## Academic Policies Committee <br> Short Form Proposal Template

Schools/departments should use this short form to submit proposals:

- Needing only APC approval (revision of course descriptions including title, number or prerequisites, alternate year listing in the Catalog and the cross listing of courses); or
- Eliminating (or adding?) 1-3 courses which don't impact other programs or
- Eliminating a minor, concentration, credential program or certificate which doesn't impact other programs (confirmed by direct administrative report - college dean or provost).

All submitted proposals need to adhere to the following template in order to facilitate the work of the Academic Policies Committee.
I. Who - Academic Unit Name:

Mathematical, Information and Computer Sciences
Physics and Engineering
II. Impact- Will this proposal impact other departments, schools or Ryan Library (Yes/No)? If yes, please describe and provide date of contact to respective personnel:

Physics and Engineering:

- PHY341 - no impact

Mathematical, Information and Computer Sciences:

- CSC311 - no impact
- MTH363 - impacts the Biology department (for whom we teach this class). Vote on 11/15: Hi, Maria,

We voted unanimously to accept these changes.
Thanks,
Dawne

## III. What - Proposal Summary:

Physics and Engineering:

- Reduce the number of units in PHY341 Analytical Mechanics from 4 to 3.

Mathematical, Information and Computer Sciences:

- Change the course description of CSC 311 (1) R for Computational Science
- Change MTH363 (3) Calculus-Based Statistics with R to a class that can be offered in a hybrid format.
IV. When - Academic Year and Semester Changes to Take Place:

Fall 2018
V. Why - Proposal Rationale (might include):

Physics and Engineering:

No one in our department knows the historical reason for why PHY341 (4) Analytical Mechanics is 4unit course when the equivalent upper division courses are all 3-unit courses. In order to create space
for other curricular changes that we need to make, it makes sense to bring this course into alignment with the others.

Mathematical, Information and Computer Sciences:
CSC311 (1) R for Computational Science description has been adjusted to include machine learning in the list of topics covered. This change involves a slight adjustment in the course content. This modification has been made to align our curriculum with national CS standards.

MTH363 (3) Calculus-Based Statistics with R has been taught as a face to face course. However, for the last several years MTH203 Introduction to Statistics has been taught as a hybrid and the department has found the "flipped classroom" pedagogy that has been used in MTH203 is an effective way to teach statistics. We would like to use this same pedagogy with the students in MTH363. The interlocking scheduling in STEM at PLNU is like a puzzle. So the intent is to place MTH363 in its traditional time slot on MWF and hold class fewer days per week (see the schedule below). This class will be $50 \%$ hybrid.

Current Schedule is a two-week rotation:

|  | M | W | F |
| :--- | :--- | :--- | :--- |
| Week 1 | Lecture | Lecture | $R$ work in <br> class |
| Week 2 | Lecture | Lecture | Open lab <br> for $R$ work |
|  |  |  |  |

Proposed Hybrid Schedule as a two-week rotation:

|  |  | M | W |
| :--- | :--- | :--- | :--- | F

*this open lab is a time for students come and get help but is not required.

## VI. How - Curricular Changes:

A. Step 1: In the Catalog Review folder (H:\Catalog Review) provided by the VPAA Office use track changes to prepare the proposed catalog text.
B. Step 2: Arrange a meeting with the APC chair and Records liaison to review the catalog text proposal and receive assistance in submission of proposed catalog copy. Include this with your proposal.

Total course/unit additions: 0
Total course/unit deletions: 1
Staffing increase/decrease: 0
Library resourcing impact: None
Net Financial impact: None

I have reviewed this proposal and the items above and believe the proposal meets all university requirements, don not impact other departments or programs, and is ready for APC review.

Department or School Direct Report:
$\qquad$
College Dean or Provost as applicable:
$\qquad$
Date

Note: Submit completed short form proposal to the APC chair not later than one month prior to the APC meeting at which you hope it can be placed on the agenda.

## ACADEMIC POLICIES COMMITTEE LONG FORM PROPOSAL TEMPLATE

- Proposals should use this long form if they:
o Need faculty and/or WASC approval.
o Request elimination, addition or revision of multiple courses and/or courses impacting other departments or schools.
o Request elimination, addition or revision of a major, minor, concentration or credential program.
- All submitted proposals need to adhere to the following template in order to facilitate the work of the Academic Policies Committee.


## Section 1: Proposal Summary

1. Today's Date: November 8,2017
2. Academic Unit Name:

Mathematical, Information and Computer Sciences
Physics and Engineering
3. Submitted by: Maria Zack
4. Recorded Department/School Vote (Please provide the number and percentage of department/school faculty who voted in approval for this proposal): $11,100 \%$ of those who are not on sabbatical
5. Academic Year (Provide academic year and semester changes are to take place): Fall 2018
6. Is this proposal a result of a Program Review (Yes/No)? If not, please provide explanation:
We are in the midst of Program Review and one of the targets of our review process is to obtain ABET accreditation for our Engineering programs. ABET requires that the institution graduate a cohort in the new curriculum before accreditation is awarded. We are proposing to change the courses in the first year curriculum for Physics and Engineering Physics majors, that will allow us to use the Fall 2018 cohort for our ABET application (the rest of the curricular changes will be done after program review and not implemented until Fall 2019).
7. Overall Proposal Rationale (Briefly describe the nature of the proposed changes or the proposed new academic offering):

We are making two changes to help facilitate our Program Review work and speed up the ABET accreditation process (see above).

Section 2: Impact

1. Impact on Other Department(s)/School(s) (Are there other departments/schools impacted by this proposal? If so, how did the other department[s]/school[s] vote on this proposal?):
Chemistry is impacted by the department moving some chemistry from required to recommended. They voted on this information on:
Impact:
CHE152 16-18 fewer students annually
CHE153 1-3 fewer students annually
2. Impact on Library Services:
a. Will there be any new library acquisitions needed to support the proposed changes? (Yes/No):
b. If yes, please contact the Director of Ryan Library and provide further information below.
i. Provide the date the director was contacted:
ii. Briefly describe the needed acquisitions:

## Section 3: What and Why

Proposals (For each proposal or group of proposals, provide a description and rationale.): In order to facilitate a change to the Physics and Engineering Physics programs in their first year, we are deleting two classes, adding two classes and making some changes in which courses are required, elective and recommended.

To meet ABET accreditation standards for the number of engineering units, CSC143 and CSC154 need to be cross-listed as engineering courses (EGR143 and EGR154 respectively)

The deleted courses:
EGR110 (1, but 2-unit faculty load)
Computational Methods for Engineers \& Scientists I

EGR120 (1, but 2-unit faculty load)
Computational Methods for Engineers \& Scientists II

Added courses:
EGR111 (1) Introduction to Engineering I
EGR111L (1) Introduction to Engineering I Lab
EGR122 (2) Introduction to Engineering II
EGR122 (1) Introduction to Engineering II Lab
EGR143 (3) Introduction to Computer Programming (note that this is just a cross-listing of CSC143)

EGR154 (4) Objects and Elementary Data Structures (note that this is just a cross-listing of CSC154)

One course moved to recommended for Physics:
CHE153 (3) General Chemistry II

One course moved to recommended for Engineering Physics:
CHE152 (3) General Chemistry I

## Section 4: ***FOR NEW PROGRAMS ONLY***

A. Course Learning Outcomes - Please provide the course learning outcomes.
B. Assessment Plan - Please provide an assessment plan.

N/A

## Section 5: Catalog Edits

- Step 1:
o In the Catalog Review folder (H:\Catalog Review) provided by the VPAA Office use track changes to revise, add or eliminate the current and/or proposed catalog text. This applies to majors, minors, concentrations or certificates. This proposed text will accompany the proposal.
- Step 2:
o Arrange a meeting with the APC chair to review the completed portion of the proposal and to receive assistance from the Records liaison in submission of current and/or draft proposed catalog copy called for.


## Section 6: Summary Checklist

Review course and staffing impact with your academic unit's direct report (College Dean or Provost).

Total course additions: 6 ( 2 simply cross listing)
Total course deletions: 2
Total unit additions: 5
Total unit deletions: 2 units for students, $\mathbf{4}$ units faculty load
Staff impact (increase or decrease): None
Rotation of courses or deletions of sections to accommodate additions:

The change is neutral. We have added 5 units of faculty load and we have eliminated 4 units of faculty load in this proposal and an additional 1 unit of load in the short form.

Note that we have been saving PLNU money in the last few years by running a large lecture section of CSC143 and having two 25-30 student labs. Our annual curricular plans/submissions have had two lecture sections of CSC143 with one crossed out. This change to the Engineering and Physics curriculum will cause us to now teach two separate lectures sections of CSC143/EGR143.

I have reviewed this proposal and the items above and believe the proposal meets all university requirements and is ready for APC review.

Department or School Direct Report:

Date

College Dean or Provost as applicable:
Date $\qquad$

