

001-2-4026 Introduction to the Physics of Atmospheres 3 credits

**Pre requisite:** Vector analysis and basic calculus

Lectures	Exercise	Laboratory	Field Trip
3			

The course requirements include the submission of exercises.  
The grade is determined by a final exam/project at the end of the semester.  
The course will include demonstrations for the relevant issues.  
The syllabus is flexible.  
The Course includes:

- Characteristics of the atmosphere
- The global energy balance
- The vertical structure of the atmosphere
- Convection
- The meridional structure of the atmosphere
- The equations of fluid motion
- Balanced flow
- The general circulation of the atmosphere

**Lecturer:** Y. Ashkenazy

**Recommended Reading:**

Marshall, J. and Plumb A., *Physics of Atmospheres and Oceans*, Lecture Notes (<http://paoc.mit.edu/labweb>).

Hartmann, D. L. (1994). *Global Physical Climatology*, Academic Press

Houghton, J. T. (1977). *The Physics of Atmospheres*, Cambridge University Press

Randall, D. *The General Circulation of the Atmosphere*, available at <http://kiwi.atmos.colostate.edu/group/dave/at605.html>

trackfull degree