# COURSE SYLLABUS

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| **LAST REVIEW** | Spring 2021 |
| **COURSE TITLE** | Introductory Physics Lab |
| **COURSE NUMBER** | NASC-0131 |
| **DIVISION** | Math, Science, Business & Technology |
| **DEPARTMENT** | Physical Sciences |
| **CIP CODE** | 24.0101 |
| **CREDIT HOURS** | 1 |
| **CONTACT HOURS/WEEK** | Lab: 2 |
| **PREREQUISITES** | None |
| **COREQUISITES** | NASC-0130, Introductory Physics |
| **COURSE PLACEMENT** | None |

**COURSE DESCRIPTION**
A laboratory related to Introductory Physics (NASC-0130). Around 12-15 introductory laboratory experiments are done during semester. Schedule: Two hours of lab work per week.

**General Education Learning Outcome**
☐ Basic Skills for Communication
☐ Mathematics
☐ Humanities
☒ Natural and Physical Sciences
☐ Social and Behavioral Sciences

**Institutional Learning Outcomes**
☐ Communication
☒ Computation and Financial Literacy
☒ Critical Reasoning
☒ Technology and Information Literacy
☐ Community and Civic Responsibility
☐ Personal and Interpersonal Skills

**TEXTBOOKS**
http://kckccbookstore.com/

**METHODS OF INSTRUCTION**

A variety of instructional methods may be used depending on content area. These include but are not limited to: lecture, multimedia, cooperative/collaborative learning, labs and demonstrations, projects and presentations, speeches, debates, panels, conferencing, performances, and learning experiences outside the classroom. Methodology will be selected to best meet student needs.

**COURSE OUTLINE**

The course outline is indicated below and is subject to change as course development dictates.

Laboratory materials are designed including but not limited to the following topics:

I. Measurement
II. Motion
III. Newton's Laws
IV. Energy & Conservation Laws
V. Physics of Matter
VI. Temperature & Heat
VII. Waves & Sound
VIII. Electricity
IX. Electromagnetism and EM Waves
X. Optics
XI. Photoelectric Effect
XII. Radioactivity

**COURSE LEARNING OUTCOMES**

Upon successful completion of this course, the student will:

A. Be able to write the propose of the experiments
B. Be able to list the instruments needed to perform the experiment.
C. Be able to write the appropriate theory and equations needed to perform the experiments.
D. Be able to set up the experiments to get the appropriate data for the experiment.
E. Be able to gather all the data for analysis and calculation
F. Be able to analyze and perform the calculation to find the result using essential tools.
G. The learner will be able to interpret the result and write the conclusion.

**ASSESSMENT OF COURSE LEARNING OUTCOMES**

Student progress is evaluated through both formative and summative assessment methods. Specific details may be found in the instructor's course information document.

**COLLEGE POLICIES AND PROCEDURES**

*Student Handbook*
https://www.kckcc.edu/files/docs/student-resources/student-handbook-and-code-of-conduct.pdf

*College Catalog*
https://www.kckcc.edu/academics/catalog/index.html

*College Policies and Statements*
https://www.kckcc.edu/about/policies-statements/index.html

*Accessibility and Accommodations*
https://www.kckcc.edu/academics/resources/student-accessibility-support-services/index.html.