# **Curriculum Committee**

# **Change of Course Proposal**



School or Division	School of Pure and Applied Sciences		
Program or Certificate	General Education Program		
Proposed by (faculty only)	Dr. Yadab Paudel		
Presenter (faculty only)	Dr. Yadab Paudel		
Note that the presenter (faculty) listed above must be present at the Curriculum Committee meeting or the proposal will be returned to the School or Division and be resubmitted for a later date.			
			Submission date
Current course prefix, number, and title	PHY2053L, College Physics I Lab		

# **Section I, Proposed Changes**

Change to course prefix and number	
Lecture/lab course combined must include "C" /	
lab course must include "L"	
Change to course title	
Change of School, Division, or Department	
Change to course prerequisite(s) and minimum	
grade(s) (must include minimum grade if higher	
than a "D")	
Change to course corequisites	
Is any corequisite for this course listed as a	
corequisite on its paired course?	
(Ex. CHM 2032 is a corequisite for CHM 2032L, and	
CHM 2032L is a corequisite for CHM 2032)	
Change to course credits or clock hours	
Change to contact hours (faculty load)	
Change to grade mode	
Change to credit type	
Change to course description (provide below)	
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Change to general topic outline (type in entire new outline below)

- Experimental uncertainty (errors) and data analysis
- Measuring density
- Acceleration of gravity
- · Addition and resolution of forces
- Atwood machine
- Friction
- Centripetal force
- Work and energy

- Projectile motion: the ballistic pendulum
- Torques, equilibrium, and center of gravity
- Simple harmonic motion
- Simple pendulum
- Archimedes' principle
- Standing waves
- Speed of sound in air

Change to Learning Outcomes: For information purposes only.

### IV. Course Competencies, Learning Outcomes and Objectives

### A. General Education Competencies and Course Outcomes

1. Integral General Education Competency or competencies:

#### **Evaluate**

Course Outcomes or objectives supporting the General Education competency

# selected:

Learning Outcomes	Assessments	General Education		
		Competencies		
Recognize the effects of errors in measurements and illustrate their impact on the experimental data and results.  Use appropriate measuring devices in distinguishing between measurements/determination of mass and density, and experimentally determine the density of a given object.  Investigate the laws of motion and experimentally determine the acceleration of gravity and of a given object in linear and circular motion.  Apply and distinguish between graphical and analytical methods in calculating physical quantities.  Evaluate the validity of empirical "laws" as they relate to the experimental determination of the coefficient of friction between two given surfaces and Hooke's law in simple harmonic motion.  Explain the relationship between work and energy and compare and contrast conservation laws for ideal systems with	Lab reports, exams and/or projects.	Evaluate and utilize mathematical principles, technology, scientific and quantitative data.		

	the non-conservative aspects of situations
l	under laboratory conditions.
l	Investigate and distinguish between the
	concepts of "center of mass" and "center of
	gravity" while experimenting with the static
	equilibrium of an object under the
١	influence of forces and torques.
١	Distinguish between the quantities
ı	"density" and "specific gravity"; apply
1	Archimedes' principle in determining these
ľ	quantities for solid and liquid samples.
l	
l	Distinguish between the concepts of
	"node," "antinode," and "resonance" in
	your investigation of waves and
1	experimentally calculate the speed of a
1	wave.

- 2. Supplemental *General Education Competency or competencies*: None
- B. In accordance with Florida Statute 1007.25 concerning the state's general education core course requirements, this course along with PHY 1053 meets the general education competencies for *science*.
- 1. Students will demonstrate the ability to critically examine and evaluate scientific observation, hypothesis, or model construction, and to use the scientific method to explain the natural world.
- 2. Students will successfully recognize and comprehend fundamental concepts, principles and processes about the natural world
- C. Other Course Objectives/Standards
  None

### Section II (must complete each item below)

Should any major restrictions be listed on this course?	No change
If so, select "change" and list the appropriate major	
restriction codes or select no change.	
Change course to an "International or Diversity Focus"	No, not International or Diversity Focus
course?	
Change course to a General Education course?	No
Change course from General Education to non-General	No
Education?	
Change course to a Writing Intensive course?	No

Change course from Writing Intensive to non-Writing intensive?	No
Change course to repeatable?	No
(A repeatable course may be taken more than one time for additional credits. For example, MUT 2641, a 3 credit hour course can be repeated 1 time and a student can earn a maximum of 6 credits).  *Not the same as Multiple Attempts or Grade Forgiveness	

No		
Have you discussed this proposal with anyone (from other departments, programs, or institutions)		
regarding the impact? Were any agreements made? Provide detail information below.		

## Section III, Justification for proposal

### Provide justification (below) for each change on this proposed curriculum action

The removed topics from topic outline are covered in PHY 2054L and should not appear in the topic outline for PHY 2053L.

### Section IV, Important Dates and Endorsements Required

List all faculty endorsements below. (Note that proposals will be returned to the School or Division if faculty endorsements are not provided).

Prof. George Manacheril, Dr. Marius Coman

**NOTE:** Course and Program changes must be submitted by the dates listed on the published Curriculum Committee Calendar. Exceptions to the published submission deadlines must receive prior approval from the Provost's Office.

Term in which approved action will take place	Fall 2017	
Exception to term (other than Fall 2016)	Choose an item.	
Provide an explanation below for the requested exception to the Fall 2016 term effective date.		

VPAA: Revised 11/11, 6/12, 6/13, 7/14, 8/15, 8/16

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(2) (3)		date (other than Fall 2016) requires the	_		
	dent	and the Provost and Vice President of	Academ	ic Affairs prior to	
submission to the Dropbox.					
Dean or Associate Vice		Signature		Date	
President		,			
Provost and VPAA		Signature		Date	
Dr. Jeff Stewart					
Required Endorsements	Ту	oe in Name	Select	Date	
Department Chair or	Ge	orge Manacheril	2/10/2	016	
Program					
Coordinator/Director					
Academic Dean or	Dr.	Martin McClinton	10/7/2016		
Associate Vice President					
	not	on the completed and signed proposal. approve ure		<u>  /09/2016</u> Date	
*Approve Do	not	approve		11/9/16	
Provost Signature				Date	