Physics 3318: Analytical Mechanics Spring 2021 Cornell University Department of Physics

Time Zone Convention: All times quoted throughout the course are US Eastern (Ithaca).

Instructors

Primary Instructor: Jared Maxson, jmm586@cornell.edu Zoom Office Hours: Friday 11:30-1pm and by appointment.

Teaching Assistant: Ruoshui Wang, rw552@cornell.edu

Zoom Office Hours: by appointment.

Grader: Eve Vavagiakis, ev66@cornell.edu

Lecture: MWF, 10:10-11:00 am, MVR 1101 and synchronously via Zoom. See the zoom tab in

Canvas for Meeting ID

Discussion Sections: All Zoom, see Canvas.

DIS 201	DIS 202	DIS 203
Tues 2:40-3:30 pm	Mon 3:35-4:35 pm	Mon 7:30 - 8:20 pm

Note: Even though we are no longer constrained by physical space, I ask that you attend the discussion section for which you are registered. Please check Student Center to verify.

Zoom recordings of lecture and pdfs of **section notes** will be posted to Canvas. **Attendance in lecture and section**: *Not required, but strongly encouraged.*

Homework Parties/Office Hours: Via zoom. TAs and UTAs present.

Mon +Tues, 5-6+ pm

Textbook: No official textbook required. We will draw from three great texts throughout:

- Landau and Lifshitz, Mechanics, Volume 1
- Goldstein, Poole & Safko, Classical Mechanics (preferably 3rd Edition)
- · Hand and Finch, Analytical Mechanics

Each one contains nearly all the physics covered in the course. All are available in the Cornell Library (and L+L is even available as an ebook!): https://www.library.cornell.edu. Please contact Prof. Maxson if you need help with textbook access.

Grading Breakdown: Homework (30%, ~1 set/week), two prelims (20% each), final exam (30%).

Prelim Schedule: https://registrar.cornell.edu/exams/spring-prelim-schedule

Final Exam time: TBD

Homework: Homework submission is handled through Gradescope. The lowest two HWs will be dropped, because things happen! Homework is graded on both accuracy and presentation. All homeworks count equally. HWs are due at **10 am** via gradescope the day listed in the course calendar. No late submissions will be accepted by gradescope.

Academic Integrity: Each student in this course is expected to abide by the Cornell University Code of Academic Integrity. Any work submitted by a student in this course for academic credit will be the student's own work.

Announcements will be typically posted to our Canvas site.

Online Discussion: We will be using CampusWire for course discussion. To join the campuswire site, please use this link: https://campuswire.com/p/G49C9BCC1 or use the Class join code: 7048. Please keep campuswire posts focused on physics content. Participation is not required, but I do encourage you to help answer questions!

Where to go for help, questions or concerns: In general, all of the course staff, including Prof. Maxson, are more than happy to meet with you to discuss questions or concerns. We want you to succeed! Please don't be afraid to ask to set up a zoom appointment. Common questions and concerns, and who to contact are listed below:

If you'd like to discuss grading on a particular HW or Exam problem, please either submit a regrade request through gradescope or message the grader (often this will be Eve). The grader will then contact Prof M if more help is needed.

Do you think there is an error or typo in the lecture notes or in the HW? For homework, please contact Ruoshui, and for Lecture, please contact Prof M. We appreciate your help identifying these and like to correct them ASAP!

If you are struggling with the course content and/or would like advice on how to optimize your approach, please let Ruoshui and Prof M know. Roushui will specialize in helping you with the subject matter, and Prof M is happy to work with you both on subject matter and on general study and exam prep strategies.

Please reach out to Prof M directly for the following:

If you are concerned about your grade and would like to discuss your standing in the course. Note: We have a course-wide discussion of estimated grade boundaries after each prelim.

If a life event or COVID-19 complications will significantly change your ability to participate for an extended period of time.

If you require special accommodations for any aspect of the course.

A final note from Prof M:

Cornell University (as an institution) and I (as a human being and instructor of this course) are committed to full inclusion in education for all persons. Services and reasonable accommodations are available to students with temporary and permanent disabilities, to students with DACA or undocumented status, to students facing mental health issues, other personal situations, and to students with other kinds of learning needs. Again, please feel free to let me know if there are circumstances affecting your ability to participate in class. Some resources that might be of use include:

- Office of Student Disability Services, https://sds.cornell.edu/
- Cornell Health CAPS (Counseling & Psychological Services), https://health.cornell.edu/services/counseling-psychiatry

• Undocumented/DACA Student Support, Kevin Graham (Kevin.Graham@Cornell.edu), list of campus resources can be found here:

https://dos.cornell.edu/undocumented-daca-support/undergraduate-admissions-financial-aid

• Learning Strategies Center, http://lsc.cornell.edu/ I would be glad to help you identify other resources if needed.