

COURSE SYLLABUS

I. CATALOG DESCRIPTION

PHYS 121 Physics I Laboratory

0c-3l-1cr

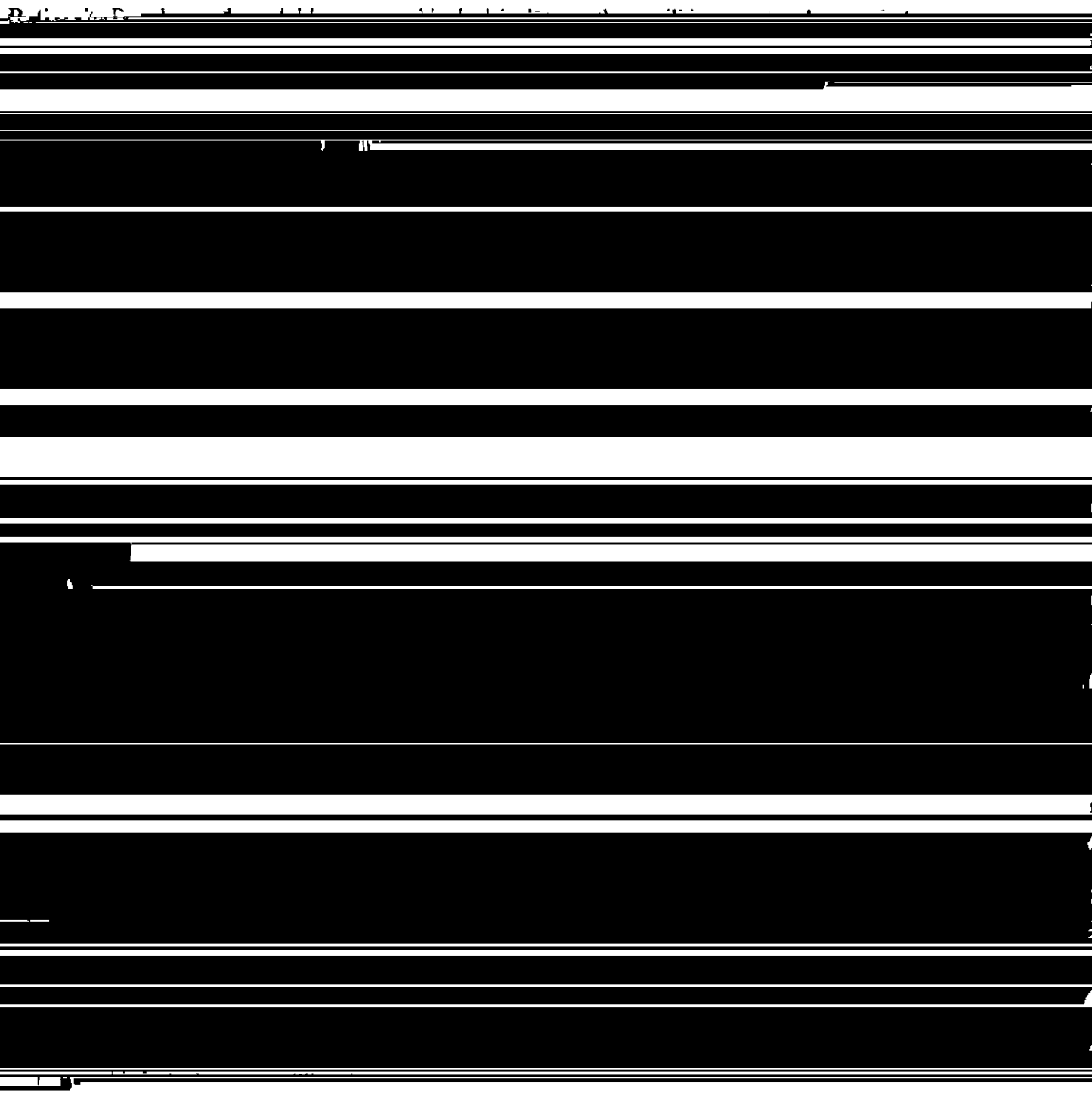
Corequisite: PHYS 111

Physics laboratory at the level of Physics I; exercises in mechanics, wave motion, and sound.

II. COURSE OBJECTIVES

1) Students will demonstrate laboratory techniques such as graphing, error analysis and data manipulation.

EUSLO 1 *Informed Learners* and EUSLO 2 *Empowered Learners*



IV. EVALUATION METHODS

The final grade for the course will be determined as follows:

50% laboratory reports

40% weekly quizzes or pre-lab questions

10% subjective evaluation – based upon interest and personal involvement in the laboratory experience.

V. GRADING SCALE

Score			Grade
100 %	to	90%	A
89%	to	80%	B
79%	to	70%	C
69%	to	60%	D
Less than		60%	F

VI. ATTENDANCE POLICY

Students are expected to attend all labs. Individual faculty members assigned to this course will determine the specific attendance requirements for this course. In certain situations,

Liberal Studies Course Approval General Information
On a separate sheet of paper, please answer these questions

(Do not include this sheet or copies of the questions in your proposal; submit only the answers)

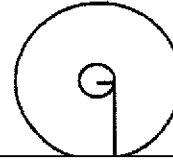
1) All sections use the same text book and lab manual. There is a Physics Department Faculty Lab committee meeting once per week where the current laboratory is discussed. All faculty who are assigned to sections of this course attend the meeting.

2) This is an introductory course in physics for science majors. The bulk of the course content is on the concepts of physics and problem solving. This lab class also requires the lecture class. These issues will be covered in the lecture class.

Sample Lesson Evaluation

Scoring rubric - each correct answer is worth one point, for a total of six points.

ROTATIONAL MOTION



1. Consider the figure at the right. The radius of the axle is 1.0×10^{-2} m. The mass $M = 0.10$ kg starts at a height of 0.50 m above the floor.

OLD COURSE SYLLABUS

CATALOG DESCRIPTION

PHYS 121 Physics I Laboratory

1 credit
3 lab hours
0c-1l-1cr

Corequisite: ·PHYS 111 or PHYS 131

Physics laboratory at the level of Physics I; exercises in mechanics, wave motion, and sound.

II. COURSE OBJECTIVES

Basic training in laboratory techniques such as graphing, error analysis, etc.

III. COURSE OUTLINE

Laboratory exercises (one experiment each week)

1. Measurement
2. Error
3. Acceleration of a freely falling body
4. Uniformly accelerated motion: the Atwood machine
5. Graphs and empirical equations
6. Air tracks and friction
7. Impulse and momentum
8. Collisions: Elastic and inelastic
9. Rotational motion
10. Half-life of a water column
11. The harmonic oscillator
12. Standing waves
13. Forced harmonic oscillator with damping

IV. EVALUATION METHODS

The final grade for the course will be determined as follows:

- 50% laboratory reports
- 40% weekly quizzes or pre-lab questions
- 10% subjective evaluation

V. REQUIRED TEXTBOOKS, SUPPLEMENTAL BOOKS AND READINGS

Laboratory manual written by several members of the Physics Department.

VI. SPECIAL RESOURCE REQUIREMENTS One packet of linear graph paper.