

Course Number and Name	PHY 201 Electricity and Magnetism
Course Coordinator	Dr. Jimmy Romanos
Class Time and Location	M-W-F 8:00 - 8:50 am Science One Bld. 403 9:00 - 9:50 am Frem Civic Center 406 T-Th 9:30 - 10:45 am Sage Hall G06
Credits and Contact Hours	4 Credit hours (3 Lecture/1 Lab)
Semester	Spring 2015
Last Revised on	8/27/2015

CURRENT CATALOG DESCRIPTION

Electricity and magnetism: Coulomb's law, Gauss Theorem, electrical field and potentials, Ampere's law and magnetic field, electrical current and Ohm's law, electromagnetic induction, alternating current and electromagnetic wave. Optics including refraction, interference and diffraction.

COURSE PREREQUISITE/COREQUISTE

Undergraduate level MATH 201 Minimum Grade of D

INSTRUCTOR

Name: Dr. Jimmy Romanos

E-mail: jimmy.romanos@lau.edu.lb

Course Page:

Office: Nicol Hall 308C (Beirut) BA 7205 (Byblos)

Office Hours:

Beirut, Tu-Th (10:45 am – 11:45 am) or by appointment

Byblos, M-W-F (11:00 am – 12:00 pm) or by appointment

COURSE LEARNING OUTCOMES

A student completing this course should be able to:

- Acquire knowledge of the basic laws of electromagnetism.
- Use mathematical tools to describe and to quantify physical phenomena related to electricity and magnetism.
- Develop skills and use techniques for solving problems addressed in the course.
- Acquire scientific and intellectual abilities to think critically about physical systems that surround us.

COURSE GRADING AND PERFORMANCE CRITERIA

The first exam will cover chapter 21-25	15% of the total grade
The second exam cover chapter 26-30	15% of the total grade
Final exam will consider whole material	30% of the total grade
The lab work (report, attendance)	25% of the total grade
Homework	5% of the total grade
Participation and classroom attitude	3% of the total grade
Project	7% of the total grade

TEACHING METHOD

Every week one chapter will be introduced, around 6 assigned problems will be solved in class. The student is requested to read chapter at home before the lecture, and to study daily.

TEXTBOOK AND REFERENCES

Principles of Physics.by Halliday/ Resnick/ Jearl Walker,(Wiley 9th Edition).

MAJOR TOPICS COVERED IN THE COURSE AND TENTATIVE SCHEDULE

Mainly, every week one chapter will be introduced in the order shown in the following table (tentative schedule).

Week	CHAPTERS
1	Chapter 21: Electric Charge
2	Chapter 22: Electric Fields
3	Chapter 23: Gauss' Law
4	Chapter 24: Electric Potential
5	Chapter 25: Capacitance
Exam I (Chapter 21-25)	
6	Chapter 26: Current and Resistance
7	Chapter 27: Circuits
8	Chapter 28: Magnetic Fields
9	Chapter 29: Magnetic Fields Due to Current
10	Chapter 30: Induction and Inductance
Exam II (Chapter 26 – 30)	
11	Chapter 31: Electromagnetic Oscillations and Alternating Current
12	Chapter 32: Maxwell's Equations
Final Exam (Chapter 21-32)	
13	Chapter 33: Electromagnetic Waves - Images



GUIDELINES FOR THE GRADING SYSTEM

Grade	Quality Points	Guidelines over 100
A	4	≥ 90
A-	3.67	87 – 89
B+	3.33	83 – 86
B	3.0	80 – 82
B-	2.67	77 – 79
C+	2.33	73 – 76
C	2	70 – 72
C-	1.67	67 – 69
D+	1.33	63 – 66
D	1	60 – 62
F	0	≤ 59
P	No quality Points	
NP	No quality Points	
U	No quality Points	
W	No quality Points	
I	No quality Points	

POLICY ON CHEATING AND PLAGIARISM

Students caught cheating on an exam receive a grade of zero on the exam in their first cheating attempt and receive a warning. Students caught cheating for the second time will receive a grade of "F" in the course and another warning. Plagiarism on assignments and project work is a serious offense. If plagiarism is detected, a student will be subject to penalty, similar to the cheating case, which ranges from receiving a zero on the assignment concerned to an "F" in the course in addition to a warning.

ATTENDANCE POLICY

1. Students are expected to attend all classes.
2. For valid reasons, students may miss classes for a maximum that is equivalent to two regular weeks (*MWF: 6 absences and T-Th: 4 absences*)
3. When exceeding the maximum number of absences, it is the instructor's prerogative to ask the concerned student to stop attending and drop the course. In this case, it is the student's responsibility to drop the course; otherwise a grade of "F" or "NP" will be given.
4. In exceptional justified cases (long illness, etc...), where absences exceed the maximum, the student has to petition to the department Chair to be allowed to stay in the course.
5. Students are held responsible for all the material presented in the classroom, even during their absence



WITHDRAWAL POLICY

1. A student who withdraws after the Drop/Add period and by the end of the 5th week of classes (10th day of classes for Summer Modules) will obtain a “WI” on that particular course. The student may process such request directly through the Registrar’s Office.
2. A student who withdraws from a course between the 6th week and the end of the 10th week of classes (18th day of classes for Summer Modules) will receive either a “WP” or a “WF”. “WP” or “WF” will be determined by the instructor based on the achieved academic performance in that course till the time of withdrawal.
3. The “WI” and the “WP” will not count as a repeat; whereas the “WF” will count as a repeat.
4. “WI”, “WP” and “WF” will not count towards the GPA calculation.

Last day for early withdrawal for fall 2015 (WI): October 8, 2015

Last day for withdrawal from courses for fall 2015 (WP/WF): November 13, 2015

