

Request for Courses in the Core Curriculum

**Originating Department or College:** Engineering, Mathematics, and Physics/ College of Arts and Sciences

**Person Making Request:** Dr. Qingwen Ni

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**Course Number and Title:** PHYS 2125 – University Physics I Lab

Please attach in separate documents:

- Completed Catalog Add/Change Form
- Syllabus

List the student learning outcomes for the course (Statements of what students will know and/or be able to do as a result of taking this course. See appended hints for constructing these statements.)

Upon successful completion of this course, the students will be able to:

- 1 Explain why experiments are an important component of the scientific method.
- 2 Explain why uncertainty is present in all measurements.
- 3 Collect experimental data, interpret results, and compare with theoretical predictions
- 4 Prepare a laboratory report in proper format.
- 5 Design and implement a scientific experiment that demonstrates physics principles covered in this course.
- 6 Deliver oral presentations with appropriate visual aids.

Component Area for which the course is being proposed (check one):

- |  |   |
|--|---|
| <input type="checkbox"/> Communication                   | <input type="checkbox"/> American History                 |
| <input type="checkbox"/> Mathematics                     | <input type="checkbox"/> Government/Political Science     |
| <input type="checkbox"/> Language, Philosophy, & Culture | <input type="checkbox"/> Social & Behavioral Science      |
| <input type="checkbox"/> Creative Arts                   | <input checked="" type="checkbox"/> Component Area Option |
| <input type="checkbox"/> Life & Physical Sciences        |   |

Competency areas addressed by the course (refer to the appended chart for competencies that are required and optional in each component area):

- |   |  |
|---|--|
| <input checked="" type="checkbox"/> Critical Thinking               | <input type="checkbox"/> Teamwork                |
| <input checked="" type="checkbox"/> Communication Skills            | <input type="checkbox"/> Personal Responsibility |
| <input type="checkbox"/> Written Communication                      | <input type="checkbox"/> Social Responsibility   |
| <input checked="" type="checkbox"/> Oral Communication              |  |
| <input checked="" type="checkbox"/> Visual Communication            |  |
| <input checked="" type="checkbox"/> Empirical & Quantitative Skills |  |

Because we will be assessing student learning outcomes across multiple core courses, assessment assigned in your course must include assessment of the core competencies. For each competency checked above, indicate the specific course assignment(s) which, when completed by students, will provide evidence of the competency. Provide detailed

