UNIVERSITY OF MICHIGAN-FLINT
COURSE CHANGE REQUEST

*** This change is not effective for registration or publication until this request has been reviewed by the Provost. ***

Change Effective For Term*: Fall 2010

(*cannot be earlier than the next published course schedule)

School/College: CAS
Department: CSEP

Current Course Subject Code: PHY Current Course Number: 434
Current Title Advanced Physics Laboratory III
Current Crosslists: EGR 433

Summary of changes: GenEd distribution, description

INSTRUCTIONS: Only where a change is requested, please complete both columns below; leave other lines blank. Add separate page(s) if space provided is not sufficient for your response.

☐ INACTIVATE Course ☐ INACTIVATE Crosslisting(s)

AS CURRENTLY OFFERED

1. Course Number: ____________________________
2. Title: ____________________________
3. Credit Hours: Total _______ -or- Variable _______ to ______
4. Contact Hours: Lec: _____ Lab: _____
5. Repeat Status: ____________________________
6. Grading Mode: ____________________________
7. Can be reported as Y grade?: Yes / No

REQUESTED CHANGE

1. Course Number: ____________________________
2. Title: ____________________________
3. Credit Hours: Total _______ -or- Variable _______ to ______
4. Contact Hours: Lec: _____ Lab: _____
5. Repeat Status: ____________________________
6. Grading Mode: ____________________________
7. Can be reported as Y grade?: Yes / No

Schedule Type (Lec/Lab/etc):

Crosslisting(s):

Corequisites:

Distribution Credit (circle):

Course Level: UG GR

NOTE: IF THIS COURSE WILL BE OFFERED FOR BOTH GRADUATE AND UNDERGRADUATE CREDIT. A SEPARATE PAGE EXPLAINING DISTINCTIONS IN INSTRUCTION AND/OR DIFFERING REQUIREMENTS FOR TWO LEVELS IS REQUIRED.

12. New Course Prerequisites:
13. Other New Restrictions (class/college-major/level):

14. New Course Description (as it should appear in the Catalog): Original problems selected and pursued in consultation with the instructor. This course serves as the capstone for the Physics General Program (BS). Also listed as EGR 434. Graded ABCDE/Y.

15. Reinstatement Term/Year (you must provide rationale for reinstatement in 16 below):

16. Reason for changes (or reinstatement): General Education reform

17. How does this request affect the prerequisites or requirements of other departments and programs? No effect

NOTE: IF THIS WILL AFFECT PROGRAM OR CONCENTRATION REQUIREMENTS, YOU MUST ALSO SUBMIT A PROGRAM CHANGE REQUEST FORM.

REQUESTED BY: ____________________________

Chris Pearson
Department Chair
Date 10/29/2007

REVIEWED BY: ____________________________

Catalog Editor
Date

Dean of Graduate Programs (Graduate courses)
Date

Provost (Undergraduate courses only)
Date

Catalog Coordinator (Registrar's Office)
Date

Dean
Date

Dean of Crosslist(s) or Prerequisite(s)
Date

GECAC
Date
REQUEST FOR GENERAL EDUCATION DISTRIBUTION DESIGNATION

Directions: Please indicate which learning outcomes will be addressed in this course (place the corresponding number and outcome where indicated). A minimum of five learning outcomes must be addressed for a course to be eligible for general education distribution designation. Please provide a brief narrative as to how the course objectives/key concepts address each learning outcome selected, and indicate what tools for assessment will be used.

<table>
<thead>
<tr>
<th>Course Title: Advanced Physics Laboratory III</th>
<th>Department: CSEP</th>
<th>Course Prefix: PHY</th>
<th>Course Number: 434</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>No. 1</th>
<th>Learning Outcome: Reflect on one’s own learning processes</th>
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<tbody>
<tr>
<td>Narrative: Students in this course pursue original problems and projects. In order to be successful, students will need to assess their knowledge and understanding of the problem and create solutions. As part of their learning process, students will be regularly exposed to critical inquiry from both the instructor and peers.</td>
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<tr>
<td>Assessment tools: Grades from problems and projects; grades from report paper.</td>
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<tr>
<th>No. 2</th>
<th>Learning Outcome: Demonstrate facility with research methods</th>
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<tbody>
<tr>
<td>Narrative: In order to complete their project successfully, students will need to enhance their understanding through the use of resources. Successful students will thoroughly analyze the project in order to identify resource needs. Successful students will also find, analyze, and incorporate those resources that are applicable to their project.</td>
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<tr>
<td>Assessment tools: Grades from problems and projects; grades from report paper.</td>
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<tr>
<th>No. 3</th>
<th>Learning Outcome: Demonstrate the ability to think critically</th>
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<tbody>
<tr>
<td>Narrative: During the course, students will be expected to analyze a problem, plan a solution, carry-out the plan, and evaluate the result. In order to be successful, students must interpret quantitative data and facts, pose relevant questions, and synthesize information.</td>
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<tr>
<td>Assessment tools: Grades from problems and projects; grades from report paper.</td>
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<th>No. 5</th>
<th>Learning Outcome: Produce competent written work</th>
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<tbody>
<tr>
<td>Narrative: Students will be expected to communicate their project summaries effectively via written means. To be successful, students must organize and present text and corroborating material effectively and efficiently, incorporating resources when applicable. Successful students will also be expected to evaluate their written work critically.</td>
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<td>Assessment tools: Grades from problems and projects; grades from report paper.</td>
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<tr>
<th>No. 12</th>
<th>Learning Outcome: Apply knowledge to complex issues such as social justice, globalization, economic growth and distribution, environmental sustainability, public health, etc, in increasingly broad spheres of influence.</th>
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<tbody>
<tr>
<td>Narrative: While students in the course complete a specific project, it is expected that they transfer the knowledge gained during the project to complex issues. Successful students will reflect on their project and its relationship to complex issues, collaborate effectively with others to complete a project, and devise strategies that integrate competing demands. As part of the learning process, students will be expected to enhance their understanding in their community and collaborate effectively.</td>
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</tr>
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<td>Assessment tools: Grades from problems and projects; grades from report paper.</td>
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