

Working schedule for GEF2610
fall 2017
(dates may change)

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

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

- 4/12 **Final exam**