

Electromagnetic Field Theory

Introduction

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Course Background

- Engineering Mathematics
- Engineering Physics

Course Objective

- To analyze field and potential due to the static charges.
- To evaluate static magnetic fields.
- To understand how material effect from the electric & magnetic field.

Course Outcome

- Apply vector calculus to understand the behavior of static electric fields in standard configurations.
- Apply vector calculus to understand the behavior of static magnetic fields in standard configurations.
- Describe and analyze electromagnetic wave propagation in free-space.
- Describe and analyze transmission lines.
- Work in a small team using a cooperative learning rules.
- Communicate electromagnetic concepts both orally and in writing.

Habits of Successful Students

- Seek to understand and be understood
- Read the assigned material before class
- Attend and participate in class
- Review your class notes
- Do your homework and turn it in - on time
- Study with teammates
- Start preparing for an exam at least one week ahead

What is expected of you

- Study the book.
- Do the problem sets.
- Participate in class.
- Solve the assignment.
- Give both midterm and end semester exam.

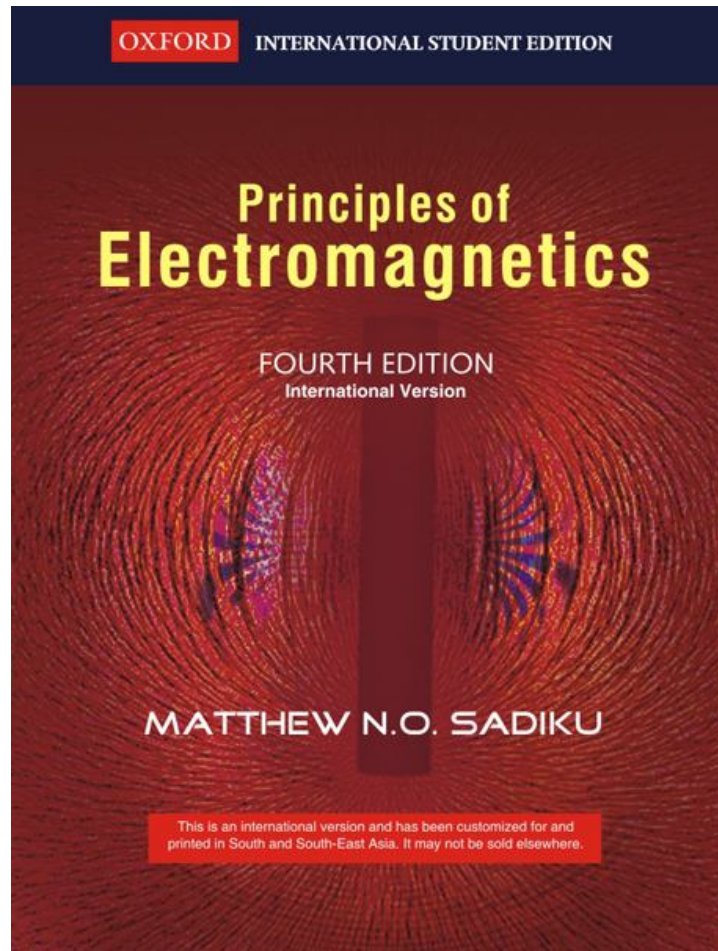
Class Participation

- Show up on time. Late comers may not be allowed in class.
- Ask questions. The only bad question is the one that you never ask.
- Bring your book to class.
- Learn from your teammates and be loyal to the team.

Etiquette

- Treat e-mail or website correspondence as a professional exchange of information.
- Turn in homework assignments on time.
- Turn off cell phones, beepers, i-pods and other electronic items during the class period.

Text Book



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