Professor: Loris Magnani Office: Physics 238 Phone: 542-2876
E-Mail: loris@uga.edu
Web Page: www.physast.uga.edu/~loris/phys4201/prob.html
Class Hours: MWF 10:20 AM – 11:10 AM in Physics 327
Office Hours: M 3:30 PM – 5:00 PM (or by appointment via Zoom or Skype)
Call Number: PHYS 4201: 25800
PHYS 6201: 25801

Textbook: *Introduction to Electrodynamics – 4th ed.* – David J. Griffiths (Pearson: Addison Wesley) - Required. It will also be used in PHYS 4202.

This course is an upper-level physics course dealing with the basics of electrodynamics theory. This is a two-semester course and PHYS 4201 is the first part that deals primarily with vector analysis, electrostatics, electric fields in matter, and magnetostatics.
I assume you have at least two years of Calculus and PHYS 3700 and PHYS 3900 as part of your background.

*The course syllabus is a general plan for the course; deviations announced to the class by the instructor may be necessary.*

**Homework**

4 to 8 homework problems will be assigned each week on the Monday class of that week. They are due the following Monday. You may work with others in the class on the homework, but, if you choose to do so, you must write on the homework who you worked with. There is no penalty for working with others, but I will assign the same exact grade to all the people who worked on the problems together. I will not grade all the problems assigned, but will choose one problem from each homework assignment to
grade. Your weekly performance on the chosen problem that is graded will dictate your final homework grade. For every two days that any homework assignment is late, one point (out of a total of ten points) will be deducted from the final score for that homework.

**Exams**

There will be three midterms; on Monday, September 14th, on Wednesday, October 7th, and on Monday, November 9th. The final exam for this course is cumulative and will be on Wednesday, December 16th, from 8 AM till 11 AM. All the exams will be open book and may be taken online during the allotted class time. If you miss an exam, you will have to schedule a makeup exam within one week of the original exam date.

**Final Grade Determination**

The homework will constitute 15% of your grade, the midterms 20% each for a total of 60%, and the final exam will be 25% of your total score. Your numerical score based on the above percentages will be calculated at the end of the semester and letter grades will be assigned using the following scale:

- A corresponds to 91.00 – 100.00
- A- corresponds to 87.00 – 90.99
- B+ corresponds to 83.00 – 86.99
- B corresponds to 80.00 – 82.99
- B- corresponds to 76.00 – 79.99
- C+ corresponds to 72.00 – 75.99
- C corresponds to 68.00 – 71.99
- C- corresponds to 60.00 – 67.99
- D corresponds to 50.00 – 59.99
- F corresponds to less than 50.00

**PHYS 6201 Requirements**

If you are taking this course for PHYS 6201 credit (either as a graduate or undergraduate student) you will have to do an extra homework problem for
each homework set (this will be graded in addition to the regularly graded problem). Also, on the final exam you will have to do two extra exam problems.

**COVID-19 Guidelines for When to Attend**

In light of the COVID-19 pandemic, students will have to follow the University guidelines (see below for more details) while in room 327. These guidelines include the wearing of masks and respecting social distancing conventions. In room 327, seats that will allow for social distancing are designated and will be used by the students. To allow for this, given the size of the classroom, only one-third of the class will meet on any given day. Thus, the class will be divided into three sections by last name. One section will attend the class in person, while the other two will follow the class remotely via Zoom. If your last name begins with A-E, you will be in section 1, if your last name begins with F-M you will be in section 2, and if your last name begins with N-Z, you will be in section 3.

We will start with section 1 attending in person on the first day of class (August 21, 2020) and sections 2 and 3 will attend that first class using Zoom. Section 2 will attend the Monday, August 24 class in person, and section 3 will attend the Wednesday, August 26 class in person. Then we will continue in that sequence for the rest of the semester. Details on how to join the Zoom meeting will be sent by email to each student prior to each class.

**Coronavirus Information for Students**

**Face Coverings:**

Effective July 15, 2020, the University of Georgia—along with all University System of Georgia (USG) institutions—requires all faculty, staff, students and visitors to wear an appropriate face covering while inside campus facilities/buildings where six feet social distancing may not always be possible. Face covering use is in addition to and is not a substitute for social distancing. Anyone not using a face covering when required will be
asked to wear one or must leave the area. Reasonable accommodations may be made for those who are unable to wear a face covering for documented health reasons. Students seeking an accommodation related to face coverings should contact Disability Services at https://drc.uga.edu/.

**DawgCheck:**

Please perform a quick symptom check each weekday on DawgCheck—on the UGA app or website—whether you feel sick or not. It will help health providers monitor the health situation on campus: https://dawgcheck.uga.edu/

**What do I do if I have symptoms?**

Students showing symptoms should self-isolate and schedule an appointment with the University Health Center by calling 706-542-1162 (Monday-Friday, 8 a.m.-5 p.m.). Please DO NOT walk-in. For emergencies and after-hours care, see https://www.uhs.uga.edu/info/emergencies.

**What do I do if I am notified that I have been exposed?**

Students who learn they have been directly exposed to COVID-19 but are not showing symptoms should self-quarantine for 14 days consistent with Department of Public Health (DPH) and Centers for Disease Control and Prevention (CDC) guidelines. Please correspond with your instructor via email, with a cc: to Student Care & Outreach at sco@uga.edu, to coordinate continuing your coursework while self-quarantined. If you develop symptoms, you should contact the University Health Center to make an appointment to be tested. You should continue to monitor your symptoms daily on DawgCheck.

**How do I get a test?**

Students who are demonstrating symptoms of COVID-19 should call the University Health Center. UHC is offering testing by appointment for students; appointments may be booked by calling 706-542-1162.

UGA will also be recruiting asymptomatic students to participate in surveillance tests. Students living in residence halls, Greek housing and off-campus apartment complexes are encouraged to participate.
What do I do if I test positive?

Any student with a positive COVID-19 test is **required** to report the test in DawgCheck and should self-isolate immediately. Students should not attend classes in-person until the isolation period is completed. Once you report the positive test through DawgCheck, UGA Student Care and Outreach will follow up with you.

**Student Responsibilities**

Please make a reasonable attempt to arrive on time. If you must leave earlier than the scheduled end of class, please do so quickly and quietly. Class disruptions or distracting behavior will not be tolerated.

Ask for clarification on anything you find unclear, ambiguous, or unspecified in this syllabus. This includes both course policies and astronomical topics.

Know the rules concerning withdrawals and incompletes, published in the UGA *Undergraduate Bulletin*. Note that I will NOT withdraw you from the course for excessive absences.

**Academic Honesty**

All students are responsible for knowing, understanding, and abiding by the academic honesty policy of the University of Georgia, which can be found online at [http://honesty.uga.edu](http://honesty.uga.edu)

If you have any questions about this policy and how it pertains to your work in this course, please ask me for clarification.

*UGA Student Honor Code: "I will be academically honest in all of my academic work and will not tolerate academic dishonesty of others." A Culture of Honesty, the University's policy and procedures for handling cases of suspected dishonesty, can be found at [www.uga.edu/ovpi](http://www.uga.edu/ovpi). Every course syllabus should include the instructor's expectations related to academic honesty.*
Mental Health and Wellness Resources

- If you or someone you know needs assistance, you are encouraged to contact Student Care and Outreach in the Division of Student Affairs at 706-542-7774 or visit [https://sco.uga.edu](https://sco.uga.edu). They will help you navigate any difficult circumstances you may be facing by connecting you with the appropriate resources or services.
- UGA has several resources for a student seeking mental health services ([https://www.uhs.uga.edu/bewelluga/bewelluga](https://www.uhs.uga.edu/bewelluga/bewelluga)) or crisis support ([https://www.uhs.uga.edu/info/emergencies](https://www.uhs.uga.edu/info/emergencies)).
- If you need help managing stress anxiety, relationships, etc., please visit BeWellUGA ([https://www.uhs.uga.edu/bewelluga/bewelluga](https://www.uhs.uga.edu/bewelluga/bewelluga)) for a list of FREE workshops, classes, mentoring, and health coaching led by licensed clinicians and health educators in the University Health Center.
- Additional resources can be accessed through the UGA App.

If you have any questions or concerns about this syllabus, please contact me.

**Tentative** Class Schedule & Readings:

<table>
<thead>
<tr>
<th>Week of or Day</th>
<th>Topic/Readings</th>
</tr>
</thead>
<tbody>
<tr>
<td>August 21</td>
<td>introduction – vector analysis – Ch. 1</td>
</tr>
<tr>
<td>August 23</td>
<td>more on vector analysis – Ch. 1</td>
</tr>
<tr>
<td>August 30</td>
<td>even more on vector analysis – Ch. 1</td>
</tr>
<tr>
<td>Sept. 6</td>
<td>Labor Day holiday on Sept. 7 – electrostatics – Ch. 2</td>
</tr>
<tr>
<td>Sept. 13</td>
<td>electrostatics – Ch. 2</td>
</tr>
<tr>
<td><strong>First midterm: September 14th</strong></td>
<td><strong>Ch. 1</strong></td>
</tr>
<tr>
<td>Sept. 20</td>
<td>electrostatics – Ch. 2</td>
</tr>
<tr>
<td>Sept. 27</td>
<td>electrostatics, special techniques – Ch. 2-3</td>
</tr>
<tr>
<td>Oct. 4</td>
<td>special techniques – Ch. 3</td>
</tr>
<tr>
<td><strong>Second midterm: October 7th</strong></td>
<td><strong>Ch. 2</strong></td>
</tr>
<tr>
<td>Oct. 11</td>
<td>special techniques – Ch. 3</td>
</tr>
<tr>
<td>Oct. 18</td>
<td>special techniques – Ch. 3</td>
</tr>
</tbody>
</table>
Oct. 25 – Fall Break holiday on Oct. 30 – electric fields in matter – Ch. 4

Withdrawal Deadline – Tuesday, October 27th

Nov. 1 – electric fields in matter – Ch. 4
Nov. 8 – electric fields in matter – Ch. 4

Third midterm: November 9th – Ch. 3

Nov. 15 – magnetostatics – Ch. 5
Nov. 22 – magnetostatics – Ch. 5; Thanksgiving break – Class will meet on Monday, Nov. 23; no class on Wednesday and Friday of this week

After Thanksgiving Break, classes resume online only

Dec. 2 – magnetostatics – Ch. 5
Dec. 9 – magnetostatics – Ch. 5

Wednesday, Dec. 9 is the last day of classes

FINAL EXAM – Friday, December 16th – Cumulative