

Phys 411 Syllabus - Spring 2019 Intermediate Electricity and Magnetism

- **Instructor :** Anson Hook
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- **Class meeting times - Lecture :** T,TH 9:30am - 10:45am in Toll Physics Building 1201
Problem review : F 10:00am - 10:50am in Toll Physics Building 1201
- **Textbook :** *Introduction to Electrodynamics*, by D.J. Griffiths, Fourth Edition
- **Attendance :** Attendance in lectures is strongly encouraged, but will not count towards the course grade.
- **Office Hours :** By appointment
- **Course Related Policies :** The university policies on matters related to courses may be found at <http://www.ugst.umd.edu/courserelatedpolicies.html>
- **Grading Criteria :** 30% Homework, 35% midterm and 35% Final
- **Homework :** The homework assignments (problem sets) will generally be assigned on Tuesday on ELMs, and should be handed in class the following Tuesday or in folder outside Room 3160 in the Physical Sciences Complex by 5 PM. For full credit for any written homework or exam problem, in addition to the correct answer, you must show the steps/justify your approach as much as possible.
- **Exam :** There will be one midterm exam given during one of the lecture periods. The final exam will be given during the standard exam period. The date and time of the exam are not yet determined. You must take the final exam to pass the course. There will be no make-up for the exams, unless there is a strong documented excuse (medical problem, religious holiday, or serious family crisis). Details such as which topics will be covered in each exam, whether crib sheets will be allowed etc. will be posted later.

- Schedule

Week	Date	Main Topics	Chapter in Griffiths
1	Jan 28	Electrostatics; (Review of) Vector Analysis	1,2
2	Feb 4	Electrostatics; (Review of) Vector Analysis	1,2
3	Feb 11	Electrostatics, Special techniques (Laplaces Equation)	2,3
4	Feb 18	Special techniques	3
5	Feb 25	Electric Fields in Matter	4
6	Mar 4	Magnetostatics	5
7	Mar 11	Magnetic Fields in Matter	6
8	Mar 25	Magnetic Fields in Matter; Electrodynamics	6,7
9	Apr 1	Electrodynamics	7
10	Apr 8	Conservation Laws	8
11	Apr 15	Electromagnetic Waves	9
12	Apr 22	Electromagnetic Waves; Potentials and Fields	9,10
13	Apr 29	Potentials and Fields	10
14	Mar 6	Electromagnetic Radiation	11