

PHYS 231A. General Relativity

A. Zee

Prerequisite: Physics 210A-B.

Gravity as geometry, differential geometry, Einstein's equation, relativistic stars, gravitational collapse, black holes, cosmology, gravitational radiation, and special topics.

The text S. Carroll, *Spacetime and Geometry: An Introduction to General Relativity*, is strongly suggested but not required. Other recommended texts include Weinberg, Cheng, Hobson et al. The book by Hartle gives an excellent coverage of general relativity but it is pitched at a somewhat lower level than this course.