

**ATMOSPHERIC SCIENCES 792 FALL 2012
SATELLITE REMOTE SENSING**

Taught by: Pat Arnott. Office hours Wed 1 pm - 3 pm, RM 213 Leifson Physics.

Contact: arnottw at unr.edu, 775-784-6834 (office).

Course Administration: <http://www.patarnott.com/satsens/>.

Course Deliverables:

see <http://www.patarnott.com/satsens/homework2012.html>.

see <http://www.patarnott.com/satsens/notes2012.htm>.

Specific reading material will be assigned:

see <http://www.patarnott.com/satsens/notes2012.htm>.

Time and Place:

Tues / Thurs 4:00 pm until 5:15 pm, Conference Room Leifson Physics.

Final Exam:

Thursday December 13th from 5 pm to 7 pm.

Related Textbooks:

1. Remote Sensing of the Lower Atmosphere: An Introduction, by Graeme L. Stephens.
2. Radiation and Cloud Processes in the Atmosphere: Theory, Observation, and Modeling, by Kuo-Nan Liou.
3. An Introduction to Satellite Image Interpretation by Eric D. Conway.
4. Satellite monitoring of the Earth's surface and atmosphere edited by S. Arnault.

Outline:

The objectives of this practical, hands-on course are:

1. To learn about satellite remote sensing of the atmosphere by doing homework assignments and projects aimed at evaluating specific scientific questions.
2. To make connections between atmospheric radiation transfer and satellite remote sensing.
3. To jump start skills that will help you solve your research questions.
4. To understand the power and limitations of satellite remote sensing.

Grading:

Attendance and participation: 1/4th

Homework: 1/4th.

First Project: 1/4th.

Final Project: 1/4th.

Work Together:

I *strongly* suggest that you work together with other students on projects and homework. Find a partner or group and take advantage of the synergy provided by group

brainstorms and effort sharing with respect to homework and projects.

Special Needs:

Any student with a disability needing academic adjustments or accommodations is requested to contact the instructor as well as the Disability Resource Center in Thompson Student Services 107 as soon as possible to allow for appropriate arrangements.

UNR's Statement on Audio and Video Recording:

“Surreptitious or covert video-taping of class or unauthorized audio recording of class is prohibited by law and by Board of Regents policy. This class may be videotaped or audio recorded only with the written permission of the instructor. In order to accommodate students with disabilities, some students may be given permission to record class lectures and discussions. Therefore, students should understand that their comments during class may be recorded.”

Guide to Doing Well in Class:

(My observations of students that get the most out of their course work during this brief time in life when you get to be a student)

1. Attend class, every class. Ask questions in class. I benefit greatly from questions students ask in class as it helps me refine my understanding of the subject matter, and it helps me convey topics more effectively. Other students benefit as well. I am very open to questions in class, and find that when we have a discussion rather than a monologue, we all get a lot more out of our time together, and we can make interesting discoveries as we go along.
2. Do the homework every time, on time.
3. Work with others on the homework so that you learn to work in a group, and you gain the insights of others as they gain from you.
4. Be sure you thoroughly understand the homework and course material.
5. Arrange your daily schedule so that you have time for sleep at night, and can digest the course material daily. Work on each course a little each day.
6. Get started early on everything. It helps cement your knowledge.
7. Eat well, and get some exercise. Some diversions help refresh your enthusiasm and skill.
8. Attend office hours to ask questions and refine your understanding of the subject matter.
9. Seek connections with the subjects of this course and others you are taking or will take later on as well as with your research.
10. Pay close attention to subjects that are of great interest to you, and you may be able to link your future employment in some way to the concepts of this course.