

8/24/21

Sections	Lecturer	Office	Phone	e-mail
9:10-10:05	Prof. Comert Kural	PRB 2018	688-1456	kural.1@osu.edu
10:20-11:15	Prof. Comert Kural	PRB 2018	688-1456	kural.1@osu.edu

**Course Manager - for excuses and permission for anything**

Dr. Raju Nandyala Smith 1036B 292-4464 nandyala.1@osu.edu

Use Excuse Request Form available on Carmen under Modules\Course Documents.

**HW Administrator - for any technical issues with the homework**

Dr. Ken Bolland Smith 1106D 292-8065 bolland.1@osu.edu

**Required Texts and Materials:**

1. Physics: Principles with Applications by Douglas C. Giancoli, 7th edition.

(eText book comes with online Mastering Physics homework. Access code and Registration instructions are available on Carmen under Modules\Course Documents)

2. Lab manual: Each lab's pdf will be available on Carmen under lab assignments.

**Course Policies**

Refer to the course policy document available at Carmen under Modules/Course Documents.

<b>MidTerm 1 Exam</b>	Tue, 10/05	7:30 pm - 8:30 pm	Rooms to be determined
<b>MidTerm 2 Exam</b>	Tue, 11/02	7:30 pm - 8:30 pm	Rooms to be determined
<b>Final Exam</b>	Tue, 12/14	8:00 pm - 9:45 pm	Rooms to be determined

See Course Manager Dr. Nandyala by Friday 10/8/2021 if a conflict exists with your scheduled final exam for a valid reason (e.g., medical appointment, military duty, etc.)

In addition to Quizzes, Midterm exams and Final exam you have the following weekly assignments. Late submissions do NOT receive any credit, and deadlines will NOT be extended.

<b>Assignment</b>	<b>Weekly deadlines</b>	<b>&amp; Where to Find</b>
preLabs	Sunday 11:59 pm	Carmen/Assignments/preLabs
Labs	Tuesday 11:59 pm	Carmen/Assignments/Labs
Wed GroupWork	Wednesday 11:59 pm	Carmen/Assignments/Wednesday Group Work
Mastering Homework	Thursday 11:59 pm	Pearson.com/mastering (registration required)
Hand-in Homework	Thursday 11:59 pm	Carmen/Assignments/Hand-in Homework
Fri GroupWork	Friday 11:59 pm	Carmen/Assignments/Friday Group Work

#### Course grade points distribution

Quizzes	16%
MidTerm 1	12%
MidTerm 2	12%
Final	20%
PreLab	4%
Labs	12%
Mastering Homework	12%
Hand-in HW	6%
Group work - Wed	3%
Group work - Fri	2%
Peer Review	1%
Total	100%

OSU Standard Grade Scheme	
Total %	
Start From	Grade
0	E
60.00	D
67.00	D+
70.00	C-
73.00	C
77.00	C+
80.00	B-
83.00	B
87.00	B+
90.00	A-
93.00	A

Scores from best 10 of 12 Quizzes, and best 10 of 11 Labs are considered because there are no makeup quizzes/labs available in this course. Similarly scores from best 12 of 14 Wednesday GWs and best 10 of 12 Friday GWs are considered. There are NO drops in the categories of Mastering HW, HiHW, and preLab. Read the first page of the course policy for more details.

Scores of quiz total, midterm 1, midterm 2, and final exam each will be shifted to a median of 77% if the median score is under 77%.

**SEI Participation bonus:** If at least 65% of students enrolled in a lecture section participate in the on-line survey "Student Evaluation of Instruction" (SEI) for both lecturer and recitation instructor, then a bonus of 0.5 % will be added to every student's percentage score in those recitation sections before the OSU standard grade scheme is applied.

**Total percentage scores will not be rounded up (e.g. 86.99% is a B).**

Abbreviations: L=lecture, Rc=recitation, HW = homework, GW = group work.

Week#1		No Lab this week (and not required to go to the lab)
Mon, 08/23		
Tue, 08/24		
Wed, 08/25	Rc	Description of weekly assignments, Physics Diagnostic test (no grade points)
Thu, 08/26	L1	Electric Charge and Coulomb's Law (Read Ch 16 S1-6) Mastering HW#0 (for practice only - no grade points) due Thu 11:59 pm
Fri, 08/27	Rc	Hand-in HW example
Week#2		<b>LAB2</b> (Lab1 skipped): Deflection of Electrons
Mon, 08/30	L2	Electric Field and Electrostatics (Read Ch 16 S7 – 9, S11)
Wed, 09/01	Rc	Wed - Group Work#1
Thu, 09/02	L3	Electric Potential (Read Ch 17 S1-5) Hand-in HW#1 & Mastering HW#1 (over L1 material) due Thu 11:59 pm
Fri, 09/03	Rc	QUIZ 1, Fri - Group Work#1
Week#3		No Lab this week
Mon, 09/06		Labor Day
Wed, 09/08	Rc	Wed - Group Work#2
Thu, 09/09	L4	Capacitance, Dielectrics, and Applications (Read Ch17 S7-11) Hand-in HW#2 & Mastering HW#2 (over L2 and L3 material) due Thu 11:59 pm
Fri, 09/10	Rc	QUIZ 2, Fri - Group Work#2
Week#4		<b>LAB3:</b> Ohm's Law
Mon, 09/13	L5	Current, Ohm's Law, and Superconductivity (Read Ch 18 S1-4,8,9)
Wed, 09/15	Rc	Wed - Group Work#3
Thu, 09/16	L6	Electric Power, Alternating Current, Circuits (Read Ch 18 S5-7, Ch19 S1-2) Hand-in HW#3 & Mastering HW#3 (over L4 material) due Thu 11:59 pm
Fri, 09/17	Rc	QUIZ 3, Fri - Group Work#3 <i>Last day to drop this class without receiving a "W".</i>
Week#5		<b>LAB4:</b> Series and Parallel Circuits
Mon, 09/20	L7	Kirchhoff's Rules, RC Circuits, Electric Hazards (Read Ch 19 S3 – 7)
Wed, 09/22	Rc	Wed - Group Work#4
Thu, 09/23	L8	Magnetic Field and Magnetic Force (Read Ch 20 S1 – 4) Hand-in HW#4 & Mastering HW#4 (over L5 and L6 material) due Thu 11:59 pm
Fri, 09/24	Rc	QUIZ 4, Fri - Group Work#4
Week#6		<b>LAB5:</b> Magnetic Force
Mon, 09/27	L9	Solenoids and Electromagnets (Read Ch 20 S5 – 7)
Wed, 09/29	Rc	Wed - Group Work#5
Thu, 09/30	L10	Ampere's Law, Motors and Loudspeakers (Read Ch 20 S8-11) Hand-in HW#5 & Mastering HW#5 (over L7 and L8 material) due Thu 11:59 pm
Fri, 10/01	Rc	QUIZ 5, Fri - Group Work#5

## Week#7

**LAB6: Magnetic Fields**

Mon, 10/04	L11	Electromagnetic Induction; Faraday's Law (Read Ch 21 S1 – 4)
Tue, 10/05		Mid Term 1 (7:30 pm - 8:25 pm)
Wed, 10/06	Rc	Wed - Group Work#6
Thu, 10/07	L12	Applications of Faraday's Law (Read Ch 21 S5-9)
		Hand-in HW#6 & Mastering HW#6 (over L9 and L10 material) due Thu 11:59 pm
Fri, 10/08	Rc	QUIZ 6, Fri - Group Work#6

## Week#8

**LAB7: Faraday's Law**

Mon, 10/11	L13	Electromagnetic Waves and Light (Read Ch 22 S1-4, Ch23 S1-2)
Wed, 10/13	Rc	Wed - Group Work#7
Thu, 10/14		Autumn Break
Fri, 10/15		Autumn Break

## Week#9

**LAB8: Image Formation**

Mon, 10/18	L14	Image formation with mirrors, Refraction (Read Ch 23 S3-6)
Wed, 10/20	Rc	Wed - Group Work#8
Thu, 10/21	L15	Ray tracing with lenses (Read Ch 23 S7-9)
		Hand-in HW#7 & Mastering HW#7 (over L11,12, and 13 material) due Thu 11:59 pm
Fri, 10/22	Rc	QUIZ 7, Fri - Group Work#7

## Week#10

**LAB9: Geometric Optics and Lenses**

Mon, 10/25	L16	Human Eye, Optical Instruments, (Read Ch 25, S1-6)
Wed, 10/27	Rc	Wed - Group Work#9
Thu, 10/28	L17	Wave Nature of Light: Interference and Diffraction (Read Ch 24 S1-5)
		Hand-in HW#8 & Mastering HW#8 (over L14 and L15) due Thu 11:59 pm
Fri, 10/29	Rc	QUIZ 8, Fri - Group Work#8
		<i>Last day to drop without petitioning to your college.</i>

## Week#11

**LAB10: Optical Instruments**

Mon, 11/01	L18	Diffraction grating, Spectroscopy (Ch 24 S6,7, 12; Ch25 S11)
Tue, 11/02		Mid Term 2 (7:30 pm - 8:25 pm)
Wed, 11/03	Rc	Wed - Group Work#10
Thu, 11/04	L19	Polarization, Limits of Optical Resolution, (Read Ch24 S10, Ch25 S7-9)
		Hand-in HW#9 & Mastering HW#9 (over L16 and L17 material) due Thu 11:59 pm
Fri, 11/05	Rc	QUIZ 9, Fri - Group Work#9

## Week#12

**LAB11: Superposition, Interference, and Diffraction**

Mon, 11/08	L20	Relativity: Inertial Reference Frame, Time dilation (Read Ch 26, S1-4)
Wed, 11/10	Rc	Wed - Group Work#11
Thu, 11/11		Veterans Day
		Hand-in HW#10 & Mastering HW#10 (over L18 and L19 material) due Thu 11:59 pm
Fri, 11/12	Rc	QUIZ 10, Fri - Group Work#10

<b>Week#13</b>		No Lab this week
Mon, 11/15	L21	Length contraction, mass-energy equivalence (Read Ch 26, S5, 7-9)
Wed, 11/17	Rc	Wed - Group Work#12
Thu, 11/18	L22	Blackbody radiation, Photoelectric effect (Read Ch27, S1-4, 7-9)
		Hand-in HW#11 & Mastering HW#11 (over L20 and L21 material) due Thu 11:59 pm
Fri, 11/19	Rc	QUIZ 11, Fri - Group Work#11
<b>Week#14</b>		NO Lab this week
Mon, 11/22	L23	Bohr model of hydrogen atom and Spectral lines (Read Ch27, S10-13)
Wed, 11/24		Thanksgiving Break
Thu, 11/25		Thanksgiving Break
Fri, 11/26		Thanksgiving Break
<b>Week#15</b>		<b>LAB12:</b> Optical spectrometry (last lab)
Mon, 11/29	L24	Quantum Mechanics (Ch28 S1-3,5); Nuclear Structure (Ch30 S1-2)
Wed, 12/01	Rc	Wed - Group Work#13
Thu, 12/02	L25	Radioactivity (Ch30, S3-11)
		Hand-in HW#12 & Mastering HW#12 (over L22 material) due Thu 11:59 pm
Fri, 12/03	Rc	QUIZ 12, Fri - Group Work#12
<b>Week#16</b>		NO Lab this week
Mon, 12/06	L26	Nuclear Fission, Fusion, Radiation damage and measurement(Ch31: S1-5)
Wed, 12/08	Rc	Wed - Group Work#14
		Mastering HW#13 (over L23 - L26 material) due Wed 11:59 pm
		Last day of classes
<p><i>Final Exam information is on the first page of this document.</i></p>		