Physics 422  
Topics in Electromagnetism  
Spring 2019

Instructor:  
Raymond Frey, Wil 462, 346-5873, rayfrey@uoregon.edu
Lectures:  
TuTh 15:00-16:50, Wil 318
Office hours:  
tbd
Text:  
Griffiths, Introduction to Electrodynamics, 4th Ed
Pre-requisite:  
PHYS 413 or equiv. Check with Prof Frey if questions.
WWW:  
http://pages.uoregon.edu/~rayfrey/422/ (this page)
Grading:  
Midterm Exam (20%), Homework (50%), Final Exam 30%
TA  
Kent Mastroianni. Office hour tbd
Other Resources:  
Homework Solutions

News/Announcements:

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<thead>
<tr>
<th>Date</th>
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<td>Mar 20</td>
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Lecture/Homework/Exam Schedule (to be updated continuously):

<table>
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<tr>
<th>Week</th>
<th>Lecture Topic(s)</th>
<th>Text Chs.</th>
<th>Homework (Problems from text)</th>
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<td>Apr 2</td>
<td>review of Maxwell's equations; Conservation Laws</td>
<td>7 (rev), 8</td>
<td>8.1, 8.2, 8.4, 8.7, 8.13, 8.14 due in class Thur 4/11</td>
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Course Description and Plan (approximate):

The goal is to over most of Chapters 8-12 of Griffiths. This includes electromagnetic waves, radiation, and relativity.

Homework:

- Weekly homework will be posted above.
- Students are required to show their work and reasoning as appropriate to receive full credit. A model solution will be posted in week one.
- You are welcome to work on the homework with your classmates, and please feel free to seek help from me.
- Complete solutions will be available from this web site soon after the due date. Please refer to these.

Exams:

There will be one midterm and a final exam. Exams will be closed book, but the generally useful equations and information will be provided.

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