

# PHYS 1112L/2212L – Physics Laboratory II

Spring 2009 (1 Credit hour)

Monday: 1:25 – 3:25 P.M.; 3:35 – 5:35 P.M. in 312 Rogers Hall

Tuesday: 10:00 A.M. – 12:00 P.M. in 312 Rogers Hall

**Instructors:** Dr. Sarah P. Formica, ext: 2701, office: 107 Rogers Hall, [spformica@ngcsu.edu](mailto:spformica@ngcsu.edu)  
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## Course Syllabus

January 12 <sup>th</sup> /13 <sup>th</sup>	<b>Lab 1:</b> E-field Calculations for Point Charges.
January 19 <sup>th</sup> /20 <sup>th</sup>	MLK Holiday – No Labs
January 26 <sup>th</sup> /27 <sup>th</sup>	<b>Lab 2:</b> Electric Fields and Equipotentials.
February 2 <sup>nd</sup> /3 <sup>rd</sup>	<b>Lab 3:</b> Magnitude of the Electric Field.
February 9 <sup>th</sup> /10 <sup>th</sup>	<b>Lab 4:</b> Ohm's Law.
February 16 <sup>th</sup> /17 <sup>th</sup>	<b>Lab 5:</b> RC Time Constant.
February 23 <sup>rd</sup> /24 <sup>th</sup>	<b><u>Midterm Exam (Labs 1-5).</u></b>
March 2 <sup>nd</sup> /3 <sup>rd</sup>	<b>Lab 6:</b> The Magnetic Field in a Coil.
March 9 <sup>th</sup> /10 <sup>th</sup>	<b>Lab 7:</b> The Magnetic Field in a Slinky.
March 23 <sup>rd</sup> /24 <sup>th</sup>	<b>Lab 8:</b> Reflection and Refraction of Light.
March 30 <sup>th</sup> /31 <sup>st</sup>	<b>Lab 9:</b> Thin Lenses.
April 6 <sup>th</sup> /7 <sup>th</sup>	<b>Lab 10:</b> Single-Slit Diffraction
April 13 <sup>th</sup> /14 <sup>th</sup>	<b><u>Final Exam (Labs 6-10).</u></b> (Make-up lab)

**Required Materials:** The main textbook for this course is available to buy from the university print-shop. You are also required to have a laboratory notebook, which is available to buy from the university bookstore.

**Preparation:** Before each lab, you should read through the experiment you will be performing.

**Attendance:** Regular class attendance is expected. You must arrive to lab on time. If you arrive to lab ten or more minutes late, you will not be allowed to do the lab and you will receive a grade of zero for that experiment. If you know you will be late or miss lab because of an emergency or sickness, contact the instructor prior to the lab so that you can set up a time to make up the missed work. A grade of WF may be given for six or more absences at the discretion of the instructor.

**Exams:** One midterm and one final exam will be given on the dates listed above. The exams will cover the concepts in the labs with discussion questions and simple problem solving. Make-up tests for other than valid excuses will not be given. If you know that you will have to miss an exam, see your instructor for other possible arrangements.

**Grading:** Seventy percent of your course grade will come from the weekly assigned labs. The remaining thirty percent of your grade will be determined by the two tests (15% each). A = 90 – 100; B = 80 – 89; C = 70 – 79; D = 60 – 69; F < 60.

**Class Evaluations:** Class evaluations at NGCSU are now conducted on-line through Banner. Evaluation of the class is considered a component of the course and students will not be permitted to access their course grade until the evaluation has been completed. The evaluations will be accessible beginning one week prior to Final Exam week.

**Early Alert/Early Intervention:** We are committed to your success in this course and at this university. We may, therefore, refer you to other persons and/or services available to help you achieve academic success. In turn, if you are referred, you will be expected to comply with the referrals. Please understand that such referrals are not a form of punishment, rather, they are intended to help you.

**Academic Honesty:** NGCSU's integrity code- "On my honor, I will not lie, cheat, steal, plagiarize, evade the truth, or tolerate those who do" -reflects the university's commitment to academic integrity. The "Academic Integrity Policy" (2004-2006 Undergraduate Bulletin, pp. 78-81) is incorporated herein by reference.