

Working schedule for GEF2610
fall 2018
(dates may change)

The dates below give an estimate of the progression of lectures, assignments, cruise and exams during the semester.

- 22/8 Introduction
- 23/8 The stratified ocean
- 29/8 Fluxes of heat, freshwater and momentum across ocean surface
- 30/8 Conservation of mass, salt and thermal energy
- 5/9 The momentum equations (with Pål Erik Isachsen)
- 6/9 The momentum equations on a rotating planet
- 12/9 Observing the ocean
- 13/9 Turbulent mixing and Reynolds fluxes.
- 19/9 Numerical ocean models
- 20/9 **Cruise in the Oslofjord**
- 26/9 Simplified equations for geophysical flows
- 27/9 Large-scale flows: geostrophy
- 3/10 Large-scale flows: thermal wind (**1st obligatory assignment due**)
- 4/10 Large-scale flows: vorticity dynamics
- 10/10 Wind-driven Ekman transport
- 11/10 *Q&A session before midterm exam—bring your questions!*
- 12/10 **Midterm exam**
- 17/10 *No class*
- 18/10 *No class*
- 24/10 The large-scale wind-driven circulation in mid-latitudes, part 1 (**Cruise report due**)
- 25/10 The large-scale wind-driven circulation in mid-latitudes, part 2
- 31/10 Buoyancy-driven flows: why surface forcing isn't enough
- 1/11 The global-scale buoyancy-driven circulation
- 7/11 Wave kinematics
- 8/11 Wind-generated surface gravity waves
- 14/11 Waves influenced by Earth's rotation (**2nd obligatory assignment due**)
- 15/11 Tides
- 21/11 *Q&A session before final exam—bring your questions!*
- 22/11 *No class*

- 30/11 **Final exam**