Course Change Request

Date Submitted: 04/19/19 12:46 pm

Viewing: **PHYS 251 : Introduction to Computer Techniques in Physics**

Last approved: 02/22/19 4:26 am

Last edit: 04/19/19 12:46 pm

Changes proposed by: prubin

Catalog Pages referencing this course	Astronomy (ASTR) Department of Physics and Astronomy Physics (PHYS)
Programs referencing this	SC-BS-ASTR: Astronomy, BS SC-BS-PHYS: Physics, BS

Select modification type:

~~Simple~~

Substantial

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

No

Effective Term: Fall 2019

Subject Code: PHYS - Physics **Course Number:** 251

Bundled Courses:

Is this course replacing another course? No

Equivalent Courses:

Catalog Title: Introduction to Computer Techniques in Physics

Banner Title: Intro Comp Tech in Phys

Will section titles vary by semester? No

Credits: 3

Schedule Type: Lecture

Hours of Lecture or Seminar per week: 3

Repeatable: May be only taken once for credit, limited to 3 attempts (N3) **Max Allowable Credits:** 9

Default Grade Mode: Undergraduate Regular

Recommended Prerequisite(s):

Recommended Corequisite(s):

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

Approval Path

1. 05/15/19 1:02 pm Philip Rubin (prubin): Approved for PHYS UG Committee
2. 05/15/19 4:38 pm Paul So (paso): Approved for PHYS Chair

History

1. Aug 25, 2017 by pchampan
2. Feb 22, 2019 by Gregory Craft (gcraft)

Required Prerequisite(s) / Corequisite(s) (Updates only):   **PHYS 160 or PHYS 170**

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

And/Or	(	Course/Test Code	Min Grade/Score	Academic Level	)	Concurrency?
		PHYS 160	C	UG		

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: Introduction to using computers in physics based on examples from mechanics and astronomy.

Justification: PHYS 160 and PHYS 170 are equivalent

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

Learning Outcomes:

Attach Syllabus

Additional Attachments

Specialized Course Categories: Mason Core

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

Foundation Courses: Information Technology and Computing

Exploration Courses:

Integration Courses:

Information Technology and Computing

Course must meet the following learning outcomes:
   1. Students will be able to use technology to locate, access, evaluate, and use information, and appropriately cite resources from digital/electronic media.
2. Students will understand the core IT concepts in a range of current and emerging technologies and learn to apply appropriate technologies to a range of tasks.

Course must meet one additional learning outcome:
   3. Students will understand many of the key ethical, legal and social issues related to information technology and how to interpret and comply with ethical principles, laws, regulations, and institutional policies.
4. Students will demonstrate the ability to communicate, create, and collaborate effectively using state-of-the-art information technologies in

multiple modalities.

5. Students will understand the essential issues related to information security, how to take precautions and use techniques and tools to defend against computer crimes.

I affirm that I have attached the following using the syllabus and attachment buttons provided above: (see "?" for help with submission)

Additional Comments:

Reviewer Comments

Key: 12504