GEOS 120, Part B: GLACIERS

Lectures TR 2:00-3:30 pm, 10/5/01 through 11/2/01

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Recommended text:

Post & LaChapelle (2000): Glacier ice, University of Washington Press, 145pp.

Grading criteria:

Quizzes (Thursdays): 15 % (total)

Final exam, Nov 2 (Glaciers): 50 %

Labs: 35 % (total)*

* Attendance of labs is mandatory. Lab exercises are to be completed and handed in by the end of each lab session.

Course outline

1. Introduction and overview (Oct 5)

- Glaciers: What are they? Where do they occur? Why do we study them?

2. Ice, glaciers and landscapes (Oct 10, 12, 17, 19)

- The building blocks of a glacier: Snow, firn and ice

- Anatomy and flow of a glacier

- Glacier types & Glacier hydrology

- Ice sheets, ice streams and ice shelves

- Periglacial phenomena and the glacial landscape

3. Ice ages and climate (Oct. 24, 26, 31)

- Glaciation and the ice ages

- Glaciers, ice sheets and global climate change

- Ice cores as an archive of past climate

4. Final exam for Glaciers part of class (Nov 2)

Last update: October 17, 2001

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