FACULTY CURRICULUM COMMITTEE
COURSE FORM

Instructions:
• Please fill out one of these forms for each course you are adding, changing, deactivating, or reactivating.
• Fill out the parts of the form specified in part B. **You must do this before your request can move forward!**
• Remember that your changes will not be implemented until the next catalog year at the earliest.
• If you have questions, start by checking the instructions on the website. Please feel free to contact the committee chairs with any remaining questions you might have.

A. CONTACT/COURSE INFORMATION.

Name: P. Chris Fragile		Phone: 953-3181		Email: fragilep@cofc.edu

Department or Program: Physics & Astronomy	School: SSM

Subject Acronym and Course Number: ASTR 210

Catalog Year in which changes will take effect: FALL 2014

B. TYPE OF REQUEST. Please check all that apply, then fill out the specified parts of the form.

☐ Add a New Course (complete parts C, D, F, H, I, J, K)
☒ Change Part of an Existing Course (complete parts C, D, E, F, G, I, J, K)
☐ Course Number
☐ Course Name
☐ Course Description
☐ Credit/Contact Hours
☒ Restrictions (prerequisites, co-requisites, junior/senior standing, etc.)
☐ Deactivate an Existing Course (complete parts C, D, E, G, I, J, K)
☐ Reactivate a Previously-Deactivated Course (complete parts C, D, E, G, I, J, K)

C. RATIONALE AND EXPLANATION. Please describe your request and explain why you are making it.

We are dropping the prerequisite requirements for ASTR 210. This just brings the prerequisites into line with the actual expectations of the course. Historically all students who have been interested in this class have been allowed to enroll.

D. IMPACT ON EXISTING PROGRAMS AND COURSES. Please briefly describe the impact of your request on your own programs and courses as well other programs and courses. If another program requires the course, you must submit their written acknowledgement with this proposal. Also, the affected program must describe any change in the number of credit hours they require. Include a list of similar courses in other departments and explain any overlap.

None
E. EXISTING COURSE INFORMATION. If you are proposing a new course, just leave this blank. Otherwise, please fill out all fields.

Department: Physics & Astronomy  School: SSM  Subject Acronym: ASTR  Course Number: 210
Credit hours:  __3__ lecture  __ lab  __ seminar  __ independent study
Contact hours:  __3__ lecture  __ lab  __ seminar  __ independent study

Course title: Black Holes in the Universe

Course description (maximum 50 words, exactly as it appears in the catalog):

Properties of black holes and observations of objects that might harbor them. Topics include Einstein's special and general relativity, stellar evolution, black hole detection, accretion and outflows, gravitational waves, the Hawking's effect, singularities and the possibility of creating mini black holes in the laboratory. (For non-science majors.)

Restrictions (pre-requisites, co-requisites, majors only, etc.):
Prerequisite: ASTR 130 or PHYS 102 or PHYS 112 or HONS 158

Cross-listing, if any:

Is this course repeatable?  ☐ yes  ☒ no  If yes, how many total credit hours may the student earn?  ____

F. NEW COURSE INFORMATION. If you are deactivating a course, leave this blank. Otherwise, please fill out all fields. For changed courses, use boldface for the information that is changing.

Department: Physics & Astronomy  School: SSM  Subject Acronym: ASTR  Course Number: 210
Credit hours:  __3__ lecture  __ lab  __ seminar  __ independent study
Contact hours:  __3__ lecture  __ lab  __ seminar  __ independent study

Course title: Black Holes in the Universe

Course description (maximum 50 words, exactly as it appears in the catalog):

Properties of black holes and observations of objects that might harbor them. Topics include Einstein's special and general relativity, stellar evolution, black hole detection, accretion and outflows, gravitational waves, the Hawking's effect, singularities and the possibility of creating mini black holes in the laboratory. (For non-science majors.)

Restrictions (pre-requisites, co-requisites, majors only, etc.):
Prerequisite: None

If this is a newly-created course, is it intended to be the equivalent of an existing course and replace it?  ☐ yes  ☐ no  If so, which course?  ______________
Note: You must deactivate that course by submitting an additional Course Form.

Cross-listing, if any (submit approval from relevant department):
Note: Cross-listed courses are equivalent.

Is this course repeatable?  ☐ yes  ☒ no  If yes, how many total credit hours may the student earn?  ____

This form was last updated on 06/03/13 and replaces all others.
Is there an activity, lab, or other fee associated with this course? □ yes ☑ no  What is the fee? $______  
Note: The Senate cannot approve new fees; Business Affairs will submit any such request to the Board of Trustees. The course can still be created, but the fee will not be attached until the Board has approved it.

G. COSTS. List all of the new costs or cost savings (including new faculty/staff requests, library, equipment, etc.) associated with your request.
   None.

H. STUDENT LEARNING OUTCOMES AND ASSESSMENT.

<table>
<thead>
<tr>
<th>Student Learning Outcomes</th>
<th>Assessment Method and Performance Expected</th>
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<tbody>
<tr>
<td>What will students know and be able to do when they complete the course?</td>
<td>How will each outcome be measured? Who will be assessed, when, and how often? How well should students be able to do on the assessment?</td>
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<tr>
<td>1.</td>
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<td>3.</td>
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How does this course align with the student learning outcomes articulated for the major, program, or general education? What program-level outcome or outcomes does it support? Is the content or skill introduced, reinforced, or demonstrated in this course?

I. PROGRAM CHANGES. Will this course be added to the existing degree requirements or list of approved electives of a major, minor, or concentration? □ yes ☑ no

If yes, please attach a Change Minor and/or Change Major/Program Form as appropriate.
J. CHECKLIST.

☒ I have completed all relevant parts of the form.

☒ I have attached a cover letter that describes my request and lists all the documents I am submitting.

☐ (For new courses only) I have attached a syllabus.

☐ (For courses used in any way by other departments, including cross-listing) I have attached an acknowledgement from the relevant department.

☐ (For courses intended to fulfill a Gen Ed requirement) I have submitted the proposal to the Gen Ed committee.

☒ I have submitted one Signature Form that lists all of the different forms I am submitting.