Chair: Tracy Christofero | **GC#7: Course Change**

Request for Graduate Course Change

1. Prepare one paper copy with all signatures and supporting material and forward to the Graduate Council Chair.
2. E-mail one identical PDF copy to the Graduate Council Chair. If attachments included, please merge into a single file.
3. ***The Graduate Council cannot process this application until it has received both the PDF copy and the signed hard copy.***

College: College of Science Dept/Division: Physics Current Alpha Designator/Number: PHY 630

Contact Person: Huong Nguen, Wilson Thomas Phone: x6-2754

CURRENT COURSE DATA:

Course Title: Classical Mechanics

Alpha Designator/Number: P H Y 6 3 0

Title Abbreviation: C l a s s i c a l M e c h a n i c s

1. Complete this **five** page form in its entirety and route through the departments/committees below for changes to a course involving: course title, alpha designator, course number, course content, credit hours, or catalog description.
2. If this change will affect other departments that require this course, please send a memo to the affected department and include it with this packet, as well as the response received from the affected department.
3. If the changes made to this course will make the course similar in title or content to another department's courses, please send a memo to the affected department and include it with this packet as well as the response received from the affected department.
4. List courses, if any, that will be deleted because of this change (*must submit course deletion form).*
5. If the faculty requirements and/or equipment need to be changed upon approval of this proposal, attach a written estimate of additional needs.

Signatures: if disapproved at any level, do not sign. Return to previous signer with recommendation attached.

Dept. Chair/Division Head Ralph Oberly	Date Dec 7, 2017
Registrar 400801	Date 12-8-17
College Curriculum Chair	Date 12-15-17
Graduate Council Chair	Date

Form updated 10/2011

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College: College of Science | Department/Division: Department of Physics | Alpha Designator/Number: PHY 630

Provide complete information regarding the course change for each topic listed below.

Change in CATALOG TITLE: ☐ YES ☒ NO

From (limited to 30 characters and spaces)

To

If Yes, Rationale

Change in COURSE ALPHA DESIGNATOR:

From: To ☐ YES ☒ NO

If Yes, Rationale

Change in COURSE NUMBER: ☐ YES ☒ NO

From: To:

If Yes, Rationale

Change in COURSE GRADING

From ☐ Grade To ☐ Credit/No Credit

Rationale

Change in CATALOG DESCRIPTION: ☐ YES ☒ NO IF YES, fill in below:

From

To

If Yes
Rationale

Change in COURSE CREDIT HOURS: ☒ YES ☐ NO If YES, fill in below:

NOTE: If credit hours increase/decrease, please provide documentation that specifies the adjusted work requirements.

From 3
In the time allotted for the course, only 2/3 of the textbook Classical Mechanics (Third Edition), by Herbert Goldstein, Charles P. Poole and John L. Safko could be covered.

To 4
This will allow students to cover the remaining part from the textbook, thus providing them with a more in-depth knowledge of Electrodynamics at the graduate level.

Change in COURSE CONTENT: ☒ YES ☒ NO

From Chapters 1 through 8 from the textbook Classical Mechanics (Third Edition), by Herbert Goldstein, Charles P. Poole and John L. Safko.

To Chapters 1 through 12 from the textbook Classical Mechanics (Third Edition), by Herbert Goldstein, Charles P. Poole and John L. Safko.

Rationale In a one-semester 3-hour sequence, time does not usually allow for an introduction to Canonical Transformations, Hamilton-Jacobi Theory and Action-Angle Variables problems. Increasing the lecture time by 33% (from 3 to 4 hours) should now allow for these topics to be included and considered in some depth.

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College: College of Science

Department: Department of Physics

Course Number/Title PHY 630

1. REQUIRED COURSE: If this course is required by another department(s), identify it/them by name and attach the written notification you sent to them announcing to them the proposed change and any response received. Enter NOT APPLICABLE if not applicable.

NOT APPLICABLE

2. COURSE DELETION: List any courses that will be deleted because of this change. A *Course Deletion* form is also required. Enter NOT APPLICABLE if not applicable.

NOT APPLICABLE

3. ADDITIONAL RESOURCE REQUIREMENTS: If your department requires additional faculty, equipment, or specialized materials as a result of this change, attach an estimate of the time and cost etc. required to secure these items. (NOTE: approval of this form does not imply approval for additional resources. Enter NOT APPLICABLE if not applicable.

NOT APPLICABLE

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Please insert in the text box below your course change summary information for the Graduate Council agenda. Please enter the information exactly in this way (including headings) based on the appropriate change:

COURSE DESCRIPTION CHANGE	COURSE NUMBER CHANGE	COURSE TITLE CHANGE
Department:	Department:	Department:
Course Number and Title:	Current Course Number/Title:	Current Course Number/Title:
Rationale:	New Course Number:	New Course Title:
Course Description (old)	Rationale:	Rationale:
Course Description: (new)	Catalog Description:	Catalog Description:
Catalog Description:	Credit hours:	

COURSE CREDIT HOURS CHANGE
Department: Physics
Current Course Credit Hours: 3
Current Course Credit Hours: 4
Rationale: In a one-semester 3-hour sequence, time does not usually allow for an introduction to Canonical Transformations, Hamilton-Jacobi Theory and Action-Angle Variables problems. Increasing the lecture time by 33% (from 3 to 4 hours) should now allow for these topics to be included and considered in some depth.
Catalog Description: Study of variational principles and Lagrange's equations, the two-body central force problem, the kinematics and dynamics of rigid-body motion, Hamilton's equations of motion, canonical transformations, Hamilton-Jacobi theory, and small oscillations.