

UMBC UGC Change in Existing Course: PHYS431L Modern Physics Laboratory

Date Submitted: February 6, 2021

| | Name | Email | Phone | Dept |
|-------|--------------------|-----------------------|-------|---------|
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COURSE INFORMATION: (please provide all information in the "current" column, and only the information changing in the "proposed" column)

| Change | | Current | Proposed |
|-------------------------------------|--|--|---|
| <input type="checkbox"/> | Course Number(s) Include cross-listed courses | PHYS431L | |
| <input type="checkbox"/> | Formal Title | Modern Physics Laboratory | |
| <input type="checkbox"/> | Transcript Title (≤30c) | Modern Physics Laboratory | |
| <input type="checkbox"/> | Recommended Course Preparation | none | |
| <input type="checkbox"/> | Prerequisite | PHYS324 & PHYS330L both with C or better | Prerequisite must be passed with a grade of: <input type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D |
| <input type="checkbox"/> | # of Credits Must adhere to the UMBC Credit Hour Policy | 3 | |
| <input type="checkbox"/> | Repeatable? | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| <input type="checkbox"/> | Max. Total Credits | 3 | Max. Total Credits: This should be equal to the number of credits for courses that cannot be repeated for credit. For courses that may be repeated for credit, enter the maximum total number of credits a student can receive from this course. E.g., enter 6 credits for a 3 credit course that may be taken a second time for credit, but not for a third time. Please note that this does NOT refer to how many times a class may be retaken for a higher grade. |
| <input checked="" type="checkbox"/> | Grading Method(s) | <input type="checkbox"/> Reg (A-F) <input type="checkbox"/> Audit <input type="checkbox"/> Pass-Fail | <input checked="" type="checkbox"/> Reg (A-F) <input type="checkbox"/> Audit <input type="checkbox"/> Pass-Fail |
| <input type="checkbox"/> | Topics Course | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | <input type="checkbox"/> Yes <input type="checkbox"/> No |

CURRENT CATALOG DESCRIPTION (required):

Laboratory course intended for physics majors. Purpose is to acquaint the student with some of the phenomena and experimental techniques of atomic and nuclear physics. Error analysis and advanced data fitting techniques are included.

PROPOSED CATALOG DESCRIPTION (Approximately 75 words in length. Please use full sentences): Leave blank if no changes are being proposed to the catalog description. NOTE: information about prerequisites should NOT appear in the catalog description.

This is a laboratory course intended for upper-level physics majors. The course will acquaint students with contemporary experimental techniques in physics, with an emphasis on open-ended inquiry, data analysis, and development of technical writing and presentation skills.

RATIONALE FOR CHANGE:

The Department has diversified the range of experiments that are part of this course, and the new description better describes the present and future offerings. We could not find a grading method for this course and as this is a senior-level, required course for physics majors, we believe that letter grade only is appropriate.

Required Information for Registrar's Office Implementation:

Items below will be listed in the catalog, but do not require UGC approval. For future changes to these items, submit an RT ticket to the Registrar's Office.

| | | | |
|--------------------------|---|--|---|
| <input type="checkbox"/> | Component | <input type="checkbox"/> Clinical <input type="checkbox"/> Discussion <input type="checkbox"/> Field Study <input type="checkbox"/> Independent Study <input checked="" type="checkbox"/> Laboratory <input type="checkbox"/> Lecture <input type="checkbox"/> Practicum <input type="checkbox"/> Seminar <input type="checkbox"/> Thesis Research <input type="checkbox"/> Tutorial | <input type="checkbox"/> Clinical <input type="checkbox"/> Discussion <input type="checkbox"/> Field Study <input type="checkbox"/> Independent Study <input type="checkbox"/> Laboratory <input type="checkbox"/> Lecture <input type="checkbox"/> Practicum <input type="checkbox"/> Seminar <input type="checkbox"/> Thesis Research <input type="checkbox"/> Tutorial |
| <input type="checkbox"/> | Departmental Consent | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| <input type="checkbox"/> | When Offered (Fall, Winter, Spring, Summer, Other*) *If Other, please describe | Fall & Spring semesters | |

Requested Effective Date (Please note that the final approval date will determine the earliest possible effective date):

Fall 2021

Under what APR is this course evaluated? Physics