

**WELCOME TO PHY 481**

**ELECTROSTATICS**

Prof. Danny Caballero

## **CONTACTING DANNY (HE/HIM/HIS)**

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## **CONTACTING BRYAN STANLEY (HE/HIM/HIS)**

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## IMPORTANT SITES

- Course Webpage: [dannycab.github.io/phy481msu\\_f2019/](https://dannycab.github.io/phy481msu_f2019/)
- Slack Team: [msuphysics481fall2019.slack.com](https://msuphysics481fall2019.slack.com)
  - *Invite link in syllabus*

# COURSE ACTIVITIES

- Evening Exams (2 of them) - 20% each
  - 1415 BPS; Oct 2 and Nov 6; 7-9pm
- Final Exam (Dec 10: 1415 BPS) - 20%
- Homework (Lots of it; Due on Fridays) - 40%
- Clickers - Extra Credit for Lowest Midterm

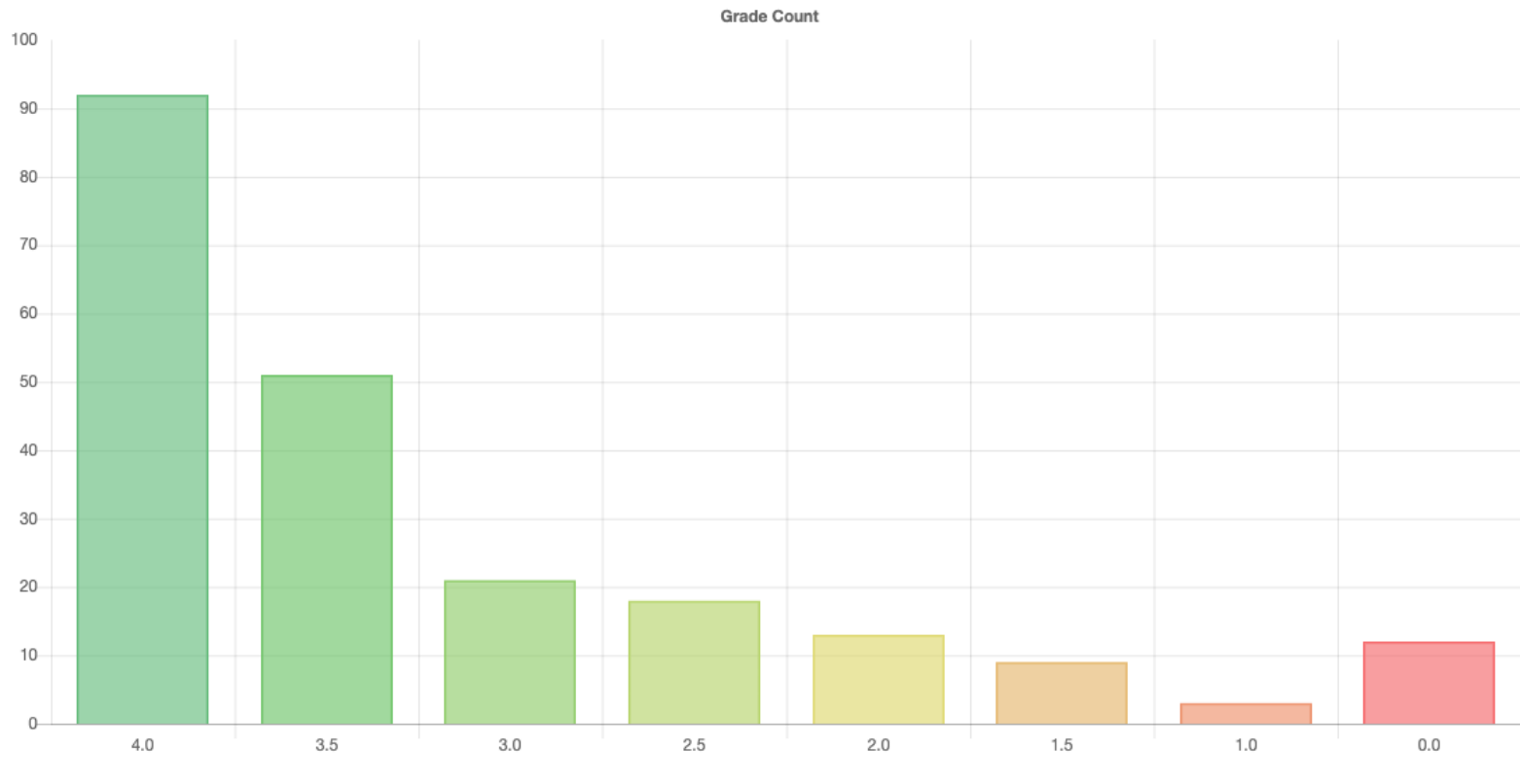
[Much more detail on website](#)

# GRADING SCHEME

- 4.0 - 90-100
- 3.5 - 80-90
- 3.0 - 70-80
- 2.5 - 65-70
- 2.0 - 60-65
- 1.5 - 55-60
- 1.0 - 50-55
- 0.0 - Below 50

I do not curve grades.

# HISTORICAL GRADES IN 481



# 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.

**I give you credit for any click.**

# **EXAM RE-WRITES**

Exams can be very stressful.

- For both Exam 1 and 2, you will be allowed to rework the exams to earn up to 50% of the credit back.
- You will need to rework the exam and turn in a page that addresses what you did incorrectly.



Learning is a social and collaborative act!

## **HOMEWORK HELP SESSION**

**Evening sessions twice per week (1300 BPS)**

Question to you: When should we do this?

- A. Wednesday 6-7pm
- B. Wednesday 7-8pm
- C. Thursday 6:30-7:30pm
- D. Thursday 7:30-8:30pm
- E. None of these times work

Reminder: Homework is due on Fridays.

How likely are you to attend the help sessions?

A. Very likely

B. Likely

C. Not likely, I really want a different day/time

D. I'm unlikely to attend regardless of schedule

# THIS WEEK!!!

- Homework 1 is already up (Due Fri. Sept. 6)
- 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 Slack 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!*

# COMMITMENT TO AN INCLUSIVE CLASSROOM

I am committed to creating an inclusive classroom. If I can do anything to make the classroom a better learning environment for you, please let me know.

If you observe or experience behaviors that violate our commitment to inclusivity, please let me know as soon as possible.

If I violate this principle, please let me know or please tell the undergraduate department chair, Stuart Tessmer ([tessmer@pa.msu.edu](mailto:tessmer@pa.msu.edu)).

# **CONFIDENTIALITY AND MANDATORY REPORTING**

One of my responsibilities is to help create a safe learning environment. It is my goal that you feel able to share information related to your life experiences. I will seek to keep information you share private.

However, I am required to share information regarding sexual misconduct, relationship violence, or information about criminal activity with the University.

# **CONFIDENTIALITY AND MANDATORY REPORTING**

Students may speak to someone confidentially by contacting:

- MSU Counseling and Psychiatric Service (CAPS)
  - [caps.msu.edu](http://caps.msu.edu) or ph: 517-355-8270
- MSU's 24-hour Sexual Assault Crisis Line
  - [endraper.msu.edu](http://endraper.msu.edu) or ph: 517-372-6666
- Olin Health Center
  - [olin.msu.edu](http://olin.msu.edu) or ph: 517-884-6546

# **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
- Danny is never trying to trick you.

**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.



## Physics GRE Prep Sessions



- Physics Graduate Students will be hosting Physics GRE Prep Sessions
- Go over practice problems
- Help with any specific questions you may have
- Go over test taking strategies
- \*Suggested topics can change based on the questions you have
- Contact Devyn Cantu with any questions (rysewykd@msu.edu)

| Date                                 | Time   | Location | Suggested Subjects*   |
|--------------------------------------|--------|----------|---|
| Wed.<br>September 4 <sup>th</sup>    | 4-5 pm | BPS 1400 | Classical, E&M, Optics/Waves                                |
| Thurs.<br>September 12 <sup>th</sup> | 4-5 pm | BPS 1400 | Thermo/Stat Mech, Quantum/Atomic, Special Relativity, Misc. |
| Mon.<br>September 30 <sup>th</sup>   | 4-5 pm | BPS 4270 | Classical, Optics/Waves                                     |
| Tues. October<br>8 <sup>th</sup>     | 4-5 pm | BPS 4270 | E&M, Thermo/Stat Mech                                       |
| Wed. October<br>16 <sup>th</sup>     | 4-5 pm | BPS 1400 | Quantum/Atomic, Special Relativity                          |
| Thurs. October<br>24 <sup>th</sup>   | 4-5 pm | BPS 1400 | Exam Tips/Methods, Misc.                                    |