# Welcome to Physics 462

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# **Syllabus and Schedule**

- Course Website: http://ticc.mines.edu/csm/wiki/index.php/PHG N-462\_Fall-2015
- This is a wiki and will include the syllabus, all homework assignments, a schedule, reading and video assignments.

# **Clicker Registration**

- Everyone needs to register their clickers on the iClicker website. Even if you have before.
- Everybody gets <u>two</u> free clicker days to cover forgotten clickers, bad batteries, etc. That's automatic.
- Beyond those two needs to be part of an excused absence.

## Textbook

- Pollack & Stump same as intermediate
- Griffiths will be lightly supported

## **Office hours**

Mondays 10-11:50am Wednesdays 11-11:50am Thursdays 10-11:50am

And by appointment

TA: Monday/Wednesday 12-1pm

## Grading

Lecture participation: 10 %
Homework: 30 %
3 Exams: 20 % each

This is an upper-division class. Numerical averages will be low. That doesn't mean grades will be. Everything will be substantially curved if necessary. It will, however, remain possible (if difficult) to fail.

## Homework

- Points are assigned substantially based on explanation, diagramming, and presentation. I posted an example of my own homework on the wiki.
- Working together is okay. Identical turn-ins are not okay. Using online (or offline) solutions manuals or stashes is <u>specifically forbidden</u>.
- If you want to contest a score, contact the grader. You may appeal the decision to me if you have a <u>good</u> reason.
- Note again that you will probably not need 90-100% on homeworks to do well in the class.

#### Exams

- Two mid-terms: One traditional written, one oral
- Half the class will take an oral exam the week of October 5<sup>th</sup> and a paper exam on the week of November 9<sup>th</sup>
- Other half will take a paper exam on the week of October 5<sup>th</sup> and an oral exam the week of November 9<sup>th</sup>
- More detail as test time approaches

- 50 minute in-class exam
- Time-limited take home
- Hybrid in-class/take home

# Flipped classroom format

- Pre-lecture assignments: Reading or watching video lectures <u>ahead of time</u>
- In-class: Discussions, Q&A, clicker questions, activities as appropriate
- Not all lessons will have pre-assignments watch wiki schedule

#### Content choice

• Relativistic E&M – Motivations, tensor formulation

• Wave optics – Interference, coherence, interferometry, maybe diffraction

## Other activities

- Peer lecture activities
- You'll individually prepare a twelve-minute minilecture and deliver it to two peers, who'll provide feedback
- First peer lecture on Friday September 25<sup>th</sup>; more detail to come
- Recitations
- Bonus problems

#### Announcements

• First homework will be posted on the wiki by Friday, to be turned in at the start of the following Friday

• Suggested readings/videos will be posted on the wiki before each lecture

• Bring your clicker. Points count Friday