

UNIVERSITY OF MARYLAND

DEPARTMENT OF ELECTRICAL AND COMPUTER ENGINEERING

ENEE 681

Spring 2020

TITLE: Electromagnetic Theory II

http://terpconnect.umd.edu/~antonsen/ENEE681_S20/

INSTRUCTOR: T M. Antonsen Jr.
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405-1635

TA: TBD

ROOM: [EGR 3106](#)

TIME: TuTh 11:00 AM – 12:15 PM

OFFICE HOURS: (TMA) by appointment.

**COURSE
DESCRIPTION**

Continuation of ENEE 680. Theoretical analysis and engineering applications of Maxwell's equations. The homogeneous wave equation. Plane wave propagation. The interaction of plane waves and material media. Retarded potentials. The Hertz potential. Simple radiating systems. Relativistic covariance of Maxwell's equations..

TEXT: Modern Electrodynamics by Andrew Zangwill, Cambridge University Press, ISBN 978-0-521-89697-9

EXAMS: There will be three exams: two midterms and a final exam. Some of these will be take-home

HOMEWORK: Assignments will be posted on the web.
Assignments may involve computation.

GRADING: Your course grade will be computed on the basis of 425 points apportioned as follows:

Two midterms	200
Final: (Usually take-home, due around Dec. 17)	125
Homework	<u>100</u>
	425