Goals:
This course is intended to present to students the fundamentals of processes that govern waves in the ocean environment.

Material:
Basic principles of fluid mechanics, equations of surface gravity waves, linear dispersion relation, phase and group velocity, wave dispersion, wave refraction, wave diffraction, wave reflection, frequency and wavenumber spectra, action balance equation, wave generation, wave-current interaction, ray tracing, stokes drift, Reynolds stress, radiation stress, wave-driven currents, internal waves, propagation of sound in the ocean.

Assignments:
Weekly homework, mid-term and final open-book exams.

Grades:
Homework 30%, mid-term 30%, final 40%.

Textbooks: