

## *Department of Atmospheric Sciences*

### COURSE ANNOUNCEMENT – SEMESTER I – 2002–03

#### **ATMOS 463: Teaching Atmospheric Sciences**

*Call number:* 08929

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*Room and Time:* 109 Atmospheric Sciences Building; 3:00–4:30 p.m. Monday

*Credit:* 1/2 unit

*Prerequisites:* Graduate standing; consent of instructor

This course will discuss approaches for curriculum development and help to develop skills in teaching of the atmospheric sciences. As part of the course, students will:

- Develop a teaching portfolio
- Develop syllabi for undergraduate and graduate courses
- Participate in micro-teaching activities

#### Course Content:

1. Introduction to teaching atmospheric sciences
  - pedagogy; curriculum content, literature review on teaching science effectively
  - ethics, gender issues, ageism, dealing with disabled students, disruptions in class
2. Developing course materials
  - syllabus writing, homework, exams, quizzes, writing assignments, class projects
  - determining course content (quantity vs. quality)
3. Identifying and developing a teaching style
  - overview of teaching methods
  - observation of other instructors (in classroom and during class preparation)
4. Teaching methods in the classroom
  - lecture, discussions, laboratory, active learning
  - incorporating technology into the class/technology in the classroom
5. Microteaching
  - students participate in micro-teaching while being video taped
  - reflection on micro-teaching experience

Approximately 2 weeks will be spent on each topic. All topics are inclusive and will be revisited. The course will likely include formal and information presentations by personnel from DAS, UIUC and others.

**Texts:** *McKeachie's Teaching Tips*, by Wilbert J. McKeachie, Houghton Mifflin Co., 10th edition (paper) (required).

*Science Teaching Reconsidered*, National Research Council, National Academy Press (paper) (recommended).