

# ELECTRICITY AND MAGNETISM

## PHYS 272

Spring 2020

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<b>Instructor:</b>	Remy Prechelt	<b>Time:</b>	MWF 8:30 – 9:20
<b>Email:</b>	<a href="mailto:prechelt@hawaii.edu">prechelt@hawaii.edu</a>	<b>Place:</b>	WAT 112
<b>Office:</b>	WAT 302		

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Welcome to **PHYS272** - or how to have fun understanding the universe and learn some skills to help you survive the zombie apocalypse.

This class will teach you:

- how to understand electrostatics and magnetostatics (i.e. how to build a wind-powered generator when society collapses).
- how to build and understand basic circuits (i.e. how to wire an electric fence to defend against a horde of zombies).
- what is light and how to control it (i.e. how to build your own solar death ray to melt those pesky zombies)

My **number one goal is for you all to learn some physics, understand how important it is in the modern world, and have fun doing it.** Hopefully, you'll never have to use these skills in a real zombie apocalypse.

**Office Hours:** Monday: 1pm - 2pm, Wednesday: 12pm - 1pm, or by appointment in WAT 302.

**Textbook:** Young & Freedman, *University Physics 15th Ed.*

**Grading:** Your overall course grade will be curved. Your grade will be computed as follows: Quizzes (5%), Recitations (10%), Homework (20%), Midterm 1 (20%), Midterm 2 (20%), Final (25%).

**Homework:** There will be one written homework assigned each **Friday** and due the following **Friday**. This will consist of several questions (zombie-related where possible). I will **drop** your **lowest** written homework. Written Homework is due at the start of class. There will also be weekly assignments given through the Mastering Physics (IDAP) course. These will primarily be conceptual and will be worth roughly half a written homework. I will also **drop** your lowest IDAP grade. These will typically be assigned **Wednesday** and due the following **Wednesday** at midnight.

**Late Homework Policy:** Late homework **is accepted**. Any homework turned in after class ends will incur a 15% penalty. For each additional day past the official due date, an additional 15% penalty will be incurred (after 7 days, the homework will be worth zero points).

**Quizzes:** There will be a quiz at the start of class on **Monday** with topics chosen from the previous week's subject matter. I will drop your **two lowest** quiz scores.

**Recitations:** The recitation sessions are mandatory (and are included in your grade!). These problem-solving sessions will be extremely useful in developing your intuition for solving physics problems.

**Academic Honesty:** Academic honesty will be taken **very** seriously. All incidents will automatically be reported to the department chair and dean. Lack of knowledge of the academic honesty policy is not a reasonable explanation for a violation.