

LECTURERS	Lecture Time	Office	Phone	e-mail
Prof. T. Humanic	8:30 am	PRB 2144	247-8950	humanic.1@osu.edu
Dr. K. Akli	9:30 am	PRB 4114	292-9626	akli.1@osu.edu

Course Manager: Dr. R. Leonard – SMITH 1106F, 292-8065, leonard@physics.osu.edu

WebAssign Administrator: Dr. K. Bolland – SM 1106D, 292-8065, bolland.1@osu.edu

REQUIRED TEXTS & MATERIALS:

Physics by Cutnell & Johnson, Ohio State University Custom 8th ed or regular 8th ed

Worksheets for Physics 112 Laboratory, 19th ed. (2011)

WebAssign Access Card

POLICIES AND WEBSITE

See the “Welcome to Students of Physics 112” packet for course policies.

Course Home Page: <http://www.physics.ohio-state.edu/~phys112/index.html>

MIDTERM (in recitation room): WEDNESDAY, May 2, 2012

FINAL EXAM (in recitation room):

LECTURER	RECITATION TIME	FINAL EXAM DATE AND TIME	
HUMANIC	10:30 AM	Wednesday, June 6	9:30 AM - 11:18 AM
AKLI	11:30 AM	Thursday, June 7	11:30 AM - 1:18 PM

Make no commitment that conflicts with your scheduled final examination. See Dr. Leonard by April 27 if a conflict exists.

SCHEDULE AND ASSIGNMENTS

Reading, homework, etc. assignments below refer to Cutnell & Johnson, 8th ed.

Homework and Pre-labs are submitted on-line via WebAssign web page:

<https://www.webassign.net/osu/student.html>

See On-Line Homework Instruction sheet for login instructions, etc.

Abbreviations: L=lecture, R=recitation, Ch=chapter, P=problem, S= section, Q=question,
HW = homework

First Week - **NO LAB**

Mar	26	R	Course Information Distributed
	27	L	Electric Charge and Force (Read Ch 18 S1-5)
	28	R	Demonstration problems; Concept Questions
	29	L	Electric Field (Read Ch 18 S6 – 8)
	30		ONLINE HOMEWORK #0 (WebAssign tutorial) due at 6 PM

Second Week

LAB 1: Electric Force & Electric Charge

- Apr 2 R Ch18 Q9, 13, 17; Group Work #1
ONLINE PRELAB #1 DUE AT 11:59 PM
- 3 L Electric Field and Electric Potential (Read C18 S8, 10, 11; Ch 19 S1-2)
ONLINE HW #1 DUE AT 11:30 PM (Ch 18: P 3, 12, 21, 37, 39, 41, 29)
- 4 R QUIZ 1; Ch 19 Q2, 4; demonstration problems
- 5 L Electric Potential (Read Ch 19 S3, 4, 7)
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Third Week

LAB 2: Deflection of Electrons

- Apr 9 R Ch 19 Q 6,11; Group Work
ONLINE PRELAB #2 DUE AT 11:59 PM
- 10 L Capacitors; Batteries, Current, Ohm's Law (Read Ch 19 S5; Ch 20 S1,2)
ONLINE HW #2 DUE AT 11:30 PM (Ch 19: P 1, 2, 3, 58, 21, 35, 13, 18, 41, 42)
- 11 R QUIZ 2; Ch 19 Q17; demonstration problems
- 12 L Resistance, Power, Series Circuits (Read Ch 20 S3, 4, 6)

Friday, April 13 is the Last Day to drop without a "W."

Fourth Week

LAB 3: Ohm's Law

- Apr 16 R Ch 20 Q 3, 5; Group Work #2; tutoring in recitation
ONLINE PRELAB #3 DUE AT 11:59 PM
- 17 L Circuits (Read Ch 20 S7 – 9)
ONLINE HW #3 DUE AT 11:30 PM (Ch 19 P44, 43, 63; Ch 20: P4, 7, 12, 24, 42, 46, 23)
- 18 R QUIZ 3; Ch 20 Q8, 10, 12; demonstration problems
- 19 L More Circuits (Read Ch 20 S9, 11, Example 16 in S15)
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Fifth Week

LAB 4: Series and Parallel Circuits

- Apr 23 R Group Work #3; tutoring in recitation
ONLINE PRELAB #4 DUE AT 11:59 PM
- 24 L Magnetic Field; Magnetic Force (Read Ch 21 S1 – 4)
ONLINE HW #4 DUE AT 11:30 PM (Ch 20: P50, 53, 55, 64, 67, 70, 74, 116)
- 25 R QUIZ 4; Ch 21 Q3, 6, 8; demonstration problems
- 26 L Magnetic Force and Applications (Read Ch 21 S5,6)
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Sixth Week

LAB 5: Magnetic Force

- Apr 30 R Ch 21 Q 12, 13; demonstration problems
ONLINE PRELAB #5 DUE AT 11:59 PM
- May 1 L Magnetic Fields due to Currents (Read Ch 21 S7 – 10)
ONLINE HW #5 DUE AT 11:30 PM (Ch 21: P2, 72, 5, 79, 17, 31,30, 33
41, 45, 42)
- 2 R **MIDTERM** (in your recitation room)
- 3 L Electromagnetic Induction; Faraday's Law (Read Ch 22 S1 – 5)
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Seventh Week:

LAB 6: Magnetic Fields

- May 7 R Ch 21 Q 16; Ch 22 Q4; Group Work #4; tutoring in recitation
ONLINE PRELAB #6 DUE AT 11:59 PM
- 8 L Applications of Faraday's Law (Read Ch 22 S 5,6, 7, 10)
ONLINE HW #6 DUE AT 11:30 PM (Ch 21: P55, 56, 73, 59, 80;
Ch 22: P12, 16, 19)
- 9 R QUIZ 5; Ch 22 P35; Q9; demonstration problems
- 10 L Transformers; Waves, Electromagnetic Waves (Read Ch 22 S9; Ch 16 S1, 2;
Ch 24 S1 – 3)

Friday, May 11 is the Last day to drop without petition to dean of your college.

Eighth Week

LAB 7: Faraday's Law

- May 14 R Ch 16 Q3; Group Work #5; tutoring in recitation
ONLINE PRELAB #7 DUE AT 11:59 PM
- 15 L Polarization (Read Ch 24 S6, Example 10 in S7)
ONLINE HW #7 DUE AT 11:30 PM (Ch 22: P 20, 22, 70, 45, 74, 63;
Ch 24 P2, 7, 13, 21))
- 16 R QUIZ 6; Ch 24 Q 10; demonstration problems
- 17 L Light Rays; Reflection; Mirrors (Read Ch 25 S1 – 5)
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Ninth Week

LAB 8: Image Formation from a Flat mirror

- May 21 R Ch 25 Q6, 7; Group Work #6; tutoring in recitation
ONLINE PRELAB #8 DUE AT 11:59 PM
- 22 L Spherical Mirrors; Refraction (Read Ch 25 S 6, 7; Ch 26 S1, 2)
ONLINE HW #8 DUE AT 11:30 PM (Ch 24: P 39, 45, 55;
Ch 25 P3, 5, 6, 20, 23, 39)
- 23 R QUIZ 7; Ch 25 Q13, 14; demonstration problems
- 24 L Total internal reflection; Lenses (Read Ch 26 S3, 6, 7)
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Tenth Week - **NO LAB**

May 28 R HOLIDAY
29 L Lenses (Read Ch 26 S7, 8)
ONLINE HW #9 DUE AT 11:30 PM (Ch 25 P 40, 25;
Ch 26 P3, 11, 12, 20, 26, 28)
30 R Ch 26 Q1, 5, 12; demonstration problems
31 L more Lenses and review (Read Ch 26 S8, 9)
Jun 1 **ONLINE HW #10 DUE AT 11:30 PM , FRIDAY, JUNE 1**
(Ch 26 P 50, 51, 53, 117, 122, 65)
