

Physics 551: Classical Mechanics

Fall 2008

Instructor: Michael Engelhardt
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Lectures: MWF 9:30-10:20 in Monagle Hall 3300.

Office hours: Tuesday 1:30-3:30 – but don't hesitate to write me an email to make an appointment at other times or just pop by my office, the likelihood I'm there is high.

Required Text: Goldstein, Poole and Safko, *Classical Mechanics*, 3rd Edition, Addison-Wesley 2002.

Contents of the Course: Lagrangian formalism, application to central force motion, rigid body motion and small oscillations, Hamiltonian formulation, canonical transformations.

Reading: You will benefit most from the course by reading each section in the book, as assigned, *before* it is treated in class; that way, we can have an informed discussion and you can ask about anything you don't understand in class.

Homework: Homework will be assigned in class on a regular basis. This is probably where you can learn the most. Definitely do all of them! They will not be the kind of problems you can do in the evening before the homework is due, so plan accordingly. Even if you don't manage to get to the final answer on all problems, significant effort will lead to significant learning benefit and credit.

Exams: There will be an intermediate exam about halfway through the semester and a comprehensive two hour final examination which will take place on December 8, 8:00-10:00 am.

Grading: The final grade will be the following weighted average: Overall % = (intermediate % + final % + homework %)/3.

I've been asked to provide the following information to students as part of the syllabus:

Both intentional and unintentional plagiarism is considered academic misconduct and is prohibited. Academic misconduct is discussed in detail at

<http://www.nmsu.edu/%7Evpsa/SCOC/misconduct.html>, and plagiarism in particular is defined at <http://lib.nmsu.edu/instruction/plagiarismforstudents.htm>.

Feel free to call Jerry Nevarez, Director of Institutional Equity, at 505-646-3635 with any questions you may have about NMSU's Non-Discrimination Policy and complaints of discrimination, including sexual harassment.

Feel free to call Michael Armendariz, Coordinator of Services for Students with Disabilities, at 505-646-6840 with any questions you may have on student issues related to the Americans with Disabilities Act (ADA) and/or Section 504 of the Rehabilitation Act of 1973. All medical information will be treated confidentially.