

Physics 1310L or 1320L

Section 1, CRN:nnnnnn

Fall, 2021

Workman 115 or 107

Day, time

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

Course Description: (for P1310L) Experiments from the subject matter of PHYS 1310.
(for P1320L) Continuation of PHYS 121 including electricity, and magnetism.
This course addresses a cross-section of the concepts introduced in the lecture. It 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.

Pre-requisites: (for P1310L) N/A , (for P1320L) Phys-1310

Co-requisites: (for P1310L) Phys-1310 , (for P1320L) Phys-1320

Grading: Describe how grades will be calculated, and include any relevant rubrics.

Mode of Instruction: This Lab is delivered face-to-face.

Course Schedule: Laboratory exercises are performed weekly. Their sequence is given in the Lab Manual. Preliminary material is covered during the first week of classes; the first Lab is performed during the second week.

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 [(for P1310) Newtonian Mechanics] or [(for P1320L) electro and magneto static phenomena]. In addition, the students should have learned basic techniques for obtaining and analyzing experimental data.

Program Learning Outcomes: The student will describe the process of scientific inquiry, solve problems scientifically, communicate scientific information, apply quantitative analysis to scientific problems.

Course Requirements: The required Lab Manual is provided to you; it has all the relevant information to perform each Lab. You are expected to read it before the Lab and bring it with

you to the Lab. You are also expected to bring a laptop computer to perform some of the data analysis. Be ready to work with all needed materials (pencil, notebooks, Laboratory Manual, personal computer, etc.).

For safety, No food is allowed in the Lab; beverages should be carried in spill-proof containers. You are also expected to follow the instructions for each Lab carefully. 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. You are expected to turn in your reports a week after the Lab is completed. Lab work submitted late for grading, but which is not more than a week past due, 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 we may accept late submissions under extenuating circumstances. 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 instructor signs off your raw data before leaving the Lab.

Approach all issues with professional courtesy and respect the efforts, opinions, and property of others. 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 joining your team. Abusers may be asked to leave the Lab.

NMT 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: <https://www.nmt.edu/studenthandbook>. 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 for Disability Services (ODS) as soon as possible. They will describe the process by which you can request such accommodations for this course. To schedule

an appointment, please call 835-6209, or email disability@nmt.edu.

Counseling Services: New Mexico Tech offers individual and couples counseling, safety assessments, crisis intervention and consultations through The Counseling Center. These confidential services are provided free of charge by licensed professionals. For more information, please call 835-6619, email counseling@nmt.edu or complete an Intake Form on our website at <https://www.nmt.edu/cds/>. All services are provided via phone or Zoom during the Covid-19 pandemic.

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: According to current guidance from the Center for Disease Control, the State of New Mexico, and university officials (i.e., the President and the Board of Regents), students who have been fully vaccinated do not need to wear a mask in buildings, classrooms, or laboratories and do not need to social distance. Students who have not been vaccinated are required to wear a face mask and to social distance. Vaccinated students are welcome to still wear a mask if they choose to, so please do not assume that individuals wearing masks are unvaccinated. Instructors and TAs will not ask for proof of vaccination. Please note that these provisions are subject to change as the situation evolves.

Students are still asked not to come to class if they are feeling ill and to follow any quarantine guidelines that they are given in the event of exposure to COVID-19. If you do miss class, please contact the instructor for missed assignments, contact the Student Health Center, and consider getting tested for COVID-19. For the most up-to-date guidelines, please consult NMT's COVID-19 information page: <https://www.nmt.edu/covid19/> .

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 Phaiiah, 216 Brown Hall, 575-835-5880 (O), 575-322-0001 (C), titleixcoordinator@nmt.edu). Please visit Tech's Title IX Website (www.nmt.edu/titleix) for additional information and resources.