Prof. Yen-Chieh Huang Dept of Electrical Engineering National Tsing-Hua University Hsinchu, Taiwan 30013 tel: 886-3-5162340 office: HOPE 301, Delta 856 email: ychuang@ee.nthu.edu.tw EE214000 Electromagnetics, Fall, 2012

Last update Oct. 5, 2012

EE 214000 Electromagnetics

國立清華大學電機工程科學系 Fall 2012

Prof. 黃衍介

Class location: EECS 209 Class schedule: M3M4W2

Office hours @ Delta 856: 12 ~ 13 pm, Monday; 10 am ~ 12 pm, Wednesday.

Teaching Assistants (TAs): Primary: 王奕竹 (dk0933304592@hotmail.com), Secondary: 吳明雄 (wuing911119@hotmail.com), Tel: 5162333

General Information

This course is to introduce the basic concepts on electromagnetics, covering topics of transmission line, electrostatics, magnetostatics, time-varying field, plane waves etc. To be consistent with the modern trend of electrical engineering, I bring forward the transmission line to the beginning of the lecture. The content of transmission line is mostly adopted from the textbook by Ulaby. However, the same concepts are also given in the textbook by Cheng.

This course will be lectured mostly in English and slightly in Chinese for clarity.

Textbook

David K. Cheng, <u>Field and Wave Electromagnetics</u> 2nd Ed., Addison Wesley, 1989. **Reference book**

Fawwaz T. Ulaby, <u>Fundamentals of Applied Electromagnetics 6th Ed.</u>, PEARSON Prentice Hall, 2007. (新月圖書,東華書局代理)

Grading Policy:

Homework	20% (late homework not accepted)
Weekly quiz (open books, notes)*	20% (will become the weighting factor for final score
adjustment)	
two midterm exams	20% x 2
one final exam	20%
two midterm exams	

* weekly quiz includes those lectured, to be lectured, or assigned in homework. **Course Handouts:** Bound copies are now available at 水木書苑. Updates can be found on <u>http://www.hope.nthu.edu.tw</u>. The password to access the course website will be announced by the teaching assistant.

Course Contents

Introduction, transmission line, vector calculus, electrostatics, magnetostatics, time-varying field, electromagnetic waves, EM wave at boundaries, radiation and antenna (if time allows).

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Re-scheduled Classes

- Sep. 17, M3, TA announces class information
- Sep. 19, W2, class meets as usual
- Sep. 20, 6:20-7:10 pm, class makeup (補課) in the same classroom
- Sep. 24, 26, no class
- Oct. 4, 6:30-8:20 pm, class makeup (補課) in the same classroom
- Nov. 21 (校運會), W2, class meets as usual (補課)