

PHYS 4380: Fluid Dynamics (fall or winter)

Calendar description: This course introduces students to the fundamentals of fluid dynamics. Discussion embraces both compressible and incompressible fluids and includes the continuity equation, the Navier-Stokes equation, Bernoulli's theorem, viscosity, the Reynolds number, vorticity, and numerous applications to “real world” problems. Some specialized numerical techniques for solving complex problems in fluid dynamics may also be discussed.

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Overview

Prerequisites

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

[PHYS 3300](#) Classical Mechanics

Dependent courses

Student Outcomes

Curriculum

Suggested texts

Notes to the instructor