Email: pthorman@unm.edu
Office Hours:  Monday 12:00-1:00, Regener 109
            Wednesday 3:00 -4:00, Regener 109
            Friday 2:00-3:00, Physics and Astronomy Dept. Lobby (NE corner of Yale and Lomas)
            Or by appointment
Mailbox: In the hallway outside the Physics and Astronomy Dept. Main Office (near Lomas entrance)
Website: Updated versions of this syllabus, practice tests and other extra credit materials, and homework and test schedules will be posted at http://panda.unm.edu/Courses/thorman/Phys152Fa08/

Course Goals: This course will focus on building your intuition for physical systems, through demonstrations and conceptual questions, and solving quantitative problems using mathematical models. Problem solving will also be emphasized in the related problems course, offered Wednesdays from 2:00-2:50 (call no. 16250).

Prerequisites: Students will need to be comfortable with trigonometry (sine, cosine, etc.) and algebra. Calculus is not required.

Required Materials:
   Scientific calculator (trig, inverse trig, and exponents required) and a ruler.
   i>Clicker: You will be required to use an i>Clicker device to respond to in-class questions. These can be purchased in a bundle with your textbook, from the bookstore, or you can re-use an i>Clicker from another class (although you will still need to register your device on the website for this class.)
   WebAssign: Homework will be due each week using the WebAssign system. You will need an access card to use this service, which can be purchased at the bookstore, or online at http://www.webassign.net.

If you have any trouble setting up a WebAssign login, or registering your i>Clicker, you can get help during the first two weeks of class; see http://panda.unm.edu/Courses/StudentHelp/index.html for scheduled help sessions, or email Cathy Webster at webster@unm.edu.

Homework: Each week, there will be one WebAssign homework assignment, due 11PM Friday, and one written homework assignment, due at the start of class on Wednesday. Early homework may be turned in to my mailbox; late homework will not be accepted.

Grading Policy: Final grades will be based on:

   Two mid-term exams: 15% each
   Final exam: 25%
   WebAssign: 15%
   Written homework: 15%
   Participation and attendance: 15%
Exams may be “curved” to an appropriate average score, but no curve will result in a lowered grade for anyone. Opportunities to earn extra credit for additional problem sets and practice exams will be announced in class and posted to the website. Participation and attendance will be assessed beginning in the second week of class, using your i>Clicker responses (so make sure to bring your clicker to class!) Due to the cumulative nature of the course, poor attendance will make it very difficult to keep up with new material, and your attendance score will be progressively reduced if you miss more than 3 classes during the semester.

**Syllabus and Tentative Homework Schedule:** Changes to the homework and exam schedule will be announced in class and posted to the website.

**Week 1:** Electric charges and the electric field  
Reading: Chapter 16, Sections 1-9  
Homework (due September 3): Chapter 16, Problems 4, 13, 14, 27, 30, 33, 42, 53, 54, 67

**Week 2:** Electric potential and capacitance  
Reading: Chapter 17, Sections 1-5, 7-9, 11  
Homework (due September 10): Chapter 17, Problems 3, 4, 11, 14, 24, 38, 43, 47, 50, 70

**Week 3:** Electric current and circuits  
Reading: Chapter 18, Sections 1-3, 5-6, 9-10  
Homework (due September 17): Chapter 18, Problems 4, 9, 26, 29, 34, 37, 52, 53, 58, 67

**Week 4:** More about circuits  
Reading: Chapter 19, Sections 1-5, 7  
Homework (due September 24): Chapter 19, Problems 2, 3, 5, 16, 19, 23, 27, 32, 38, 42, 67

**Week 5:** Magnetism and magnetic fields  
Reading: Chapter 20, Sections 1-7, 11  
Homework (due October 1): Chapter 20, Problems 8, 11, 28, 33, 40, 41, 42, 48, 49, 61, 78

**Week 6:** Magnetic induction  
Reading: Chapter 21, Sections 1-5, 7  
Homework (due October 8): Chapter 21, Problems 2, 3, 8, 15, 23, 30, 33, 34

Mid-term Exam 1 (October 3): Chapters 16-21

New homework and exam schedules will be announced and posted after the first mid-term exam.

**ADA Notice:**

Qualified students with disabilities needing appropriate academic adjustments should contact the instructor as soon as possible to ensure their needs are met in a timely manner. Handouts are available in alternative accessible formats upon request.