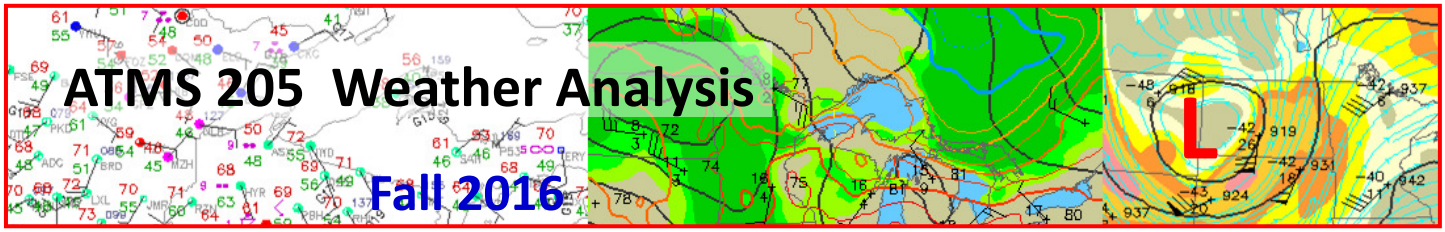

What is all about this course?

Students will learn map analysis skills and fundamental concepts of meteorology by studying surface and upper air maps, vertical atmospheric profiles, and METAR/TAF/MOS decoding.

Who is the instructor?

Dr. Huo-Jin (Alex) Huang, RRO 236B, 232-5157
Dept. of Atmospheric Sciences, UNCA
e-mail: ahuang@unca.edu
http://blizzard.atms.unca.edu/ahuang

Office Hours:

Monday 1:50—3:15 pm;
Tuesday, Thursday 2:30– 3:10 pm;
Wednesday 1:45 – 2:15 pm.
(or by appointment, but walk-in is always welcome)

When and Where do we meet?

3:30—6:00 pm, Monday, RRO 239

Textbooks:

- Weather Analysis Handout (2015) compiled by Alex Huang.
- Weather Analysis & Forecasting Handbook (2011) by Tim Vasquez.

References:

- COMET Learning Module: Introduction to Meteorological Charting (2015).
- Aviation Weather Services Handbook AC 00-45G (2010) by FAA and NWS.

What is the structure of the course?

- PowerPoint Lectures
- 13 Lab assignments

How will you be graded?

- Lab Assignments: 65%;
- Final Exam: 30%;
- Classroom participation: 5%;

Grade Scale (100%)

A ≥ 93: A-: 92.5-90;
B+: 89.5-87; B: 86.5-83; B-: 82.5-80;
C+: 79.5-77; C: 76.5-73; C-: 72.5-70;
D+: 69.5-67; D: 66.5-60; F: ≤ 59.5.

Final Open-book In-class Exam:

3:00—5:30 pm, Wednesday, 12/14/2016

How can you succeed in this course?

- Come to Classes
- Do your homework
- Read materials
- Ask Instructor
- Ask questions
- Form study group
- Think, review, connect
- Be healthy
- Choose right friends

How can I contact the instructor? By e-mail to **ahuang@unca.edu**

Special Remarks: Class attendance is strongly recommended. You are solely responsible for the consequences due to your absence. No make-up quizzes/tests will be given. An exception may be granted for uncontrollable circumstances and medical reasons. You have to consult with the instructor at your earliest convenience for exceptions. A **significant** reduction of your score on your late assignments and make-up quizzes/tests may be applied. You will receive an F for the semester if you miss more than **3** class periods without any justifiable and excusable reasons No operational electronic devices are allowed during the class period.

Student Learning Outcomes: The students in ATMS 205 Weather Analysis are expected to achieve the following goals successfully upon the completion of the course, so they are able:

- To understand definitions and applications of atmospheric variables;
- To comprehend relationships among weather variables;
- To learn basics of meteorology, in-situ observations, and remote sensing technology;
- To practice surface/upper air map plotting and analysis techniques;
- To understand the representations of weather maps and diagrams, and meteorological codes;
- To identify and interpret weather processes from analyzed weather maps;
- To develop analytical skills and scientific common sense;
- To enhance the ability for verbal and written communications; and
- To learn to work with classmates in and out of the classroom.

Academic Integrity: Individual honesty and responsibility are expected, and academic integrity is enforced. Any act of plagiarism or cheating is academic dishonesty. A person who knowingly assists another in cheating is likewise guilty of cheating. According to the instructor's view of the gravity of the offense, a student may be punished by a failing grade or a grade of zero for the assignment or test, or a failing grade in the course. If it seems warranted, the instructor may also recommend to the Provost dismissal or other serious university sanction. Please review the procedures outlined in Section 8.3 of the UNCA Faculty Handbook (http://www3.unca.edu/aa/handbook/8.htm) that relate to academic dishonesty.

Accommodations for Students with Disabilities: The University of North Carolina at Asheville is committed to making courses, programs, and activities accessible to persons with documented disabilities. Students requesting accommodations and/or academic adjustments must do so through the Office of Academic Accessibility and may be required to provide supporting documentation. All information provided will remain confidential. For more information, please contact the Office of Academic Accessibility at *(828)232-5050* or academicaccess@unca.edu, visit them in the OneStop Student Services Center or at their website https://oaa.unca.edu/ .

Disclaimer: This syllabus is the contract between the instructor and students. Most information will not be changed. However, the schedule may be altered due to unforeseeable circumstances upon the agreement between the instructor and students.

ATMS 205 LAB OUTLINE

Week	Dates	Subject	EX
1	8/22	Geography, Isoplething, Isothermal Analysis	1
2	8/28	METAR, Surface Station Model, Isobaric Analysis	2
3	9/5	Labor Day, No class	
4	9/12	Isothermal/Isobaric/Frontal Analysis	3
5	9/19	MOS/TAF Decoding	4
6	9/26	Winds and Thermal Advection	5
7	10/3	RAOB, Upper Air Station Model, Contouring	6
8	10/10 - 11	Fall Break	
9	10/17	Upper air (850, 700, 500, 300 hPa) Maps	7
10	10/24	1000-500 hPa Thickness and 500 hPa Vorticity Maps	8
11	10/31	Current Weather Case Study	9
12	11/7	Thermodynamics Diagram and Stability Indices	10
13	11/14	Severe Weather Case Study	11
14	11/21	Winter Weather Case Study	12
15	11/23 - 27	Thanksgiving Holidays	
15	11/28	Streamline Analysis and Hodograph	13
16	12/5	Satellite and Radar Images (No exercise due)	
16	12/6	UNCA Fall Symposium, No class	
17	12/14	In-Class Open-book FINAL EXAM, 3:00 – 5:30 pm.	

Title IX and Sexual Misconduct

Title IX of the Education Amendments of 1972 prohibits sex discrimination against any participant in an educational program or activity that receives federal funds. The act is intended to eliminate sex discrimination in education. Title IX covers discrimination in programs, admissions, activities, and student-to-student sexual harassment, sexual exploitation, interpersonal violence, non-consensual touching, and sexual assault.

UNC-Asheville's policy against sexual misconduct extends not only to employees of the university but to students as well. If you encounter unlawful sexual misconduct behavior or gender based discrimination, please talk to any University Responsible Employee. All University employees (except Health and Counseling center employees and employed Campus Minsters are considered Responsible Employees and are mandated to report incidents to the Title IX Office. The Title IX office consists of Dr. Jill Moffitt, UNC-Asheville's Title IX Administrator, who can be reached at (828)232-5658; and Keishea Boyd, Assistant Title IX Coordinator, who can be reached at (828) 258-7872. Individuals may also report anonymously at https://police.unca.edu/anonymous-report. For more information regarding Title IX and resources concerning sexual misconduct and its prevention please visit: https://titleix.unca.edu/.

Early Alerts (EA)

Early Alert

Faculty at UNCA are encouraged to use the university's Early Alert system to communicate with students about their progress in courses. Early Alerts can reflect excellent performance or satisfactory progress, or they can indicate concerns (e.g., attendance problems, missing assignments, academic difficulty, etc.).

When a faculty member submits an early alert that expresses a concern, the student receives an email from OneStop and meets with the professor to discuss the alert, completing a form as part of the process.

Professors use the EA system because they are invested in student success and want to open conversations about how students can improve their performance. Generally, early alert meetings involve the professor making sure the student understands the expectations of the course and the likely implications of the behavior(s) that led to the alert. The professor and student then set a plan for progress or discuss the student's options if it is no longer possible to pass the class.

It is in the student's best interest to complete the EA process quickly, as students who do so are more likely to earn credit for the course. Failure to complete the EA process (including meeting with the professor and submitting the required form to OneStop) will result in a registration hold; the student won't be able to register for the next semester's classes until they have met with the faculty member and turned in the required form.

Questions about the EA system can be directed to Anne Marie Roberts (amrober1@unca.edu) in OneStop.