

The Electromagnetic Universe Laboratory
Gustavus Adolphus College
Fall 2022

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Textbook: *The Electromagnetic Universe Laboratory Manual 2022*, by Henry, Miller, Niederriter, Petricka, and Saulnier.

Required Materials: Two 80-sheet quadrille ruled lab notebooks.

1. **General:** Twelve laboratory sessions will be held during the semester. There will be no lab during the week of the Nobel Conference or Thanksgiving.
2. **Attendance:** Regular attendance at all labs is required. Students will be held responsible for informing themselves of all announcements and assignments made in the laboratory classroom as well as in the daily classroom meetings. Any last minute communications will be by electronic mail.
3. **Makeup:** Any student who misses a lab during the semester with a valid (certifiable) excuse, must arrange with the instructor to make up the lab outside of regular class time.
4. **Laboratory Work:** All lab work for each experiment will be detailed in the lab handout. The introduction in the manual covers important information on lab course objectives, **notebook and formal report formats**, grading, content, and late report penalties. **Refer to it often.**
5. **Pre-lab Preparation** - The **entire** lab handout should be read in preparation for the lab period. You must have read the experimental procedure and complete the title, objective, and brief theory section of your lab notebook before attending your lab section. Any other pre-lab assignments must be complete in their entirety before attending the lab.
6. **Lab Notebooks:** A lab notebook is required for each of the experiments. The notebook is due at the beginning of the following lab session. These reports will be written entirely in the student's lab notebook, and thus two such notebooks will be needed for the course. Notebook reports will be graded on a 10 point basis, and *there will be a penalty for late reports*. Each student should write his/her own lab reports, even though the experiments were performed with a partner or partners. *Lab reports submitted which are found to be identical (or nearly identical) will have the total grade points divided among the identical notebooks.*
7. **Scientific Writing:** Scientific writing assignments (formal reports) will be given throughout the semester, as shown in the schedule. The format and due date for the assignments will be announced in lab, and each will be graded on a 20 point basis. Writing assignments should be word processed, double spaced on white 8.5" x 11" paper. There will be a penalty for late writing assignments.
8. **Incompletes:** A grade of incomplete will be given only for work not completed due to circumstances beyond the control of the student.

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November 16, 17 RLC Transient Circuits

November 23, 24 Thanksgiving – No Lab

Nov. 30 , Dec. 1 AC Circuits (**WA6**)

December 7, 9 Lab Final