

PHYS 4390: General Relativity (fall or winter)

Calendar description: This is an advanced course introducing Einstein's theory of general relativity and the curvature of space-time. Topics shall include manifolds, Riemannian geometry, Einstein's equations, and applications to cosmology and black holes.

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Overview

Prerequisites

[PHYS 1500](#) Introduction to Modern Physics (indirectly)

[PHYS 3201](#) Mathematical Methods in Physics II

[PHYS 3300](#) Classical Mechanics

Dependent courses

Student Outcomes

Curriculum

Suggested texts

Notes to the instructor