Physics 1320L

Section 1, CRN:71634
Fall, 2020
Workman 107
Tuesday, 13:50-16:40

Instructor: Carlos Lopez Carrillo.
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Office Hours: Tuesday, 13:00–15:00; Thursday, 10:00–12:00; other times by appointment.

Grading: Describe how you are going to grade and include any relevant rubrics.

Pre-requisites/Co-requisites: *NA* / PHYS 121

Course Description: Experiments from the subject matter of PHYS 121. This course addresses a cross-section of the concepts introduced in the lecture and introduces techniques for obtaining and analyzing experimental observations using diverse methods and equipment.
In general, students are asked to report their activities and results clearly and concisely in formats ranging from "worksheets" to a formal Lab report write-up. The time spent outside of Lab on preparation, data analysis, and presentation will vary somewhat, but an average of no more than three hours of outside work per Lab is encouraged.

Mode of Instruction: This lab is delivered face-to-face. However, to maintain safe distancing, only four students are allowed in the Lab simultaneously. For this purpose, the three-hour lab session is divided into two subsections, and students organized in teams of at most three students. During each subsection, two students from two teams are allowed in the Lab to participate in hands-on activities. The rest of the team members are expected to join the lab discussion remotely. The students' role will be rotated every week. At the end of the first subsection, the next two teams will enter the Lab.

We will use zoom.us (video conferencing software) to facilitate the remote participation and require that every student registered for the Lab has access to a portable personal computer (laptop or another device) capable of connecting to the campus wireless internet, where they can work at the Lab or away.

Place in Curriculum: This course is a general education core course and part of the required Curriculum for all Tech's students.

Course Learning Outcomes: By the end of this course, it is expected that students have acquired first-hand knowledge of the fundamental principles of Newtonian Mechanics. In addition, the students should have learned basic techniques for obtaining and analyzing experimental data.

Course Schedule: Laboratory exercises are performed weekly, following their sequence in the Lab Manual. We will go over preliminary material during the first week of classes, and we will start the first Lab in the second week. The last laboratory will take place in the week before Thanksgivings.

Course Requirements: For safety, No food is allowed in the Lab; beverages should be carried in spill-proof containers. You are also expected to carefully follow the instructions for each Lab. Furthermore, It is required that you comply with the COVID-19 procedures given below for reducing the risk of transmission in the Lab. Make sure you read and understand them.

Attendance is mandatory. Punctuality in attendance and completion of all assignments on time is required. Lab work submitted for grading that is late no more than a week will be accepted but will earn at most 80% of the grade. In general, no lab work past due more than a week will be accepted, but under extenuating circumstances, we may accept late submissions. There are no makeup labs, but under extenuating circumstances, we may grant a request.

Rotation of individual roles in a team is required to ensure everyone's participation in the exercises. Make sure to get your raw data signed and initialed by your TA before leaving the Lab.

Approach all issues with professional courtesy and respect the efforts, opinions, and property of others. Be ready to work with all needed materials (pencil, notebooks, Laboratory Manual, personal computer, etc.). Disruptive behavior, including horseplay and reckless use of equipment, will NOT be tolerated.

To minimize disruptions in the Lab, you are required to abide by the following rules of etiquette is required. Cell phones should be reserved for emergencies –no text. If you must take a call, please take it outside the Lab. If you are late to the Lab, please try to keep the disruption to a minimum while you're joining your team. Abusers may be asked to leave the Lab.

Academic Honesty: New Mexico Tech's Academic Honesty Policy for undergraduate and graduate students is found in the student handbook, which can be found at: http://www.nmt.edu/student-handbook. You are responsible for knowing, understanding, and following this policy.

Laboratory exercises are a group effort, and discussing the material with each other is encouraged. Unless your instructor specifically directs sharing data with other teams, only data you collect with your team can be shared within the team, which must be acknowledged. It is not permissible to give or receive data for your analysis from any other source. Data obtained during the lab session is expected to be the same within each group (tables, graphs, etc.). However, your written assignment must be your own work; any help received must be acknowledged, and proper citation of the utilized sources must be included. Plagiarism is not tolerated. Any suspicion of a violation of the letter or intent of the NMT policy will be reported to the Lab Director, who will determine the appropriate charges to bring to the Office of the Associate Vice President for Academic Affairs. In general, obtaining answers that, in any way, bypass the need to think about the assignment is a violation of the academic honesty policy, and can have serious consequences. If in doubt, please ask your instructor before submitting any work as your own.

Reasonable Accommodations: New Mexico Tech is committed to protecting the rights of individuals with disabilities. Qualified individuals who require reasonable accommodations are invited to make their needs known to the Office of Counseling and Disability Services (OCDS) as soon as possible. To schedule an appointment, please call 835-6619.

New Mexico Tech offers mental health and substance abuse counseling through the Office of Counseling and Disability Services. These confidential services are provided free of charge by licensed professionals. To schedule an appointment, please call 835-6619.

Respect Statement: New Mexico Tech supports freedom of expression within the parameters of a respectful learning environment. As stated in the New Mexico Tech Guide to Conduct and Citizenship: "New Mexico Tech's primary purpose is education, which includes teaching, research, discussion, learning, and service. An atmosphere of free and open inquiry is essential to the pursuit of education. Tech seeks to protect academic freedom and build on individual responsibility to create and maintain an academic atmosphere that is a purposeful, just, open, disciplined, and caring community."

COVID-19 Safety Issues for Face-to-Face Instruction: Students must follow campus-wide safety protocols, including mandatory use of face coverings and maintaining a minimum of 6 ft social distance from other students and faculty. Students should not enter the classroom earlier than 10 minutes prior to start of class, and should exit the classroom within 10 minutes of the end of class. Students who fail to comply are subject to disciplinary procedures.

Title IX Reporting: Sexual misconduct, sexual violence and other forms of sexual misconduct and gender-based discrimination are contrary to the University's mission and core values, violate university policies, and may also violate state and federal law (Title IX). Faculty members are considered "Responsible Employees" and are required to report incidents of these prohibited behaviors. Any such reports should be directed to Tech's Title IX Coordinator (Dr. Peter Phaiah, 20D Brown Hall, 575-835-5187, titleixcoordinatornmt.edu). Please visit Tech's Title IX Website www.nmt.edu/titleix for additional information and resources.