

Course Change Request

New Course Proposal

Date Submitted: 03/01/24 2:57 pm

Viewing: **PHYS 794 : Physics Internship**

Last edit: 03/01/24 2:57 pm

Changes proposed by: paso

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

In Workflow

- 1. **PHYS GR Committee**
- 2. **PHYS Chair**
- 3. **SC Curriculum Committee**
- 4. SC Assistant Dean
- 5. Assoc Provost-Graduate
- 6. Registrar-Courses
- 7. Banner

Approval Path

- 1. 03/04/24 8:57 pm
Paul So (paso):
Approved for PHYS GR Committee
- 2. 03/05/24 10:38 am
Ernest Barreto (ebarreto):
Approved for PHYS Chair

No

Effective Term: Fall 2024

Subject Code: PHYS - Physics

Course Number: 794

Bundled Courses:

Is this course replacing another course? No

Equivalent Courses:

Catalog Title: Physics Internship

Banner Title: Physics Internship

Will section titles vary by semester? No

Credits:

1-6

Schedule Type:

Internship

Hours of Other Contact Hours per week:

1-6

Repeatable:

May be repeated within degree (RD)

6

Max Allowable Credits:

Default Grade Mode:

Graduate Regular

Recommended Prerequisite(s):

Departmental approval

Recommended Corequisite(s):

Required Prerequisite(s) / Corequisite(s) (Updates only):

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

And/Or	(Course/Test Code	Min Grade/Score	Academic Level)	Concurrency?

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:

In collaboration with an external company or research lab in a physics related field, this internship course provides students with hands-on experience in an applied setting. Students will be able to apply their academic and research skills acquired in their courses in a real professional environment with a goal to enhance their career and job opportunities. This course will be co-managed by a GMU faculty course instructor and a project supervisor from the external company or research lab.

Justification:

What: Creating a new course.

Why: We do not have a graduate-level internship course in physics. This will fill that need.

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

Learning Outcomes:

Will this course be scheduled as a cross-level cross listed section? No

Attach Syllabus

[PHYS 794_Physics Internship_sample syllabus.pdf](#)

Additional Attachments**Staffing:**

Any faculty member with graduate faculty status in our department could teach this course.

Relationship to Existing Programs:

This course will be added to the MS-PHAE and the PHD-PHYS.

Relationship to Existing Courses:

PHYS 794 and ASTR 794 are a pair of new graduate internship courses for our physics and astronomy students. They have no overlap with existing P&A courses.

Additional Comments:**Reviewer Comments**

Key: 18305

SAMPLE Syllabus for PHYS 794 Physics Internship

George Mason University

Department of Physics & Astronomy

Credits/Hours

1-6 credits. May be repeated within the degree for a maximum of 6 credits.

Approximately 50 hours of professional work per academic credit earned in a semester.

Course Description

In collaboration with an external company or research lab in a physics related field, this internship course provides students with hands-on experience in an applied setting. Students will be able to apply their academic and research skills acquired in their courses in a real professional environment with a goal to enhance their career and job opportunities. This course will be co-managed by a GMU faculty course instructor and a project supervisor from the external company or research lab.

Prerequisite

Departmental approval

Course-specific learning outcomes

Upon completion of this course a student will be able to:

- Connect what they've learned in the workplace experience with what they have learned in their coursework.
- Describe how different people in the organization that they worked in contribute to the goals of the organization.
- Describe, in-depth, the nature of their work experience and how it has impacted their trajectory in school/work.
- Work effectively, independently and cooperatively.

Grading

Grades will be assigned based on the number of points a student earn on each assigned component of the course.

Below is the grading scale:

A	900-1000
B+	860-899
B	800-859
B-	760-799
C	700-759
F	below 700

Component	Total Points
Project Journal Entry	200

Internship Plan and Resume	150
Interview Report	150
Final Report & Presentation	400
Project Supervisor Evaluations	100
Total Points	1000

Assignments

Weekly Project Journal Entry (20%) The purpose of the Project Journal is to document the activities related to your internship weekly and to share experiences with your classmates. This journal should be kept and used to assist you in writing your Mid-term Progress Report, Final Report, and Presentation.

Internship Plan and Resume (15%) The student is responsible for drafting a detailed Internship Plan (3-5 pages) and a resume that includes this internship to be submitted to the course instructor within two weeks from the beginning of the course. Upon departmental permission, the student will receive prompt feedback on the Internship plan, which will be finalized by the end of week 3. The final plan will count as the first assignment in the course.

Interview Report (15%) By the end of week 8, the student should interview 2 people in the external company or research lab and write a report (3-4 pages) about their perspectives on how the organization works, how employees contribute to the goals of the organization, and how they got to their position in the organization. The internal can work with the course instructor to formulate the set of questions for the interview.

Final Report and Presentation (40%) The student will be required to submit a final report of the project (minimum 5 pages), in tandem with an oral presentation. The course instructor will be responsible for grading the final report. The final report should include an introduction that describes the internship goal or question, a description of the work/research plan, an detailed analysis of the results, and a conclusion including a description of the role of the student in the internship and the skills that were used and/or acquired in the process.

Project Supervisor Evaluations (10%) Your course instructor will seek feedback from your internship project supervisor whose assessment on the student's performance at the work site will be included in the final evaluation of the grade.

Academic Integrity

From [<http://ctfe.gmu.edu/teaching/designing-your-syllabus/>]:

The integrity of the University community is affected by the individual choices made by each of us. Mason has an [Honor Code](#) with clear guidelines regarding academic integrity. Three fundamental and rather simple principles to follow at all times are that: (1) all work submitted be your own; (2) when using the work or ideas of others, including fellow students, give full credit through accurate citations; and (3) if you are uncertain about the ground rules on a particular assignment, ask for clarification. No grade is important enough to justify academic misconduct. Plagiarism means using the exact words, opinions, or factual information from another person without giving the person credit. Writers give

credit through accepted documentation styles, such as parenthetical citation, footnotes, or endnotes. Paraphrased material must also be cited, using MLA or APA format. A simple listing of books or articles is not sufficient. Plagiarism is the equivalent of intellectual robbery and cannot be tolerated in the academic setting. If you have any doubts about what constitutes plagiarism, please see me.

Disability Accommodations

If you have a learning disability or other condition that may affect academic performance, please: a) make sure documentation is on file with Office of Disability Services (SUB I, Rm. 4205; 993-2474; <http://ods.gmu.edu>) to determine the accommodations you need; and b) talk with me to discuss your accommodation needs.

University Policies

See <http://universitypolicy.gmu.edu/>

Student Support Services

See <http://ctfe.gmu.edu/teaching/student-support-resources-on-campus/>