ENGINEERING PHYSICS 1 (Physics 1135) Course Handbook Fall 2020
(Last updated 8/16/2020)

COVID-19 Safety: Do not come to campus if you feel sick or have been in contact with somebody who is ill or tested positive for COVID-19. All assignments will be provided in a format that allows you to submit them online through Canvas. Wear a face covering in class and follow the university’s procedures outlined at https://coronavirus.mst.edu/.

Course coordinator: Dr. Agnes Vojta, 216 Physics, vojtaa@mst.edu


Course website: http://web.mst.edu/~vojtaa/engphys1/. All course information, handouts, lecture notes and video lectures will be available through the course website. If corrections to this handbook are required, the official version will be the one posted on the course website.

Course goals: The main goals of this course are to develop an understanding of the basic principles of mechanics (statics and dynamics) and to acquire the proper techniques for the solution of physical problems.

Prerequisite: Calculus 1 (Math 1214)

Major Components of the Course

Lecture (Tuesday & Thursday) reviews important concepts and ideas in the reading assignment. One objective of the lecture is to elaborate on concepts that are difficult to master or understand on a first reading of the material. Example problems will be solved to illustrate physical principles and problem-solving techniques. You are expected to have read the reading assignment before lecture. The online lectures will remain available for viewing for the duration of the semester.

Recitation (Wednesday & Friday) will be an additional source of instruction on the important concepts with particular emphasis on the problem solving. You will demonstrate your mastery of the material and your problem solving skills by showing how to solve the assigned problems or one similar to. Assigned homework is due at the beginning of recitation. Instructors may also assess your skills by other means, such as worksheets and quizzes.

The instructors for the recitation sections will be announced on the first day of class. Your recitation instructor is your first contact for all questions and concerns regarding the course.

Laboratory (every other week) is designed to reinforce concepts learned in lecture and recitation, to connect those concepts to physical experience, to illustrate scientific method, and master measurement theory. Details see separate lab instructions. The professor in charge of the laboratory is Dr. Waddill.

Physics Learning Center (Tuesday & Thursday). Run by the LEAD program, this is an open learning environment where you can solve problems and prepare for your recitation with the help of peer-learning assistants, which are students who have successfully completed the course and are trained to help you. Attending the PLC is voluntary, and there are no points associated with it. Details to be announced later.
Sources of Course Points and Grading

Exams. There will be three one-hour tests given only at 5:00pm on the Wednesdays listed in the Schedule of Classes and a Final Exam given during Finals week. The exams will be given online through Canvas. Each of these four exams is worth 200 points. Your lowest exam score (out of the three tests and the final) will be dropped.

End-Material Test worth 50 points covering material presented after test 3 will be given concurrent with the Final Exam during Finals week.

Homework. Recitation instructors will have you submit assigned homework through Canvas six times throughout the semester. They will let you know when to upload your homework. Do not email them your solutions. Your lowest homework score will be dropped. To get full credit, you must follow the procedure lined out in the Problem Solving Procedures.

Recitation. Your instructor will call on you to solve a homework problem or one similar to it without your notes. Your solution must follow the procedure lined out in the Problem Solving Procedures. An alternative source for recitation points may be quizzes and worksheets. There will be no excused absences from recitation. If you cannot attend in person, you are required to participate online; otherwise, a grade of zero will be recorded. One lowest recitation score will be dropped.

Lecture Quizzes. Twelve multiple choice quizzes will be given through Canvas to test your understanding of fundamental ideas in the week’s reading and lectures. Quizzes will be available by Thursday 9am and must be completed by Friday 5pm. In addition to the regular weekly quizzes, there will be a Syllabus Quiz which is due by midnight Sunday 8/30. Your two lowest quiz scores will be dropped.

Laboratory Reports. There will be six laboratories during the semester. Your reports are to be turned in to your lab instructor. The lowest lab score will be dropped. Lab reports will be graded on the basis of 100 points.

Course points:  
- Tests = 600  
- End-Material Test = 50  
- Lecture Quizzes = 50  
- Homework = 50  
- Recitation = 100  
- Laboratory = 150  
- Total Possible Points = 1000

One exam, two quizzes, and one homework score will be dropped. Your recitation points will be your average recitation percentage after the lowest recitation score has been dropped. Your lab points will be 1.5 times your average lab percentage after the lowest lab grade is dropped.

Absolute Grading Scale: The grade cuts are (to four significant figures):

- **A** for 89.50% of total possible points ≥ 895.0
- **B** for 79.50% of total possible points ≥ 795.0
- **C** for 69.50% of total possible points ≥ 695.0
- **D** for 59.50% of total possible points ≥ 595.0
- **F** for less than 59.50% of possible pts < 595.0

The grade cuts are absolute and will not be lowered. Points will not be added to a student’s grade to bring it above the cutoff.
Accessing Grade Spreadsheets
Grades will be posted on the course website and updated periodically. There will be an excel spreadsheet for each recitation section. In Column A (Student Personal Identification Number), find the course PIN that was assigned to you. The row with that number gives all the scores that your instructor has recorded for you prior to the last update of the course spreadsheet. Verify that your scores entered for the reported assignments are correct and notify your recitation instructor about any errors.

Some Course Rules

Those participating in a major university or intercollegiate event on the day of an exam may request an alternate exam date. To do this, you must submit a typed request to Dr. Vojta, signed by the event's university Faculty Sponsor, no later than the Tuesday the week before the test. You will receive an exam that is comparable, but not identical to, the one taken by the class.

Your lowest exam score will be dropped. This accommodates students who under perform on, or miss, one test for a reason beyond their control. If you did well on all three tests, you may decide to skip the final. If you request and are issued a grade of Incomplete due to dire personal circumstances at the course's end, all your exams will count in a prorated way, with none being dropped, in the determination of your course grade.

Requests for re-grades must be submitted no later than the next recitation after the general return of the assignment in class. Compose a detailed written statement on a separate sheet of paper explaining your request, attach it to the assignment, and submit it to your recitation instructor. If you make a single mistake in what you have written, no change will be made in your score. The entire problem will be re-evaluated; a serious mistake that was not noticed by the original grader could result in a lower grade than the one originally given.

Requests for spreadsheet corrections. In case a score is not entered correctly in the spreadsheet, notify your recitation instructor. Corrections must be requested no later than two weeks after the scores have been posted online. All requests for spreadsheet corrections must be made before the start of the Final Exam.

Communication. Contact information for all instructors is posted on the course website. We will try to respond to your emails within 24 hours during the week. Announcements will be made through Canvas.

Conduct in class. Students are required to wear a face covering in class and follow the university procedures at https://coronavirus.mst.edu/. Do not engage in disruptive behavior. An instructor may request the campus Judicial Officer to take effective disciplinary action after issuing a single warning (see Student Code of Conduct at http://registrar.mst.edu/academicregs/).

Academic Dishonesty will not be tolerated. See http://registrar.mst.edu/academicregs.

Emergency exit: Egress maps for campus buildings can be found at http://designconstruction.mst.edu/floorplan/

Appeals. In extremely rare cases, you may believe an exception to a course rule should be made. In this case, you may file a written appeal with your recitation instructor. Appeals must be filed within one week of the occurrence of the circumstance that causes your appeal, or by the end of your last recitation in the semester, whichever comes first. Your appeal will be carefully considered by the entire Physics 1135 teaching staff. This appeals policy applies to course rules given in this handbook, but does not apply to
laboratories. Lack of preparation, non-emergency family events, oversleeping, forgetting a test date or poor performance etc. are not reasons for filing an appeal.

**Unresolved complaints about laboratory or recitation instructors.** It is hoped that all conflicts can be resolved in a collegial manner through discussion between student and instructor. However, if such a situation continues or remains unresolved, please feel free to discuss it with Dr. Vojta. If you have complaints about your lab instructor, please contact the professor in charge of the lab portion of the course, Dr. Dan Waddill ([waddill@mst.edu](mailto:waddill@mst.edu)).

**Unresolved complaints about the course:** It is hoped that any complaints about the course can be resolved through discussions with Dr. Vojta. However, if there are any complaints that cannot be resolved, you may contact Dr. Shannon Fogg, Associate Dean for Academic Affairs ([sfo@st.edu](mailto:sfo@st.edu)).

**COVID-19 Contingency Plans.** Due to the evolving Covid-19 situation, it may become necessary to change the delivery mode of one or more components of the course. In that case, we will strive to adhere to the syllabus and schedule as far as possible. We will communicate all details through Canvas. If you become ill or need to quarantine, let your recitation instructor know and participate in classwork online. If an instructor is ill or quarantined, their class will be conducted online.

**Course assistance**

**If you have a disability** and anticipate needing accommodations in this course, you are encouraged to meet with Dr. Vojta early in the semester. You will need to request a letter from Student Disability Services ([http://dss.mst.edu](http://dss.mst.edu), 203 Norwood Hall, 341-6655, [dss@mst.edu](mailto:dss@mst.edu)) verifying your disability and specifying the accommodation you need and have this sent to Dr. Vojta before we can arrange your accommodation. **Testing accommodations require seven days notice.** If you are unable to perform boardwork because of a disability or condition that hampers your public performance, you need to discuss this with your recitation instructor to determine an alternative way of accessing your mastery.

**Academic assistance** is available in the Physics Learning Center (see [http://lead.mst.edu/](http://lead.mst.edu/) for details) and through the Student Success Center ([https://studentsuccess.mst.edu](https://studentsuccess.mst.edu)). Contact your recitation instructor or Dr. Vojta if you have concerns or need additional assistance.

**Title IX** policies, resources and reporting options are available at [http://titleix.mst.edu](http://titleix.mst.edu).