PHYSICS 3420: Electricity and Magnetism I

Syllabus

January 15, 2020

Lecture Sessions:	MWF $10:00-10:50$ am	Rm. 205, Physics Building
Instructor:	Xiaochao Zheng	email: xz5y@virginia.edu
Office Hours:	W 1-3pm, Th 1-3pm walk-in welcome	Office 135, Physics Building
Grader:	Kevin Vu	email: kv6xh@virginia.edu

Course Organization

The course comprises lecture sessions with in-lecture active learning components, weekly homework assignments, two in-class midterm exams, and one final exam. During each lecture, we will introduce important concepts, theorems, and go over examples and derivations. Each week we will spend half a lecture for active participation such as short quizzes and discussions. The in-lecture quizzes or discussion serve as an active learning component. For quizzes, students will be working in groups of 3-4 and hand in individual solutions by the end of the lecture. The average score of each group will be assigned to everyone in the same group.

Textbook and Other Study Material

The **textbook** is "Introduction to Electrodynamics", by David J. Griffiths, 4th edition (ISBN-13: 978-1108420419 ISBN-10: 1108420419; Cambridge) is recommended. If you have to use the 3rd edition (ISBN-13: 978-0138053260 ISBN-10: 013805326X; Prentice Hall), please note you need to be extra careful when doing homeworks, as problems will be assigned from the book.

Lecture notes (if any) will be posted on Collab.

Quiz and homework solutions will be scanned and posted on Collab.

Exams and Grading

There will be two midterm exams during class hours and one final exam. The format of the exam (open- or close-book) is TBD at this moment. The final grade will be determined as: 30% from in-lecture quizzes and homework assignments (with 5% from quizzes and 25% from homeworks); 15% each from two in-class midterm exams; and 40% from one final Exam.

Class Calendar

The course calendar along with important dates will be provided in a separate document. The two midterms will be held on Friday Feb. 21st and Friday April 3rd. The schedule for the final exam will be announced later. Please inform the instructor as soon as possible if you have pre-arranged travel plans on exam dates.