

**GRADUATE COUNCIL: PROPOSAL FOR CHANGE IN EXISTING COURSE/PROGRAM**

**Originating Unit** Department of Physics & Astronomy

**Type of action:**  change in course  change in program

**Type of change requested:**

- |  |   |
|--|---|
| <input type="checkbox"/> Number        | <input type="checkbox"/> Course Title                       |
| <input type="checkbox"/> Description   | <input checked="" type="checkbox"/> Prerequisite(s) Program |
| <input type="checkbox"/> Drop Course   | <input type="checkbox"/> Requirements                       |
| <input type="checkbox"/> Drop Program* | <input type="checkbox"/> Other, please specify              |

*\*A SACSCOC Drop Program Justification form will need to be completed*

**Semester and year course/program will take effect:** Fall 2024

**Course instructional methodology:**

course component types: [ugradcouncil.tcu.edu/forms/Course Component Types.pdf](http://ugradcouncil.tcu.edu/forms/Course%20Component%20Types.pdf)

Current name: PHYS 50753 - Topics in Biophysics (3)

Proposed name:

Appropriate computer abbreviation (30 spaces or less):

PHYS 50753 - Topics in Biophysics (3)

***Programs Only***

Current program code:

(ex:EDCE-PHD)

Proposed code (list 2) \_\_\_\_\_ or \_\_\_\_\_

Current CIP code:

Does the change require a new or change in CIP code:  Yes  No

If yes, what is the proposed new CIP code:

\*for reference please visit: [nces.ed.gov/ipeds/cipcode/resources.aspx?y=56](http://nces.ed.gov/ipeds/cipcode/resources.aspx?y=56)

Is the program already considered TCU STEM:  Yes  No

Does the change include a request to be a TCU STEM program:  Yes  No

**Description of change** (omit if dropping a course or program):

We request corrections to the catalog descriptions of the course because the Department performed a detailed overhaul of the undergraduate PHYS courses.

**Present Catalog Copy**

Prerequisites: PHYS 20474 and 20484 or PHYS 20475 and PHYS 20485 or PHYS 10154 and 10164 and MATH 10524, or permission of instructor. This course will introduce students to a variety of biophysics topics focusing on the application of physics principles to biological systems. Topics covered might include membrane transport, impulses in nerve cells, external electric and magnetic fields, imaging, ultrasound, electromagnetic radiation, radiation therapy, nuclear magnetic resonance, crystallography, spectroscopy and signal analysis.

**Proposed Catalog Copy:**

Prerequisites: PHYS 20484 or PHYS 20485 or PHYS 10164 and MATH 10524, or graduate standing, or permission of instructor. This course will introduce students to a variety of biophysics topics focusing on the application of physics principles to biological systems. Topics covered might include membrane transport, impulses in nerve cells, external electric and magnetic fields, imaging, ultrasound, electromagnetic radiation, radiation therapy, nuclear magnetic resonance, crystallography, spectroscopy and signal analysis.

**Supporting evidence or justification:**

The Department performed a detailed overhaul of the undergraduate PHYS courses.

**Explain how the change(s) will affect the current outcomes and assessment mechanisms?**

The changes will not require additional faculty support and any other impact on other current departmental listings and assessment mechanisms.

**Additional resources required**

**Faculty:**

**Space:**

**Equipment:**

**Library:**

**Financial Aid:**

**Other:**

**Change in teaching load:**

**Does this change affect any other units of the University?** Yes  No

If yes, submit supporting statement signed by chair of affected unit.

**If cross-listed, provide evidence of approval by all curriculum committees appropriate to both the originating and the cross-listed units.**

**Chair of Originating Unit:**

**Name:**

**Unit:**

**Signature:** 