## Welcome to PHY 481

Electrostatics

Prof. Danny Caballero

### **Contacting Danny**

Office: 1310-A BPS

Email: caballero@pa.msu.edu

Cell phone: 517-420-5330 (texting is fine)

#### Important Sites

- Course Webpage: dannycab.github.io/phy481msu\_f2018/
- Slack Team: phy481msuf2018.slack.com (Check your email)

#### Course Activities

- Evening Exams (2 of them; Oct 3 and Nov 7; 7-9pm) 20%
  each
- Final Exam (Time and Location: TBD) 20%
- Homework (Lots of it; Due on Fridays) 40%
- Clickers Extra Credit for Lowest Midterm

Much more detail on website

#### Clickers

Self-register your clicker

https://goo.gl/nrebCr

Type the 8 digit code on the back of the clicker next to your name. If you can't read the code, please come see me.

#### Learning is a social and collaborative act!

#### Homework Help Session

**Evening session twice per week (Location TBD)** 

Question to you: When should we do this?

- 1. Wednesday 4-5pm
- 2. Wednesday 5-6pm
- 3. Thursday 4-5pm
- 4. Thursday 5-6pm
- 5. None of these times work

Reminder: Homework is due on Fridays.

How likely are you to attend the help sessions?

- 1. Very likely
- 2. Likely
- 3. Not likely, I really want a different day/time
- 4. I'm unlikely to attend regardless of schedule

## This Week!!!

- Homework 1 is already up (Due Wed. Sept. 7)
- Read (seriously do this!) Griffiths Ch 1.1-1.4 & 2.1-2.2 [1]
- Download Anaconda distribution of Python

Stay up-to-date by checking website, calendar, and discussion forum regularly.

[1]: I am assuming that Ch. 1 of Griffiths is mostly review.

#### Computational Homework problems

- We will be using Python on homework problems this semester.
- Installation instructions will appear on the Slack team site.
- Homework questions will take the form of a Jupyter notebook, which you can print to PDF and turn in.
- If you get stuck somewhere, post on Slack, so your classmates benefit from your question.
- Computational HW problems are turned in via Dropbox file requests. Look for link at the top of each homework assignment and include your name in the filename!

#### Spartan Code of Honor Academic Pledge

As a Spartan, I will strive to uphold values of the highest ethical standard. I will practice honesty in my work, foster honesty in my peers, and take pride in knowing that honor is worth more than grades. I will carry these values beyond my time as a student at Michigan State University, continuing the endeavor to build personal integrity in all that I do.

#### Advice from those who came before you

- Go to class every day and participate in the clicker questions/discussion
- The homework is challenging but very important, don't short cut it
- Start your homework early and spend your time on understanding all of it
- Don't do it alone; form study groups
- Attend the help session, but start the homework first

Thinking of what you want to get out of your college education and this course, which of the following is *most* important to you?

- 1. Acquiring information (facts, principles, concepts, procedures)
- 2. Learning how to use information and knowledge in new situations
- 3. Developing lifelong learning skills

All three of these goals are clearly important. However, which of these three goals do you think you can do on our own (say, before class)?

- 1. Acquiring information (facts, principles, concepts, procedures)
- 2. Learning how to use information and knowledge in new situations
- 3. Developing lifelong learning skills

# Questions?

# What do you think PHY 481 is about?

# Electromagnetism is the foundational field theory of physics

Think about everything you already know about electromagnetism (it's a lot already!).

Work with a partner to map out the electromagnetism concepts that you know and how they are related to each other.