## Spring 2021

## PHYS 1320.002 (CRN #51182)

Monday and Wednesday: 05:00 PM – 06:15 PM Zoom Meetings: <u>https://unm.zoom.us/j/4383562465</u> (Meeting ID: 438 356 2465) Class Homepage: <u>http://physics.unm.edu/Courses/Schwoebel/P1320Sp21/</u>

## Instructor: Paul R. Schwoebel

Office: PAIS Room 3422 E-mail: <u>kas@unm.edu</u>

## **Problems Sessions**: 6:30 PM – 7:20 PM Mondays and Wednesdays.

(Mondays are Physics 1321.002, as discussed below, but all are welcome)

## **TA Tutoring Table:**

The teaching assistants for the lower-division physics classes are providing will free tutoring via Zoom. The tutoring schedule can be found at:

http://physics.unm.edu/pandaweb/undergraduate/tutoring.php

# Text: University Physics, 15<sup>th</sup> edition by Young and Freeman

Grading: 30% Homework, 40% Quizzes, 15% Exam 1, 15% Exam 2.

Final grade will be curved to no lower than a C+ average. *Before* the curve if you have 97%-100% your grade will be *at worst* an A+, 94%-96% at worst an A, 90%-93% at worst an A-, 87%-89% at worst a B+, 84%-86% at worst a B, 80%-83% at worst a B-, 77%-79% at worst a C+, 74%-76% at worst a C, 70%-73% at worst a C-, 67%-69% at worst a D+, 64%-66% at worst a D, 60%-63% at worst a D-, < 60% = F.

- <u>30% Homework</u>: A combination of hand-written and Mastering Physics problems assigned weekly on Monday at 8 AM. Mastering Physics problems will be due the following Monday by 11 PM. For Mastering Physics always use 3 significant figures on numerical answers. Written homework problems will be also be assigned weekly on Monday at 8 AM and will be due on the following second Wednesday at 11 PM. Hand-written problem assignments will be in Learn and solutions will be posted on your class homepage. Graded hand-written homework will be submitted by you on Learn, graded, and then returned to you via UNM Learn. Create a single pdf document of your written homework for submission on Learn. The free phone app CamScanner is convenient because it automatically adjusts for lighting and keystone effects.
- 2) <u>40% Quizzes:</u> Unannounced each week during class on Monday <u>and/or</u> Wednesday to encourage reading of the textbook prior to the lectures. There will not be a quiz the first week of classes. Quizzes will be administered on Learn, graded, and returned to you on Learn. Each quiz will be a question taken from a list of questions posted on your class homepage (see link above) the prior week. The questions will be focused on material in the textbook chapter to be covered by lectures the week of the quiz(zes). Make-up quizzes will only be given if prior arrangements have been made with the instructor. Quiz solutions will be posted on your class homepage.

## 3) 30% Exams:

15% Exam 1: Wednesday March 10<sup>th</sup>, 5:00 – 6:15 PM. Exam 1 will cover Chapters 21 - 27.

*15% Exam 2:* Wednesday May 5<sup>th</sup>, 5:00 – 6:15 PM.

Exam will cover Chapters 28 – 30, Chapter 32, and Chapters 17 - 20.

Exams will be administered in Learn. Exam problems will be derived from the homework problems and quiz selection problems, that is they may include quiz selection problems that were not used for a quiz. With the exception of 'essay-type' problems, exam problems will be multiple choice. If an explanation/justification for your answer is required and not given you will receive no credit even if the correct answer is chosen from the set of multiple choice selections. *Exam solutions will be posted on your class homepage.* 

## Problems Session (Optional): PHYS 1321.002 (CRN # 51189)

Mondays and Wednesdays: 06:30 PM – 07:20 PM, Online at <u>https://unm.zoom.us/j/4383562465</u>. PHYS 1321 Problems per UNM Registrar meets Monday 06:30 PM – 07:20 PM but all are welcome to attend at this time. If you are registered for 1321 you only need to attend one session/week to receive credit for the class.

The problems session is strongly encouraged because students typically find it very useful in furthering their understanding of the course material, completing homework problems, and preparing for quizzes and exams. The instructor oversees the class. Students work in groups or as individuals on problems selected by the group or individual. These may include homework problems, upcoming quiz questions, or other course-related material of the group's or individual's choosing. Grading (Credit/No Credit) will be based upon attendance and participation. Five or more absences will result in a grade of No Credit.

#### Schedule

Jan 20 – 25	Chapter 21: Electric Charge and Fields
Jan 25 – 27	Chapter 22: Gauss's Law
Feb 1 – 3	Chapter 23: Electric Potential
Feb 8-10	Chapter 24: Capacitance and Dielectrics
Feb 15 – 17	Chapter 25: Current and Resistance
Feb 22 – 24	Chapter 26: Direct Current Circuits
Mar 1 – 3	Chapter 27: Magnetic Fields and Forces
Mar 8 – 10	Mar 8: Special Topic – Electricity, Magnetism and the Electron Microscope
	Mar 10, Exam 1: Online; 5:00 PM – 6:15 PM; Ch. 21 – 27
Mar 15 – 17	Spring Break
Mar 22 – 24	Chapter 28: Magnetic Sources
Mar 29 – 31	Chapter 29: Electromagnetic Induction
Apr 5 – 7	Chapter 30: Inductance
Apr 12 – 14	Chapter 32: Electromagnetic Waves
Apr 19 – 21	Topics from Chapters 17 – 18: Thermodynamics 1
Apr 26 – 28	Topics from Chapters 19 - 20: Thermodynamics 2
May 3 – 5	May 3: Complete Thermodynamics 2
	May 5, Exam 2: Online; 5:00 PM – 6:15 PM.
	Ch. 28 – 30, Ch. 32, and Topics from Ch. 17 – 20

In accordance with University Policy 2310 and the Americans with Disabilities Act (ADA), academic accommodations may be made for any student who notifies the instructor of the need for an accommodation. It is imperative that you take the initiative to bring such needs to the instructor's attention, as he/she are not legally permitted to inquire. Contact Accessibility Resource Center at 277-3506 for additional information.

#### Academic Integrity

I take this very seriously. If I find you cheating in this class, were cheating includes copying another's work, or paying others to do your work, I will see to it that the offender is punished to the full extent possible under UNM policies. I have included the policy concerning Academic Dishonesty below.

#### Regents' Policy Manual - Section 4.8: Academic Dishonesty Applicability

This policy applies to all students at the University with regard to academic activities and professional activities related to academic work.

#### Definition

"Academic dishonesty" includes, but is not limited to, dishonesty in quizzes, tests, or assignments;

claiming credit for work not done or done by others; hindering the academic work of other students; misrepresenting academic or professional qualifications within or without the University; and nondisclosure or misrepresentation in filling out applications or other University records.

#### Policy

Each student is expected to maintain the highest standards of honesty and integrity in academic and professional matters. The University reserves the right to take disciplinary action, up to and including dismissal, against any student who is found guilty of academic dishonesty or who otherwise fails to meet the expected standards. Any student judged to have engaged in academic dishonesty in course work may receive a reduced or failing grade for the work in question and/or for the course.

# References

"Dishonesty in Academic Matters," Faculty Handbook D100.