MERCER COUNTY COMMUNITY COLLEGE  
Science and Health Professions

COLLEGE PHYSICS II  
PHY 102  
Fall 2010

Course Description  
This is the second part of a two-semester sequence of algebra-based physics. Topics include electricity, magnetism, circuits, electromagnetic wave, optics, and modern physics. Algebra and trigonometry are applied throughout the course.

Prerequisites/Co-requisites  
Pre-requisite: MAT 115

Student Learning Outcomes  
1. Students will be able to gain knowledge of a broad introduction to physics at the beginning college level.
2. Students will be able to develop physical intuition and problem-solving skills.

Course Materials  
A text book is required for the lecture, laboratory, as well as the homework.  
Required textbook:  
Serway and Vuille: College Physics, volume II, 8th Edition  
Publisher: Thompson-Brooks-Cole

Required Laboratory Manual:  
Huang: College Physics Laboratory II  
Publisher: MCCC

Course website includes course information.  
http://www.mccc.edu/~huangj/  
Mercer email will be used to enhance the communication for the course. Please check regularly.

Computer lab MS 211 is available for students to use for course-related work.

A binder with three-hole puncher or lined note book with pockets. Three pens.

Calculator with trigonometric functions is required for lecture, laboratory and tests. Calculators CAN NOT be shared during any test. Cell phone is not allowed in the classroom. Violation causes disruption to the learning environment and results in lower grade.

Evaluation & Requirements of Students  
Lecture Tests  
60%

Lecture classroom participation  
-5% +5%

Lab report  
20%

Lab tests  
10%

Laboratory participation  
-5% +5%

There is NO make-up test; the lowest grade is dropped.

Class Attendance Policy  
Students are required to attend all classes and should sign attendance sheet each day. In case of transportation, medical or other emergencies, relevant documentation is required to be submitted to instructor. Such documents include car repair invoice in your name, doctor's note, court note, etc.
**Student Dress Policy**

Students are required to dress appropriately. Please keep in mind that the class will share limited space and you'll need to sit, stand, stretch, bend over, and crawl sometimes. Should your shirt/pants have shrunk, we suggest that you put on a large shirt over them.

**Supporting Services**

Our faculty provides office hours to help students with questions. The best way to take advantage of the time is to go prepared with specific questions to ask.

<table>
<thead>
<tr>
<th>Name</th>
<th>Office</th>
<th>Phone</th>
<th>Email</th>
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</thead>
<tbody>
<tr>
<td>Hector Dimas</td>
<td>MS 305</td>
<td>(609) 570-3338</td>
<td><a href="mailto:dimash@mccc.edu">dimash@mccc.edu</a></td>
</tr>
<tr>
<td>Tatiana Morozova</td>
<td>MS 305</td>
<td>(609) 570-3338</td>
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Our library holds the text book for in-library use.

Our tutoring center provides service for physics. Please walk over behind the bookstore to check out the tutoring schedule.

There is an open computer lab MS 211.

**Campus Security**

Emergency number for campus security is (609) 570-2222. The non-emergency number for campus security is (609) 570-3503. You may call security to have a classroom unlocked prior to a class. Please store these numbers in your cell phone.
Academic Integrity

Students are required to perform all the work specified by the faculty and are responsible for the content and integrity of all academic work submitted, such as papers, reports, and examinations. A student will be guilty of violating the Rule of Academic Integrity if he or she:

- uses or obtains unauthorized assistance in any academic work;
- gives fraudulent assistance to another student;
- knowingly represents the work of others as his or her own or represents previously completed academic work as current;
- fabricates data in support of an academic assignment;
- inappropriately or unethically uses technological means to gain academic advantage.

Academic Policies

Academic Integrity

Mercer County Community College is committed to Academic Integrity -- the honest, fair and continuing pursuit of knowledge, free from fraud or deception. This implies that students are expected to be responsible for their own work, and that faculty and academic support services staff members will take reasonable precautions to prevent the opportunity for academic dishonesty.

Violations

The college recognizes the following general categories of violations of academic integrity, with representative examples of each. Academic integrity is violated whenever a student:

A. Uses or obtains unauthorized assistance in any academic work.
   - copying from another student's exam
   - using notes, books, electronic devices or other aids of any kind during an exam when prohibited.
   - stealing an exam or possessing a stolen copy of an exam

B. Gives fraudulent assistance to another student.
   - completing a graded academic activity or taking an exam for someone else
   - giving answers to or sharing answers with another student before, during or after an exam or other graded academic activity.
   - sharing answers during an exam by using a system of signals

C. Knowingly represents the work of others as his/her own, or represents previously completed academic work as current.
   - submitting a paper or other academic work for credit which includes words, ideas, data or creative work of others without acknowledging the source.
   - using another author's words without enclosing them in quotation marks, without paraphrasing them or without citing the source appropriately.
   - presenting another individual's work as one's own.
   - submitting the same paper or academic assignment to another class without the permission of the instructor.

D. Fabricates data in support of an academic assignment.
E. Inappropriately or unethically uses technological means to gain academic advantage

- inappropriately or unethically acquiring material via the Internet or by any other means.
- using any electronic or hidden devices for communication during an exam.

Each instructor and academic support service area is authorized to establish specific guidelines consistent with this policy.

Consequences for Violations of Academic Integrity

For a single violation, the faculty member will determine the course of action to be followed. This may include assigning a lower grade on the assignment, assigning a lower final course grade, failing the student in the course, or other penalty appropriate to the violation. In all cases, the instructor shall notify the chairperson of the Academic Integrity Committee (AIC) of the violation and the penalty imposed.

When two or more violations of academic integrity are reported on a student, the AIC may impose disciplinary penalties beyond those imposed by course instructors. The student shall have the right to a hearing before the AIC or a designated AIC subcommittee.

Appeals

The student has a right to appeal the decision of the instructor or the Academic Integrity Committee. Judicial procedures governing violations of academic integrity are contained in the Student Handbook.

Approved: Board of Trustees March 18, 2004
# Schedule of Lecture and Experiments

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<td>Equipotential</td>
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<td>Current &amp; Voltage Measurements</td>
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<td>Ohm’s Law</td>
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<td>M: 1, 2, 4, 6, 7</td>
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|      |             | 24.4                                         | Polarization | P: I, 4, 8, 16, 17, 39, 52  |
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P: 5, 9  |
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P: 10, 27, 37  |
|      |             | 27.2, 27.6, 27.7 Quantum Physics            |            |                                                                |
|      |             | 26.4, 26.7 General Relativity               | Fuel Cell Energy | Explain hydrogen power to three people. Sign name/address.  |
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**NCYCC Science and Health Professions**

**Fall 2010**