Prerequisite(s)/Corequisite(s):

And/Or	(Course/Test Code	Min Grade/Score	Academic Level)	Concurrency?
		PHYS 260	C	UG		
And		ASTR 124	C	UG		
And		ASTR 210	C	UG		
And	(ASTR 328	C	UG		
Or		ASTR 403	C	UG		
Or		ASTR 420	C	UG		
Or		ASTR 480	C	UG)	
And		ASTR 401	C	UG		Yes

Registration Restrictions (Updates only):

Registrar's Office Use Only - Registration Restrictions:

- Field(s) of Study:
- Class(es):
- Level(s):
- Degree(s):
- School(s):

Catalog Description: An introduction to the observational, statistical, and computational techniques used by observational astronomers. The course covers some of the basic skills needed to pursue a career in astronomy and is designed around preparing for and executing an observational research project. Fulfills writing intensive requirement in the major.

Justification: PHYS 260 and 270 are equivalent. AND/OR groups clarified and corrected.

Does this course cover material which crosses into another department? No

Learning Outcomes:

Attach Syllabus

Additional Attachments

Specialized Course Categories: Mason Core
 Mason Impact
 Writing Intensive

Select the Mason Core Requirement the course is proposing to fulfill:

Foundation

Courses:

Exploration

Courses:

Integration

Capstone

Courses:

Application for Mason Impact

Select the requested Research/Scholarship designation:

Research/Scholarship Intensive (RS)

Research/Scholarship Intensive (RS)

Course must meet at least one of the below methods outcomes:

Appropriately analyze scholarly evidence

Choose an appropriate research method for scholarly inquiry

Gather and evaluate evidence appropriate to the inquiry

Select any additional SaS learning outcomes which the course meets:

Describe how the course meets the required student learning outcomes and the selected methods outcome(s):

previously approved

How will the course be supported by the appropriate subject area librarian?

previously approved

Attach Curriculum Map

[The designation for the course was previously approved.pdf](#)

Please affirm the following:

List Responsible

Faculty Members:

Faculty Member Name	Faculty Member email
previously approved	previously approved

The department has or will have an undergraduate research student learning outcome and will use the data from this course in Academic Program Review.

Yes

Capstone

While each academic degree program defines its learning outcomes, a Capstone course or sequence should follow these guidelines:Information

- Minimum of 3 credits
- Later in the curriculum, after a student has taken at least 85 credits, and at the 400 - course level
- No more than 35 students in the course or equivalent instructional/mentored support
- Emphasis on experiential/applied/integrative learning
- Allow students to apply critical thinking skills
- Learning outcomes defined by the degree program

Explain how the course meets the expectations that the capstone experience consolidates the knowledge and understanding gained in the student's major, degree, and Mason Core Courses.

previously approved

Fixing the pre-requisites—the co-req is supposed to be required, not included in the "or" group.

**Additional
Comments:**

**Reviewer
Comments**

Key: 909