

MELİKŞAH UNIVERSITY FACULTY OF ENGINEERING AND ARCHITECTURE

EEE 203 Electromagnetic Fields Syllabus (Fall 2014)

<u>Course Title</u> EEE 203 Electromagnetic Fields

<u>Class Meetings</u> Wednesday 13:00 – 13:45 in Room 105 and Friday 13:30 – 15:15 in Room B01 (TR) Wednesday 14:00 – 14:45 in Room 105 and Friday 8:30 – 10:15 in Room 105 (EN)

Course Web Site balyimez.weebly.com

Instructor Serkan Balyimez

Email serkanba@gmail.com

Office Hours Monday and Wednesday between 11:00-11:30 in Room 438 or by appointment

Course Content

- 1. Scalar and Vector Fields
- 2. Coulomb's Law and Electric Field
- 3. Electric Potential
- 4. Gauss's Law
- 5. Capacitance and Dielectrics
- 6. Current and Resistance
- 7. Direct-Current Circuits
- 8. Magnetic Fields
- 9. Sources of Magnetic Fields
- 10. Faraday's Law
- 11. Inductance and Magnetic Energy
- 12. Alternating-Current Circuits
- 13. Maxwell's Equations and Electromagnetic Waves

<u>Books</u>

- Class notes are the fundamental text. Below are some books that may help you succeed.
- Physics for Scientist and Engineers, Serway and Jewett, 8th Edition
- Introduction to Electrodynamics, David J. Griffiths, <u>3rd Edition</u> or <u>4th Edition</u>
- Elektromagnetik Teori, David J. Griffiths, 3rd Edition, Translation: Basri Unal
- <u>Here</u> is a link to some physics books in Turkish.

Grading Policy

- Homework
 20%

 Midterm 1
 20%
- Midterm 2 20%
- Final 40%

Student Responsibility

- Review the class material before coming to class
- Attend the class
- Take notes
- Do the homework on time
- Observe the honor code
- Ask help if necessary

Homework Homework will be assigned at the course webpage. Some test problems will be very similar or identical to the homework problems. Each student should study the homework problems to succeed in this course. Although students are encouraged to discuss homework problems with their classmates, each student should submit their own work. Cheating will not be tolerated. Late homework will not be accepted.

<u>Classroom Etiquette</u> Please turn off all cell phones before entering the classroom. Private chatter during lecture is not allowed. Questions in lecture are always good. Be respectful to your fellow classmates. Condescending or insulting remarks cannot be tolerated.