

University of Waterloo
Department of Electrical and Computer Engineering
Spring Term 2013
ECE 375 Electromagnetic Fields

Name	Location	Phone	Email
Instructor			
Omar M. Ramahi	EIT 4154	x37460	oramahi@uwaterloo.ca
Teaching Assistants			
1. Hadi Amarloo	E5-5026-1	X31454	hamarloo@uwaterloo.ca
2. Mohammad Faraji-Dana	E5-5006-3	X31444	mfarajid@uwaterloo.ca
3. Miguel Ruphuy	EIT-4153-8	X37251	maruphuy@uwaterloo.ca
4. Zhao Ren	EIT-154		z3ren@uwaterloo.ca
Lab Instructor			
Nizar Massoudi			nmessaou@uwaterloo.ca

Course Timetables:

Lectures

M, F, 1:30-2:50
 RCH 302

Office Hours

M: 9:00-10:00

Tutorials

Wednesday, 4:30-5:20, RCH 302

Laboratory

Check your section

Course Text

Electromagnetics (2011)
 Author: B. M. Notaros

Examinations

The course has one midterm examination and one final examination.

The Midterm Exam is schedule for Tuesday, June 18 at 4:30pm

All of the examinations are closed book, but a formula sheet will be provided.

You may use a calculator (not containing stored text or programs) on the exams.

Marking Scheme

Item	Weight
Midterm Exam	20%
Final Examination	50%
Laboratory Work	15%
Homework	10%
Attendance	5%

ECE 375 Course Material Outlines

Week	Week of	Topics	Book Chapters
1	May 6	Review of Electrostatics and Magnetostatics	1-7
2	May 13	Maxwell Equations, Potential Functions, Time-Harmonic Fields, Poynting Theorem	8
3	May 20	Wave Equations, Uniform Plane Waves, (one lecture due to Victoria Day Holiday)	8, 9
4	May 27	Waves in Media, Dispersion and Group Velocity	9
5	June 3	Dispersion Reflection and Transmission of Plane Waves	9 10
6	June 10	Reflection and Transmission of Plane Waves	10
7	June 17	Midterm Exam Tuesday June 18, 4:30-5:30, DWE-2527, RCH-307	
8	June 24	Plane Wave Interaction with half space Field Analysis of Transmission Lines	11
9	July 1	Field Analysis of Transmission Lines	11,12
10	July 8	Transmission Lines	12
11	July 15	Transmission Lines	12
12	July 22	Transmission Lines	12
13	July 29	Radiation and Antennas (two lectures as we follow a "Monday" schedule)	14
	Exam Dates:	Final Exam: August 9, 12:30-3:00, PAC	

Laboratory

- The laboratory is an integral part of the course. You **MUST** complete the laboratory assignments to obtain a passing grade for the course.

Homework Assignments

- Assignment will be collected in class as indicated on the HW assignment sheet.

Communication

- Learn will be the official medium for posting class material such as class notes, homework solutions,... etc. I will also post the HW assignment on Learn and send you a notice via e-mail when postings are made.
- It is your responsibility to make sure that the e-mail address provided by the dean office is the correct one. If it is not, you need to inform me during ASAP so that you will be added to the e-mail list.
- There are approximately 110 students in this class, so please try not to send me (your professor) any e-mail messages unless you have no other means in communicating with me, and unless the matter is urgent.

Office Hours

- Office hours for your professor will be posted outside his office and will be communicated to you shortly. Keep in mind that office hours are supposed to help you if you are having trouble understanding the material. Do not expect to come to office hours to have your professor solve your homework problems.
- Office hours are not a substitute for the lecture. This means that if you miss the lecture, don't expect to get a tutorial for what you missed during office hours. The important thing to keep in mind is that your professor is willing and ready to help you IF you want to help yourself in the first place!

Lecture Notes

- Most lecture notes will be posted on Learn. Lecture notes are intended to complement the book and help you to understand the material.

Academic Integrity

- Students are expected to know what constitutes academic integrity, to avoid committing academic offences, and to take responsibility for their actions. Students who are unsure whether an action constitutes an offence, or who need help in learning how to avoid offences (e.g., plagiarism, cheating) or about "rules" for group work/collaboration should seek guidance from the course professor, TA, academic advisor, or the Undergraduate Associate Dean. For information on categories of offences and types of penalties, students should refer to Policy #71, [Student Academic Discipline](#). Students who believe that they have been wrongfully or unjustly penalized have the right to grieve; refer to Policy#70, [Student Grievance](#).

Classroom Policies

1. You are expected to abide by the policies of the university.
2. All electronics that are not related to medical conditions are not allowed in class. This includes computer notebooks, PDAs, ...etc.
3. Cell phones must be turned off.
4. You are expected to arrive before the lecture begins. If for some reason you must arrive late, you must enter the class room from the rear door and set as close to the door and as quietly as possible.
5. Food is not allowed in class.
6. Any activities that will cause any interference with the instruction or with the learning environment will not be tolerated. Any student causing disturbance to the class will be warned and if the offense is repeated, the student will be reported to the Administration Office. According to University of Waterloo policies, "Academic offences shall include, **but shall not be limited to**, the following: **Infringing unreasonably** on the work of other members of the University community (e.g., disrupting classes or examinations; harassing, intimidating or threatening others). "

Note that talking in the classroom without permission can potentially constitute a disturbance in the classroom and disruption to the lecture

7. If you need to speak in the class room and during instruction, you need to ask permission by raising your hand.
8. Class representatives are expected to convey the sentiment and feedback of the students to the administrators.