GEOGRAPHY 396AF-070

(Directed Readings)

Meteorological Instrumentation

Instructor: Mark Coté Summer

Room Cl. 325.3

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Class Schedule: Weekly meetings as appropriate

Text: DeFelice, Thomas P. 1998. An Introduction to Meteorological

Instrumentation and Measurement. Upper Saddle River, New Jersey:

Prentice Hall

Supplemental readings as assigned

Grading: Chapter Review 20%
Data Project 20%
Annotated Bibliography 25%
State-of-the-Art Paper 35%

Description:

The science and nature of gathering and analyzing atmospheric data are covered. Instrument and measurement theories are introduced with specific reference to individual meteorological parameters. The concepts of preliminary data analysis and quality control are also integral to this study. Manual observational techniques are investigated along with satellite and airborne remotely sensed data. Specific focus on data from the Canadian Prairies is planned.

Tentative Schedule:

| <u>Week</u> | <u>Topics</u> |
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| 1 | Introduction, Measurement Basics |
| 2 | Radiation and Temperature Measurements |
| 3 | Pressure and Wind Measurements |
| 4 | Humidity, Cloud and Precipitation Measurements |
| 5 | Micrometeorological and Hyrdometeorological Measurements |
| 6 | Weather and Climate Data Analysis and Quality Control |
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