# FOUNDATIONS OF ATMOSPHERIC SCIENCE II
ATMS 204.001
SPRING 2022

The is the second course in a two-course sequence designed for atmospheric sciences majors that introduces basic meteorological, mathematical, and computational concepts, skills, and tools that are critical for advanced study in the atmospheric sciences. Once you complete the two-part series, you will have an excellent foundation for success in your meteorological studies. Ask lots of questions and enjoy!
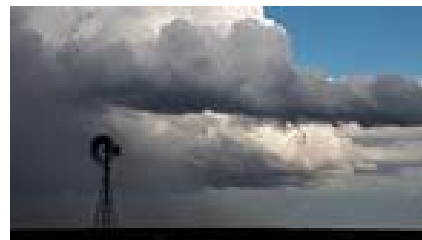
PROFESSOR

Dr. Christopher Godfrey
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Phone: 828-232-5160
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Office hours: Via virtual meetings through Google Meet on **Mondays and Thursdays 11:00 a.m.-12:00 p.m.**, or by appointment. You may call my office (it bounces to my cell phone) during regular business hours. You may send me as many email messages as you wish. Check Moodle for the Google Meet link.

CLASS INFORMATION

Meeting times: W 12:30–3:00 p.m.
Location: Online via Zoom
Required text: None.
Website: http://www.atms.unca.edu/cgodfrey/courses/atms204/

» Please visit http://www.atms.unca.edu/slos.shtml for a list of the student learning outcomes for the Department of Atmospheric Sciences.

COURSE SCHEDULE

All classes are offered synchronously online. This course schedule is approximate and subject to modifications.

Date	Week	Topic	Lab Exercise Due Date
12 January 2022	1	Gradients	19 January 2022
19 January 2022	2	Advection	26 January 2022
26 January 2022	3	Vorticity	2 February 2022
2 February 2022	4	Divergence	9 February 2022
9 February 2022	5	The Continuity Equation	16 February 2022
16 February 2022	6	The Governing Equations	23 February 2022
23 February 2022	7	Balanced Flow	2 March 2022
2 March 2022	8	The Thermal Wind	16 March 2022
16 March 2022	9	Introduction to Python	23 March 2022
23 March 2022	10	Introduction to Fortran	30 March 2022
30 March 2022	11	AWIPS II	6 April 2022
6 April 2022	12	Remote Sensing: Satellites	13 April 2022
13 April 2022	13	Remote Sensing: Radar	20 April 2022
20 April 2022	14	TBD*	4 May 2022

*The last class is reserved for schedule adjustments during the semester.

GETTING QUESTIONS ANSWERED

I will be available on Google Meet during scheduled office hours. Just drop in. If at any other time you have a question, you are more than welcome to call me or send me an email. E-mail is by far the best way to reach me and you will usually get a speedy reply. You may also schedule an appointment with me for a virtual meeting. Please don't hesitate to ask questions about class, other coursework, or the stresses of college life whenever the need arises.

EVALUATION

Your progress is evaluated based solely on the grades for each of the lab exercises. There are no exams or quizzes. **Lab assignments are due via Moodle at 12:00 p.m.** on the date listed in the syllabus. The *only* exceptions to this rule are: (1) serious medical condition (illness or injury) of you or an immediate family member; (2) University excused absence; (3) jury duty; or (4) military orders. Only in such instances will a grade penalty be waived for a late assignment. I will accept completed lab assignments up to 24 hours late (12:00 p.m. the following day) for a 50% late penalty. *Assignments more than 24 hours late will not be graded*. In the event of an unforeseen circumstance that causes you to miss a due date, *you must notify me by phone or e-mail within 24 hours of the event*. Appropriate documentation should be attached to a late assignment. Please review the guidelines for submitting homework, available on Moodle, prior to submitting your first assignment.

GRADING

The grades that you earn on each of the individual lab exercises will each contribute equally to your final grade. I reserve the option to curve the final grades upward at my discretion. However, you are guaranteed *at least* the following based on your final score before applying any curve:

A	≥92.0%	C	72.0–77.9%
A-	90.0–91.9%	C-	70.0–71.9%
B+	88.0–89.9%	D+	68.0–69.9%
B	82.0–87.9%	D	60.0–67.9%
B-	80.0–81.9%	F	<60.0
C+	78.0–79.9%		

Final grades are not negotiable. If you see a problem with a grade, you may plead your case no later than 14 days from the date I return the assignment to the class. I do make mistakes. Under no circumstances will your grade be *lower* if you see me with a question.

ACADEMIC INTEGRITY

Since the point of this or any class is to learn, you may collaborate on lab assignments, but *you absolutely must make sure that you hand in your own work and that you understand the material*. Copying your friend's answers will not only be obvious to me, but will result in both of you sharing the credit for that answer. For example, if you do a fantastic job on the lab assignment and then let three of your friends copy *any part of it*, you will each receive a maximum grade of 25% for the assignment. I have zero tolerance for academic misconduct and will deal with the problem by immediately filing charges through the regular University channels.

PARTICIPATION IN THE VIRTUAL CLASSROOM

This is an online course. Remote classes will be held synchronously and your frequent participation is expected. Please join the class from a computer or phone with a camera and microphone.

COMPUTERS

Though all lab computers in 209 Robinson Hall have the required software for this course and are available for your use, I strongly recommend that you set up your own computer to complete the lab exercises. You will receive instructions for installing special software as necessary.

NOTES

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 or visit them in the Academic Success Center.