Des Moines Area Community College
Classical Physics I   PHY 213 – A
Fall 2017
CRN: 10397
Instructor: Kevin Menges  Office: Bldg. 5, Rm 1233
Meeting Time: MWF 9:05AM – 10:00 AM  Bldg. 2, Rm 6
               TR  8:00AM – 10:00 AM  Bldg. 4, Rm 3
Corequisite: Mat 211 or equivalent.  Credit Hours: 6
Attendance: Attendance is important. It can be taken. Excessive absences will result in a lower grade. Students are responsible for all materials and information presented in class. The student is responsible for obtaining this information if absent.
Supplies: Pencil, eraser, notebook (for notes), loose leaf paper, inexpensive folder, scientific calculator
Description: This course is calculus based and intended for engineering and science majors. Topics covered include statics, dynamics, kinematics, fluid behavior, wave motion, vibrating systems, heat and thermodynamics.
Caveat: Students who transfer to or from DMACC between semesters should be aware that the divisions between Classical Physics I and Classical Physics II may not be identical to the divisions used elsewhere.
Final Exam: Monday, December 11, 2017; 9:05 AM – 11:05 AM
Course Requirements/Policies
1. Lectures: Attendance is required. Lectures will be mixed with group assignment work and quizzes.
2. Individual assignments/Homework/Sample Problems: Individual assignments account for 20% of the grade. Individual assignments will be completed using the Wiley-Plus online system accompanying your textbook. Extra points can be earned by pre-completing the sample problems posted on the instructors website. The Wiley-Plus online system must be purchased.
3. Quizzes/Other in class activities: Short quizzes and other activities will account for 5% of the grade. Missed quizzes and in class activities can’t be made up. But the lowest 5 quizzes will be dropped.
4. Labs: Students are required to perform lab experiments in the lab room during designated lab periods. Missed Labs CANNOT be made up. Failure to get 70% of the lab grade will result in failing the class with an F. The lab will account for 10% of the final grade otherwise. Labs must be turned in at the beginning of the next lab period. Late Labs result in a loss of 2 points per weekday. The two lowest lab grades will be dropped.
5. Exams: Four exams will be given. Dates for the exams will be announced a week in advance. Each exam is worth 10% of the final grade; for a total of 40%. Exams cover lecture, lab, textbook, and assignments. All exams must be done neatly. All work must be shown and the final answer underlined. Makeups are allowed only by prior arrangement or in cases where the instructor is promptly notified of an emergency. Makeup exams must be completed with-in a week of the original exam date or the student will be given a 0.
6. **Final Exam:** The final is given as scheduled by the college, therefore a student **CANNOT** take a final earlier or later. The final exam is cumulative. The final exam will be worth 15% of the final grade.

7. **Portfolios:** They will be worth 10% of the final grade. They will be explained further by a handout.

8. **Academic dishonesty:** **Cheating will not be tolerated!** However working in collaboration with your group on assignments and labs is strongly recommended. This does not mean copying someone else’s work or letting someone else copy your work. Any cheating on labs or exams will result in a zero for all parties concerned.

9. **Student Privacy Rights:** Under the Family Educational Rights and Privacy Act, every student attending a post-secondary institution has a right to privacy. This act prohibits the release of information concerning a student’s grade, progress, etc., to anyone other than that student. Thus, grades are not posted on walls, discussed over the phone or sent via email. A student can however, discuss his/her grade in private with the instructor on a face-to-face basis.

10. **Students with Disabilities:** It is the policy of DMACC to accommodate students with disabilities. Any student with a documented disability who requires reasonable accommodation should contact the special needs coordinator at (515) 964-6850 voice or (515) 964-6810 TTY.

**Evaluation:** Evaluation of the class will be through Portfolios 10%, lab 10%, assignments/quizzes and activities 25%, 4 hour exams 4 @ 10% = 40%, and a comprehensive Final Exam 15%.

<table>
<thead>
<tr>
<th>Percentage Range</th>
<th>Grade</th>
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<tbody>
<tr>
<td>100% - 90%</td>
<td>A</td>
</tr>
<tr>
<td>90% - 88%</td>
<td>B+</td>
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<tr>
<td>88% - 82%</td>
<td>B</td>
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<tr>
<td>82% - 80%</td>
<td>B-</td>
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<tr>
<td>80% - 78%</td>
<td>C+</td>
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<tr>
<td>78% - 72%</td>
<td>C</td>
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<td>72% - 70%</td>
<td>C-</td>
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<tr>
<td>60% - 70%</td>
<td>D</td>
</tr>
<tr>
<td>Below 60%</td>
<td>F</td>
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</tbody>
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**Course Outline**
1. Introduction to physics and problem-solving and vectors
2. Kinematics in one dimension
3. Kinematics in two dimensions
4. Newton’s Laws of Motion
5. Work, Kinetic Energy, and Potential Energy
6. Linear momentum and Collisions
7. Rotational Kinematics and Energy
8. Rotational Dynamics
9. Heat/Thermodynamics
10. Waves

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**http://www.dmacc.edu**

**Campus Name:** Ankeny

**Course Title:** Classical Physics I
COURSE NUMBER: Phy 213
SECTION NUMBER & CRN: A 10397

INSTRUCTOR INFORMATION

NAME: Kevin Menges
EMAIL ADDRESS: kpmenges@dmacc.edu
PHONE NUMBER: 515-965-7001
FAX NUMBER: 515-965-7083
OFFICE LOCATION: Building 5, Rom 1233
OFFICE HOURS/APPOINTMENTS: As posted on instructor website
INSTRUCTOR WEB PAGE ADDRESS: https://myweb.dmacc.edu/personal/kpmenges/instructor/default.aspx

COURSE INFORMATION

SEMESTER/YEAR: Fall 2017
DATE SYLLABUS CREATED AND/OR REVISED: August 2017

COURSE DESCRIPTION & CREDITS: http://www.dmacc.edu/courses/crsrod.asp
COREQUISITES: MAT 211
COURSE COMPETENCIES: https://go.dmacc.edu/competencies
COURSE OVERVIEW: This course is calculus based and intended for engineering and science majors. Topics covered include statics, dynamics, kinematics, fluid behavior, wave motion, vibrating systems, heat and thermodynamics.

STUDY TIPS To do well in this class, you must do your homework regularly. Study the assigned readings, which will help you follow the content of the lecture. Review your lecture notes. Ask questions. Students are expected to devote at least three hours of study time/problem solving for each contact hour. This is a fast paced, hands-on course. If you miss any lecture, it is your responsibility to obtain the notes from a classmate as soon as possible. Then review the missed notes and ask the instructor any questions on the missed material as soon as possible. The content of this course builds on itself throughout the semester. Consequently, it is important that students master early concepts, as they will become building blocks for concepts introduced later in the course. Students should seek extra help (tutoring, come in to office hours, etc.) as soon as possible if they feel that they are getting behind on the course material. This is a very work intensive class. You need to keep up on the textbook readings, lecture materials, sample problems, and homework problems. Many problems will take several hours to solve.
TEXTBOOKS & MATERIALS


Required materials: Scientific Calculator

Software applications: Software notice: “All the software used in this class is copyrighted; therefore, it is not for distribution, copying, or personal use. This software is the property of Des Moines Area Community College.”

COURSE POLICIES

Attendance/participation: Attendance is important. It can be taken. Excessive absences will result in a lower grade. Students are responsible for all materials and information presented in class. The student is responsible for obtaining this information if absent. Missed Labs and quizzes can’t be made up. Missed exams can only be made-up as per Exam rules listed in the syllabus.

Grading criteria: 100% - 90% A
90 - 88% B+ 88% - 82% B 82% - 80% B-
80% - 78% C+ 78% - 72% C 72% - 70% C-
60 – 70% D
Below 60% F

Classroom conduct: https://go.dmacc.edu/handbook
Show consideration for your classmates and instructor through these courtesies: (1) arrive on time, (2) be prepared for class, (3) participate actively and respectfully in class activities, and (4) listen with care to the class discussion. Students must behave in Lab. Food and drink are not allowed in Building 4 room 3. If they behave in a manner that the instructor deems unsafe or inappropriate, then the instructor will ask them to leave and they will be given a 0 for the Lab.

Missed exams: Makeups are allowed only by prior arrangement or in cases where the instructor is promptly notified of an emergency. Makeup exams must be completed with-in a week of the original exam date or the student will be given a 0.

Late assignments: Monday December 11 at 11:00 PM is the final deadline for all submissions late or otherwise. No submissions will be accepted after the final deadline. Extra credit sample problems are not accepted after the due date. Labs must be turned in at the beginning of the next lab period. Late Labs result in a loss of 2 points per weekday.

Extra credit: Effort grades are already built into the course, therefore no other extra credit is given.

Study expectations: This is a very work intensive class. All reading, study, and problems are expected to be completed before the exams covering the material, even if the due dates are later.
WEATHER POLICY: Individual circumstances such as health, childcare, rural roads, distance from the College, etc. can vary greatly among students and staff. It is always DMACC’s goal to provide safe learning conditions, as well as provide the opportunity for students to attend classes when the vast majority is able to safely attend. The final decision to come to College can only be made by the individual student based on their specific extenuating circumstances that may make it unsafe for them to travel. During adverse weather, DMACC faculty is considerate of students who are unable to attend classes due to unique extenuating circumstances. Notification of Campus/College closures will be sent out through the DMACC RAVE Alert System, posted to the DMACC webpage at www.dmacc.edu, and where possible sent to local media.

CLASS CANCELLATION PROCEDURE: It is the responsibility of each faculty member to notify their students (in addition to their dean or provost) through some predetermined means if they must postpone or cancel a specific class. Class cancelation will be sent to your dmacc e-mail address if time permits. Class cancelation will be noted by a sign on the classroom door.

ACADEMIC DISHONESTY/PLAGIARISM: Academic integrity, based on the values of honesty, trust, fairness, respect, and responsibility, is a fundamental principle of scholarship at DMACC. DMACC’s Academic Misconduct Policy (ES 4670) prohibits: plagiarism (using another person’s writing or copying any work without proper citation), falsification, unauthorized collaboration during a test or on an assignment, or substitution for another student to take an exam, course or test. If you are to benefit from this class and be properly evaluated for your contributions, it is important for you to be familiar with and follow DMACC’s Academic Misconduct policy. Students are encouraged to review DMACC’s Academic Misconduct Policy on-line at https://go.dmacc.edu/handbook/polprocedures/pages/academicmisconduct.aspx or in the DMACC Student Handbook. Work that violates these values is incompatible with the goals of this class and will not be tolerated. Students who are found responsible for a violation of the Academic Misconduct Policy will receive zero for all parties concerned. Students have the right to appeal and may do so by following the procedures described in the Academic Misconduct policy.

It is important for you to be familiar with and follow DMACC’s Academic Misconduct policy. Students are encouraged to review DMACC’s Academic Misconduct Policy on-line at https://go.dmacc.edu/handbook/polprocedures/pages/academicmisconduct.aspx or in the DMACC Student Handbook. Cheating will not be tolerated! However working in collaboration with your group on assignments and labs is strongly recommended. This does not mean copying someone else’s work or letting someone else copy your work. Any cheating on labs or exams will result in a zero for all parties concerned.

COURSE SPECIFIC (LAB) SAFETY PROCEDURES: Students must behave in Lab. If they behave in a manner that the instructor deems unsafe or inappropriate,
then the instructor will ask them to leave and they will be given a 0 for the Lab.

DMACC INFORMATION

INSTRUCTOR HOME PAGES: http://www.dmacc.edu/instructors
ADD/DROP DATES: https://go.dmacc.edu/registration/pages/add_drop.aspx
REFUND POLICY: https://go.dmacc.edu/registration/Pages/refund.aspx

SUPPORT SERVICES

SERVICES FOR STUDENTS WITH DISABILITIES:
https://go.dmacc.edu/student_services/disabilities

Any student with a documented disability who requires reasonable accommodation should contact the Disability Services Coordinator at 515-964-6850 or the counseling & advising office on any campus to apply for services.

Syllabus Addendum June 2016

Disclaimer: “This syllabus is representative of materials that will be covered in this class; it is not a contract between the student and the institution. It is subject to change without notice. Any potential exceptions to stated policies and requirements will be addressed on an individual basis, and only for reasons that meet specific requirements. If you have any problems related to this class, please feel free to discuss them with me.”

Academic & Educational Advising: https://www.dmacc.edu/advising

Academic Achievement Center:
https://www.dmacc.edu/currentstudents/Pages/academic_achievement_center.aspx Academic

Dishonesty/Plagiarism:
https://www.dmacc.edu/handbook/polprocedures/Pages/academicmisconduct.aspx “See DMACC Educational Services Procedures ES 4670. A. and B” for information on plagiarism, cheating, information about appeals procedures or reference publication that addresses this information in detail.”

Add/Drop Dates: https://www.dmacc.edu/registration/pages/add_drop.aspx

Admissions & Registration: https://www.dmacc.edu/registration

Blackboard: http://www.dmacc.edu/myonlinelearning/login.aspx

Career Connections: https://www.dmacc.edu/outreach/careerconnections
Career Counseling: https://www.dmacc.edu/prospectivestudents/Pages/careercounseling.aspx

Cellular Phone Use Statement: https://www.dmacc.edu/handbook/polprocedures/Pages/cellphone.aspx

Clergy Crime Report: https://www.dmacc.edu/handbook/polprocedures/Pages/cleryact.aspx

Computer Labs: https://www.dmacc.edu/helpdesk/Pages/computerlabs.aspx

Days to Register for Next Term: https://www.dmacc.edu/admissions/pages/applyonlinefull.aspx

DMACC Consumer Information: https://www.dmacc.edu/consumerinfo Financial Aid: https://www.dmacc.edu/fin_aid

Early Alert Referrals: https://www.dmacc.edu/counseling/Pages/facultyreferrals.aspx
DMACC faculty are encouraged to help connect students to available resources at the college, including academic advising, counseling, tutoring, and more. Early Alert Referrals result in direct outreach by phone and email to students who have been referred. Students are encouraged to respond to outreach efforts and take full advantage of available resources in support of their success. Questions about this process should be directed to Bobby Nalean at 515-964-6474 or earlyalert@dmacc.edu.

Grievance Procedures: https://www.dmacc.edu/student_services/pages/policies_procedures.aspx

Library: https://www.dmacc.edu/library

Midterm & Final Dates: http://www.dmacc.edu/students/Pages/academiccalendar.aspx

Nondiscrimination Policy

Des Moines Area Community College shall not engage in nor allow discrimination covered by law against any person, group or organization. This includes in employment, hiring practices or the provision of services, and harassment or discrimination based on race, color, national origin, creed, religion, sex (including pregnancy and marital status), sexual orientation, gender identity, age, disability and genetic information. Veteran status in educational programs, activities, employment practices, or admission procedures is also included to the extent covered by law. Individuals who believe they have been discriminated against may file a complaint through the College Discrimination Complaint Procedure. Complaint forms may be obtained from the Campus Provost's office, the Academic Deans' office, the Judicial Officer, or the EEO/AA Officer, Human Resources. For information about the ADA, the Section 504/ADA Coordinator may be contacted at 515-964-6857. For Title IX questions and concerns contact 515-964-6850.
Students who wish additional information or assistance may refer to Student Services procedure ES 4645 located at https://www.dmacc.edu/student_services/int. Click Policies & Procedures.

Program Development/Academic Support Services Director, is the official Student Accommodation Officer/Section 504/ADA Coordinator for DMACC. The ADA Coordinator’s office is located in Bldg. 6-10E on the Ankeny Campus and may be contacted by voice at 515-964-6857. The ADA Coordinator is responsible for ensuring that the college complies with federal regulations that guarantee qualified students with disabilities equal access to all programs and services. Any student, faculty, or staff member may contact the ADA Coordinator’s office for clarification of federal regulations, appeal of a grievance, or resolution of a disability-related problem.

Policies & Procedures Introduction: https://www.dmacc.edu/handbook/polprocedures

Refund Policy: https://www.dmacc.edu/registration/Pages/refund.aspx

Safety Page: https://www.dmacc.edu/safety

Services for Students with Disabilities: https://www.dmacc.edu/student_services/disabilities
Any student with a documented disability who requires reasonable accommodation should contact the Disability Services Coordinator at 515-964-6850V or the counseling & advising office on any campus to apply for services.

Sexual Harassment Policy: https://www.dmacc.edu/handbook/polprocedures/pages/nondiscrmpolicy.aspx

Software Notice: “All the software used in this class is copyrighted; therefore, it is not for distribution, copying, or personal use. This software is the property of Des Moines Area Community College.”

Student Handbook: https://www.dmacc.edu/handbook

Student Responsibilities and Rights: https://www.dmacc.edu/handbook/polprocedures/Pages/rightsandrespon.aspx

Technology Usage: https://www.dmacc.edu/handbook/polprocedures/Pages/technologyusage.aspx

Tutoring: https://www.dmacc.edu/handbook/servstudents/Pages/tutoring.aspx

Weather Policy: “Individual circumstances such as health, childcare, rural roads, distance from the College, etc. can vary greatly among students and staff. It is always DMACC’s goal to provide safe learning conditions, as well as provide the opportunity for students to attend classes when the vast majority is able to safely attend. The final decision to come to College can only be made by the individual student based on their specific extenuating circumstances that may make it
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