

IOWA WESTERN COMMUNITY COLLEGE

Classical Physics I Lab PHY 211 Section OL01

Term: Summer 2015

I. Faculty Information:

Instructor: Dr. Van Huett

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e-mail Address: vhuett@iwcc.edu

Office: Clark 026 B

Office Hours: None for the summer
(Please e-mail me)

II. Course Information:

<u>Course Prefix/ No.</u>	<u>Course Name</u>	<u>Credits</u>	<u>Lecture</u>	<u>Lab</u>
Phy 211	Classical Physics I Lab	1	0	1

Course Description:

Classical Physics I Lab is a one-semester laboratory course for students enrolled in Classical Physics I. The course covers experiments in kinematics, dynamics, circular motion, work, energy, linear momentum, rotational dynamics, torque, static equilibrium, fluids, wave motion, and sound.

Prerequisites:

Classical Physics I, prior or concurrent.

Course Meeting Times

Dates: 6/1/2015 – 7/24/2015

Course Location

ROC

Required Textbooks

Physics for Scientists & Engineers, 4th edition
Douglas C. Giancoli
Pearson Prentice Hall
ISBN 0-13-227559-7

Download the software from ROC. Access to a Windows PC **required** to run software.

Suggested Supplemental Textbooks, References

None

Materials and Supplies to be Furnished by Student

Calculator: TI-36 or TI83 or better

Course Learning Objectives and Course Competencies

1. Solve physical problems and draw mathematically based conclusions through clear and logical reasoning from course assignments, laboratory exercises
 - a. use analytical techniques appropriate to the study of physics
 - b. symbolically represent vector quantities.
 - c. select and use appropriate equipment for measuring and investigating.
 - d. use appropriate units and apply dimensional analysis.
 - e. manipulate equations and solve for variables.
2. Solve problems in the kinematics of motion in one and two dimension
 - a. use algebraic and geometric concepts to describe an object's motion.
 - b. describe and calculate appropriate quantities for an object in motion with constant velocity and constant acceleration.
 - c. describe and calculate appropriate quantities in one and two dimensions.
 - d. explain how changes in an object's motion are described by Newton's Laws.
 - e. describe the relationships between force, mass, and acceleration.
3. Solve problems in rotational motion
 - a. use algebraic and geometric concepts to describe an object's motion.
 - b. describe the relationships between force, mass, and acceleration.
4. Solve problem in elasticity and fracture of bodies in equilibrium
 - a. Identify, describe, and calculate the effects of balanced and unbalanced forces.
 - b. describe and state the consequences of the Law of Inertia.
5. Solve fluid problems
6. Explain vibration waves and sound

Course Practices:

1. Attendance Requirements
 - Students are responsible for completing all labs.
2. Standards for written work
 - Answers to questions should be fully explained and supported by appropriate equations.
3. Late assignments
 - All work is due on the date specified by the instructor on the site. Instructor reserves the right to reduce the amount of credit awarded if circumstances warrant.
4. Extra Credit
 - There will be no extra credit awarded.
5. Communication with Instructor
 - The best way to contact me outside of class is by e-mail. vhuet@iwcc.edu
 - Normally I will respond to e-mail within 24 hours.
 - All submitted labs will only be graded a few times during the semester. If you have questions about a lab you should e-mail me.

Instructional Techniques and Practices

Lab work will be completed using a simulation software package and the quizzes on ROC. Please ask questions if you have any.

Grading

1. Lab Work

Relative Weight of Grades

100% Lab Work

Grading Scale

A = 90 – 100 %

B = 80 – 89%

C = 70 – 79%

D = 60 – 69%

F = 0 – 50%

Final grades are viewable on ROC, Self-Services Menu, Students, Academic Record the Tuesday after the end of the semester.

Important Dates

- Friday, July 3: Holiday College/offices closed
- Monday, July 13: Last Day to Drop
- Friday, July 24: Class Ends

Problem Resolution

If you have a conflict with me, concerns about my teaching and/or the course material, please discuss this first with me. If we cannot resolve the difficulty, contact Kim Carter, Dean of Math, Engineering and Industrial Technology, Lewis 103, (712)325-3320.

Notice of Class Cancellation

1. Emergency closing of entire campus such as for weather – Students will be notified through the Reiver Alert system. Students must register for this service; find Reiver Alert on your ROC homepage.
2. Emergency cancellation of a class session such as for faculty illness – Students will be notified through an announcement on the ROC course page if possible and/or a posted note on the classroom door.

III. College Policy/Information

Honor Code – Academic Honesty

Upon enrolling at Iowa Western Community College, each student assumes an obligation to conduct her/his academic affairs in a manner compatible with the standards of academic honesty established by the College and its faculty. If this obligation is neglected or ignored by the student, disciplinary action will be taken. Please refer to the Student Code of Conduct for the Academic Dishonesty Policy.

Diversity Statement

Iowa Western Community College values diversity and supports learning experiences that promote intellectual growth and human enrichment.

American with Disabilities Act Statement

If you are an individual with a disability who requires an accommodation to fully participate in academic programs or campus activities, please email

disabilityservices@iwcc.edu or call 712-325-3299. Accommodations are arranged through the Disability Services Office, on the second floor of the Student Center on the Council Bluffs campus. Please allow adequate time to implement your accommodations.

Any student with mobility impairments should prepare for an emergency ahead of time by instructing faculty and/or classmates on how to assist in case of an evacuation.

FERPA

Student rights concerning access to educational records are spelled out in Federal Public Law 98-380 as amended by Public Law 93-568 and in regulations published by the Department of Education. The law and regulations require educational institutions to limit the disclosure of information from the student's record to those who have the student's written consent or to officials specifically permitted within the law. Students who wish to grant access to their educational (class schedule, transcript of final grades, and progress reports) or financial records (grants, loans, financial aid documents, statements and billing) may do so by submitting an Access to Student Information Consent Form to the Records and Registration Office. Access to information is only given at the Records and Registration Office or Financial Aid and Cashier Offices.

For more information, including the full Access to Student Information policy, refer to the Iowa Western Community College General Catalog or contact the Records and Registration Office.

Cyber-Library and Academic Support

- Students can access books, magazines, journals, newspapers, films and audio books 24/7 through the *Cyber-Library* by clicking on the Cyber Library under Academics in ROC.
- For questions about finding information at your campus or center, email cyberlibrary@iwcc.edu or call 712-325-3247 for the Council Bluffs Campus or 712-542-5117 for the Clarinda Campus. You can find the library hours posted on ROC.
- FREE tutoring and academic assistance are available through the *Academic Support Center*, located on the second floor of the Student Center on the Council Bluffs campus in a variety of core, general requirement classes.
 - One-on-one assistance is available on a walk-in basis
 - Group tutoring is available, but must be scheduled in advance.
- FREE online tutoring is available through SMARTHINKING on ROC, to access SMARTHINKING, locate Online Tutoring next to My ROC Classes.
- For more information about tutoring services or help in your classes, email tutoring@iwcc.edu or call 712-388-6841. A full tutoring schedule is posted by subject area on ROC.

Dropping Classes

While we encourage you to do everything you can to complete your classes, it is always better to drop a class than to fail it. If it becomes necessary for you to drop a class you can drop a class online through ROC up to the last day to drop. We recommend that you always talk to your advisor and financial aid before you drop a class. For more information on dropping classes see the Advising Information Site in ROC under the Academics tab.

Personal Electronic Devices

To provide an environment conducive to learning, Iowa Western Community College requires that cellular phones, pagers, and other personal electronic devices be turned off or set to vibrate when entering classrooms, computer labs, library, offices, auditoriums, or arena areas. Cellular phones with picture taking capabilities are not allowed in bathrooms, locker rooms, or other areas where there is a reasonable expectation of privacy. Faculty members do have the right to prohibit the use of any electronic device in their classroom.

EQUAL EDUCATIONAL OPPORTUNITY AND NON-HARASSMENT

Iowa Western Community College is committed to a policy of equal educational opportunity. Therefore the College prohibits discrimination on the basis of unlawful criteria such as race, color, creed, religion, national or ethnic origin, ancestry, genetic information, physical or mental disability, age, sex, sexual orientation, gender identity or expression, pregnancy, marital status, veteran status, AIDS/HIV status, citizenship, or medical condition, as those terms are defined under applicable laws, in admitting students to its programs and facilities and in administering its admissions policies, educational policies, scholarship and loan programs, athletic programs, and other institutionally administered programs or programs made available to students. In keeping with this policy of equal educational opportunity, the College is committed to creating and maintaining an atmosphere free from all forms of harassment.