

**Syllabus**  
**Physics 4210, Electricity and Magnetism**  
**Fall 2019**

Regular Meeting Times: MoWeFr 9:00AM - 9:50AM, Phys 115

Recitation Meeting Times: Mo 3:00PM - 4:20PM, PHYS 116

Instructor: Dr. Carlos Ordonez (or-dawn-ez)    PHYS 302, 940-565-4860, cao@unt.edu

Instructor's Office Hours: MoWeFr 10:00AM - 11:00AM or by appointment

Course Packet: The course packet is required for each class. PHYS 4210 Course Packet by C. A. Ordonez is available at the Eagle Images Design and Digital Print Center in Room 221 of the University Union.

Scientific Calculator: A non-communicating calculator is required for each class. The calculator should have the  $\sqrt{x}$ ,  $\ln(x)$ , and  $y^x$  functions and scientific notation.

Textbook: The course textbook is required: Introduction to Electrodynamics, 4th Edition, by D. J. Griffiths, Cambridge University Press (2017).

Attendance: Attendance is required.

Prerequisite(s): PHYS 2220 and MATH 2730.

Course Requirements:

Three Exams:    Each Counts 30%

Final Exam:    Counts 30%

Assignments:    Count 10%

Exams: The lowest of the four exam grades is dropped. If an exam is missed for any reason, it will be the one dropped. Make-up exams will **not** be given. Exams are multiple choice, open book/notes, and a non-communicating calculator is required. Answer sheets are provided. If you are more than 20 minutes late to an exam, you will not be allowed to take the exam. If you turn in your exam, you must leave the room. Items (e.g., calculators) may *not* be shared during an exam.

Assignments: Each assignment is due at the beginning of class one week following the designated start date, unless specified otherwise. Any assignments that have start dates during the first week of class may be turned in up to one week late without penalty. You may only turn in assignments for credit during class, and assignments may not be turned in after the class period that precedes pre-finals days. You may help each other when working assignments (but not when working exams). However, each person must submit separate work. After you finish an assignment, you will be responsible for having it graded (if a grader is available) or grading it yourself (if answers are provided). You may revise your work and regrade the assignment up to the due date. An assignment is penalized 30

points (out of 100) if turned in late by up to one week. Assignments are not accepted more than one week late. Staple each assignment separately and put your name on each. (The instructor has a stapler if you need one.)

Learning Objective: To develop analytical problem-solving skills and learn about electricity and magnetism. The classroom meetings are optimized to maximize the efficiency at which problem-solving skills are developed. A typical classroom meeting includes a class lecture with an interactive problem-solving component.

Extra Practice Problems and Optional Assignments: It is recommended that each set of extra practice problems be worked in preparation for each exam. Bring up questions regarding how to work extra practice problems during Recitations. Extra practice problems and any assignments that are designated as optional are not to be turned in.

### Schedule

Aug. 26, 28, 30	MWF	Ch. 1 Vector Analysis
Sept. 2	M	Labor Day (no class)
Sept. 4, 6	WF	Ch. 1 Vector Analysis
Sept. 9, 11	MW	Ch. 1 Vector Analysis
Sept. 13	F	Ch. 2 Electrostatics
Sept. 16, 18, 20	MWF	Ch. 2 Electrostatics
Sept. 23, 25, 27	MWF	Ch. 2 Electrostatics
Sept. 30	M	<b>Exam 1</b>
Oct. 2, 4	WF	Ch. 4 Electric Fields in Matter
Oct. 7	M	Ch. 4 Electric Fields in Matter
Oct. 9, 11	WF	Ch. 5 Magnetostatics
Oct. 14, 16	MW	Ch. 5 Magnetostatics
Oct. 18	F	Ch. 6 Magnetic Fields in Matter
Oct. 21, 23, 25	MWF	Ch. 6 Magnetic Fields in Matter
Oct. 28	M	<b>Exam 2</b>
Oct. 30, Nov.1	WF	Ch. 7 Electrodynamics
Nov. 4, 6, 8	MWF	Ch. 7 Electrodynamics
Nov. 11, 13, 15	MWF	Ch. 3 Potentials
Nov. 18, 20, 22	MWF	Ch. 9 Electromagnetic Waves
Nov. 25	M	<b>Exam 3</b>
Nov. 27	W	Review
Nov. 29	F	Thanksgiving Break (no class)
Dec. 2	M	Review
Dec. 4	W	Pre-finals Day
Dec. 6	F	Reading Day (no class)
Dec. 11	8:00AM - 10:00AM	<b>Final Exam</b>

## **Addendum to Course Syllabus**

The University of North Texas makes reasonable academic accommodation for students with disabilities. Students seeking reasonable accommodation must first register with the Office of Disability Access (ODA) to verify their eligibility. If a disability is verified, the ODA will provide you with a reasonable accommodation letter to be delivered to faculty to begin a private discussion regarding your specific needs in a course. You may request reasonable accommodations at any time, however, ODA notices of reasonable accommodation should be provided as early as possible in the semester to avoid any delay in implementation. Note that students must obtain a new letter of reasonable accommodation for every semester and must meet with each faculty member prior to implementation in each class. Students are strongly encouraged to deliver letters of reasonable accommodation during faculty office hours or by appointment. Faculty members have the authority to ask students to discuss such letters during their designated office hours to protect the privacy of the student. For additional information, refer to the Office of Disability Access website at <http://www.unt.edu/oda>. You may also contact ODA by phone at (940) 565-4323.

Emergency Notification & Procedures. UNT uses a system called Eagle Alert to quickly notify students with critical information in the event of an emergency (i.e., severe weather, campus closing, and health and public safety emergencies like chemical spills, fires, or violence). In the event of a university closure, contingency plans for covering course materials will be distributed by email.

UNT's policy on Academic Integrity can be found at:

<https://vpaa.unt.edu/fs/resources/academic/integrity>

According to UNT Policy 06.003, Student Academic Integrity, academic dishonesty occurs when students engage in behaviors including, but not limited to cheating, fabrication, facilitating academic dishonesty, forgery, plagiarism, and sabotage. A finding of academic dishonesty may result in a range of academic penalties or sanctions ranging from admonition to expulsion from the University.

Drop information is available in the schedule of classes at:

<http://registrar.unt.edu/registration/schedule-of-classes>