Instructor: ______________________________
E-mail: _______________________________@ndsu.edu
Office Hours: ______________________________

Primary Text: Laboratory instructions provided through LON-CAPA system.
Materials: Notebook, pen.

Laboratory Coordinator: Paul Omernik, South Engineering 110
E-mail: paul.omernik@ndsu.edu
Phone: 231-7047

Bulletin Description: Electric charge, field, potential, and current; magnetic field; capacitance; resistance; inductance; RC, RL, LC and RLC circuits; waves; optics.

Course Objective: This laboratory course is designed to complement Physics 252 by using hands-on experimentation to reinforce the theory and ideas developed during the lecture. By the end of the semester, students should have a good working knowledge of the concepts that were presented, be able to communicate these ideas effectively, and understand the importance of working in collaboration with their peers.

Class Expectations: Students are expected to attend all laboratory exercises and to have read the relevant material prior to each meeting. Students are expected to treat the instructor and fellow students with respect; this includes arriving to the lab in a timely fashion to avoid disturbing the class.

Specifically, it is department policy that phones should be silenced and put away during your time in the lab. If your phone is damaged because it was not put away, you are responsible for anything that happens to it.

Assignments and Grading: I will grade your reports based on the demonstration of your knowledge of physics, your utilization of the scientific method, and your ability to communicate your objectives and findings, not on the error of your results. It is acceptable to have results which are what was expected, as long as you have a reasonable explanation as to why (detailed error analysis). Your grade will not depend
directly on your results, as long as you work to get the best results that you can, and understand the relevant physics. If, during the course of your experiment, you suspect your results aren’t correct, please inform me—often the problem can be corrected in class.

At the end of the semester, the fully-completed lab with the lowest score will be dropped from consideration in your final grade.

Your final grade in Physics 252L will be based on the following scale: A - 90% and above; B - 80-89%; C - 70-79%; D - 60-69%; <60%, F.

Lab reports that are late by less than a week are worth half credit. Lab reports more than a week late are worth zero points. Failure to turn in one lab assignment will reduce your final grade by one letter. Failure to turn in two or more lab assignments will result in automatic failure of the course.

**Attendance:** Attending all lab exercises is mandatory. Make-up labs will be considered only in the case of emergencies and at the discretion of the lab instructor. Unless explicitly noted, assume class is occurring as scheduled.

**Feedback:** Students are invited to share any concerns they have about the course or their performance with the instructor at any time.

**Labs:** An approximate list of labs are as follows:

- Lab 1  Electrostatics
- Lab 2  Gauss’ Law
- Lab 3  Electrical Measurement I
- Lab 4  Electrical Measurement II
- Lab 5  The Oscilloscope
- Lab 6  RC Circuits
- Lab 7  Transformers
- Lab 7  RL Circuits
- Lab 8  RLC Circuits
- Lab 9  Reflection, Refraction, & Total Internal Reflection
- Lab 10  Geometrical Optics
- Lab 11  Optical Instruments
- Lab 12  Interference & Diffraction

Any students with disabilities or other special needs, who need special accommodations in this course, are invited to share these concerns or requests with the instructor and contact the Disability Services Office ([www.ndsu.edu/disabilityservices](http://www.ndsu.edu/disabilityservices)) as soon as possible.

The academic community is operated on the basis of honesty, integrity, and fair play. NDSU Policy 335: Code of Academic Responsibility and Conduct applies to cases in which cheating, plagiarism, or other academic misconduct have occurred in an instructional context. Students found guilty of academic misconduct are subject to penalties, up to and possibly including suspension and/or expulsion. Student academic misconduct records are maintained by the Office of Registration and Records. Informational resources about academic honesty for students and instructional staff members can be found at [www.ndsu.edu/academichonesty](http://www.ndsu.edu/academichonesty).