

Topics: Introduction to Einstein's Theory of Special Relativity, including Galilean and Lorentz transformations, the concept of simultaneity, time dilation and Lorentz contraction, the relativistic transformations of velocity, momentum and energy, and relativistic invariance in the laws of physics.

Prerequisites: Physics 1112 or Physics 2207 or permission of instructor.

Lecturer: Bert Fulbright (105 Clark Hall, rmf14@cornell.edu).

Grader: Sukhman Singh (ss2775@cornell.edu).

Textbook: "An Introduction to Mechanics", 2nd Edition, by Daniel Kleppner & Robert Kolenkow, ISBN: 978-0-521-19811-0. A digital version of the textbook is available on the Physics 2216 Canvas website under Course Materials as part of the Cornell Academic Materials Program (CAMP; <https://academicmaterials.cornell.edu/>).

iClicker: During lectures you will be asked to answer multiple-choice questions by using an iClicker remote. Your remote will be loaned to you for the duration of the course so you do not have to purchase a remote or an iClicker Student subscription for this course. However, you will need to set up an iClicker Student account (<https://student.iclicker.com/#/login>) if you don't already have one and register your iClicker remote ID there (<https://student.iclicker.com/#/profile/clickers>). You do not have to pay for a subscription in order to register your remote's ID.

Other materials: Inexpensive scientific calculator ($+$, $-$, \times , \div , $\sqrt{\quad}$, y^x , \sin , \cos , \tan , \ln , e^x).

Official course website on Canvas@Cornell:
<https://login.canvas.cornell.edu/>.

Lectures: T R 8:00-8:50 a.m. in 294D Clark Hall.

Homework: Posted on the course website (Modules \rightarrow Homework Assignments) and due as a file upload to our Canvas website by 10:00 p.m. on dates posted in the syllabus.

Quizzes & Exams: All given in lecture. Please see the syllabus for dates.

Course Grading (approximate contributions):

Course Component	% of Course Grade
Quiz 1 [†]	20
Quiz 2 [†]	20
Final Exam [†]	30
Homework Assignments	10
iClicker Lecture Participation	20

[†]Quizzes & Exams written to gauge prescribed levels of achievement (not curved).

Academic Integrity:

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An effective way to avoid potential academic integrity violations is simply to attribute all sources. This includes help received from other students and written or online materials. The offensive aspect of plagiarism is claiming the work of others for oneself.

What you hand in must reflect your own understanding.

Cornell University Code of Academic Integrity website:

<http://theuniversityfaculty.cornell.edu/academic-integrity/>.

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