CONTACT
Prof. Jorge C Gibert
Office: 1527, Phone: (305) 237-3025
Lab: 2222, Phone (305) 237-3360
Email: jgibert@mdc.edu (preferred). Please include your name and class information in the subject line.

MEETINGS:
Ref No. 754257: F – 10:00PM -11:40PM - ROOM 2222

OFFICE HOURS
Go to http://faculty.mymdc.net/faculty_member_selector.asp and enter GIBERT for up to date office hours.

TEXTBOOK (recommended only):
University Physics 13th Edition by Young and Freedman

REQUIRED MATERIALS:
Printed materials will be provided for each lab activity so you do not have to buy a lab manual. However, you must provide a unopened 4-pack AAA battery (Duracell or Energizer Only). You will need a scientific calculator, a notebook and a JumpDrive.

COURSE OBJECTIVES:
The purpose of this course is for the student to:
1. Gain physics laboratory skills through hands-on activities and use of physics equipment and technology.
2. Obtain, record and analyze experimental data.
3. Interpret results and apply error theory.
4. Test and verify the fundamental laws and relationships of electromagnetism and optics.
5. Develop report-writing skills
Course competencies can be found at: http://www.mdc.edu/asa/documents/competencies/pdf/PHY2049L.pdf
MDC Learning Outcomes can be found at: http://www.mdc.edu/learningoutcomes/documents/LearningOutcomes.pdf

GRADING:
• Preliminary questions (20%): Preliminary questions for the following lab will be distributed at the end of each lab. The answers to the preliminary questions are due at the beginning of the lab session. NO EXCEPTIONS.
• Experiment (40%): Punctuality, safety, participation, following instructions, properly recording data and care. See Deduction rubric below.
• Lab-report (40%): The data is clearly recorded and organized with appropriate labels so it is easy to read. The report is neat with well-written conclusions that show good critical thinking skills. All questions/extensions are answered correctly. Although the data is taken in groups, whenever requested, you must write your own report. Copying a whole or part of the lab report from another student will be considered cheating.

Warning: Though most of lab reports will be written as a group, whenever requested, each student must submit an independent lab report. Though lab partners are encouraged to discuss the results of experiments each student must write an entirely independent lab report. If a student caught copying from another, both students will receive a ZERO for the report. (See academic misconduct below)

GRADING SCALE:
A — 90%-100%  C — 70%-79.9%  F — 0%-59.9%
B — 80%-89.9%  D — 60%-69.9%  (Note that 89.9 is a B)
Keep in mind that your grade is cumulative. I will not bump or round your grade up at the end of the semester.
INCOMPETES:
No incomplete grade will be given.

ATTENDANCE:
Lab attendance and punctuality is mandatory. If you miss a lab, you will receive zero for the entire lab (preliminary questions, experiment and lab report). You will be able to make up one lab at the end of the semester. Since you will be working in groups, it is imperative that you be on time. I will record attendance at the beginning of each lab session. 1% of the experimental section of the lab will be deducted for each 2 minutes that you are late up to 15%. If you arrive after 8:30 AM, you will not be allowed to do the lab and you will receive a zero for the lab. Keep in mind that if you miss the first two labs or miss three labs during the semester you will be dropped from the course and a “W” grade will be recorded on your academic records.

LAB RULES:
1. Turn off your cell phone during class.
2. You cannot leave the lab until you complete the experiment and discuss the data with the others members of your group.
3. Eating or drinking is strictly forbidden inside the lab.
4. Do not use your laptops or lab computers unless you are instructed to do so by an instructor.
5. Obey all safety rules and regulations.
6. Do not sit on lab benches

   At the end of the lab:
1. Switch off and unplug any electrical equipment.
2. Disconnect all electrical circuits that you have connected.
3. Report any broken or malfunctioning equipment.
4. Arrange equipment tidily on the cart.

   Read the rules and deductions on your lab schedule.

STUDENTS WITH DISABILITIES:
If you believe you have a disability of any kind, you should contact the ACCESS office for an appointment by calling (305) 237-3072. Keep in mind that “The mission of ACCESS is to assist students to maximize their talents, skills, and abilities and recognize disability as an aspect of diversity that is unique to each individual”.

ACADEMIC DISHONESTY:
There will be zero tolerance for academic misconduct. Students that is suspected of cheating, plagiarism, or misrepresenting their work, will be subject to the process specified in the student code of conduct. More information can be found at: http://www.mdc.edu/main/rights/

RULES FOR SUCCESS:
1. The most important rule for success is being on time every lab session.
2. Complete the pre-lab quizzes ahead of time.
3. Check your data as you take it. Do not wait to the end to realize that your experimental set up is wrong and your data has to be re-recorded. You will not be able to complete the lab in for that day.
4. Don’t miss any lab.
5. Make sure you don’t leave before you are absolutely certain of what you have to write on your report. Consult with the lab assistant or myself before you leave.
6. Take notes, ask questions, and participate.
7. Exchange phone numbers or e-mail addresses with your group members.
8. Keep all of your notes and other class materials in one place.
9. Feel free to contact me whenever you need to. E-mail me. Don’t wait until the last minute to ask for help.

Resources: Free Tutoring/Help: STEM FYE Student Success Center-2214. Science Resource Center 2221
PHY2049L - LAB SCHEDULE - Fall 2013

REF. No: 754257: Friday 10:00AM – 11:40AM

Instructor: Jorge Gibert

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<thead>
<tr>
<th>LAB#</th>
<th>DATE</th>
<th>EXPERIMENT</th>
<th>IMPORTANT INFORMATION</th>
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</thead>
<tbody>
<tr>
<td>INTRODUCTION</td>
<td>Aug-30th</td>
<td>Introduction, Syllabus, Circuits Experiment Board</td>
<td>Last day to drop with refund</td>
</tr>
<tr>
<td>1</td>
<td>Sept-6th</td>
<td>Coulomb’s Law – Force vs. Distance</td>
<td></td>
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<tr>
<td>2</td>
<td>Sept-13th</td>
<td>Coulomb’s Law – Force vs. Charge</td>
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<tr>
<td>3</td>
<td>Sept-20th</td>
<td>Ohm’s Law</td>
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<td>4</td>
<td>Sept-27th</td>
<td>Series and Parallel Circuits</td>
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<tr>
<td>5</td>
<td>Oct-4th</td>
<td>RC Circuit</td>
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<tr>
<td>6</td>
<td>Oct-11th</td>
<td>e/m Ratio of the Electron</td>
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<tr>
<td>7</td>
<td>Oct-18th</td>
<td>The Magnetic Field in a Slinky</td>
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<tr>
<td>8</td>
<td>Oct-25th</td>
<td>Force on a Current-carrying Wire</td>
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<tr>
<td>9</td>
<td>Nov-1st</td>
<td>RLC-Circuits</td>
<td>Nov 6th: Last day to withdraw</td>
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<tr>
<td>10</td>
<td>Nov-8th</td>
<td>Polarization</td>
<td></td>
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<tr>
<td>11</td>
<td>Nov-15th</td>
<td>Focal Length and Magnification of a Mirror</td>
<td></td>
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<tr>
<td>12</td>
<td>Nov-22nd</td>
<td>Focal Length and Magnification of a Thin Lens</td>
<td></td>
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<tr>
<td>13</td>
<td>Nov-29th</td>
<td>Thanksgiving</td>
<td>College is Closed</td>
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<tr>
<td>14</td>
<td>Apr-17th</td>
<td>Diffraction of a double Slit</td>
<td></td>
</tr>
<tr>
<td>Makeup</td>
<td>Apr-24th</td>
<td>Electrical Energy</td>
<td>Report MUST be turned in same day.</td>
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</tbody>
</table>

Important:

LAB RULES (Deduction for each of the first two violations*):

1. Turn off your cell phone during class. (4 %)
2. Eating or drinking is strictly forbidden inside the lab. (4%)
3. Work on your assigned able and group only. (6%)
4. Keep unrelated conversations to a minimum. (5%)
5. Do not use your laptops or lab computers unless you are instructed to do so by the instructor. (4%)
6. Obey lab’s safety rules and regulations. (6%)
7. Do not sit on lab benches. (4%)
8. Work with your group only. Don’t exchange information or mingle with other groups. (6%)
9. Do not leave the lab until your group has completed the experiment and discussed the results. (10%)

At the end of the lab:

1. Switch off and unplug any electrical equipment. (4%)
2. Use rubber bands to fasten all electrical cords. Do not wrap the cords around the equipment (6%).
3. Disconnect all electrical circuits that you have connected (4%)
4. Report any broken or malfunctioning equipment. (4%)
5. Make sure every nut is attached to its corresponding screw (i.e. end-stops, track legs, holders, clamps, etc.) (5%)
6. Arrange equipment tidily back on the cart. (5%)
7. Ask your instructor to check your equipment before you leave. (5%)

*After the second violation you will be asked to leave the room and receive a zero for the lab.