AT602
Atmospheric Dynamics II
2 credits

Instructor:
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TA:
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Meeting times:
Tuesday, Thursday 11:00-11:50 AM, ATS West Classroom (except where noted in “course schedule”)

Office hours:
Tuesday 12:30-1:30 pm
Thursday 12:30-1:30 pm

Textbooks (required):

Textbooks (recommended):
• Vallis, G. K., 2006: Atmospheric and Oceanic Fluid Dynamics, Cambridge University Press

Evaluation:
Homework (4 HW assignments total): 50%
Midterm: 25%
Final: 25%

Course outline (subject to change):
1. Quasi-geostrophic theory (Holton/Hakim 2.4, 6; Vallis 5.1-5.4)
2. Baroclinic instability (Holton/Hakim 7; Vallis 6.3-6.7)
3. Wave-mean flow interaction in the Eulerian framework (Holton/Hakim 10; Vallis 7.1-7.4)
   Eliassen-Palm fluxes and the Transformed Eulerian mean (Holton/Hakim 10; Vallis 7.1-7.4)