

Weather and Climate
PGEOG 13000 - 03
Monday/Thursday 8:30-9:45 am
West Bldg W615

General Information:

Instructor: Geoffrey Fouad
Email: geoffrey.fouad@hunter.cuny.edu
Office hours: Thursday 10:00-1:00 pm
Office: North Bldg 1044

Meeting Information:

Classes are in person (West Bldg W615). Attendance is critical as you are examined on what we discuss in class.

Course Description:

A broad survey spanning the principles of meteorology, elements of weather, current weather analysis, weather map reading, forecasting practices, patterns and characteristics of world climate, and the ongoing processes/challenges of climate change. The course holds a “Required Core - Life and Physical Sciences” requirement designation.

Prerequisites: None

Course Goals: The course meets the following learning outcomes of the requirement designation:

- (1) Identify and apply the fundamental concepts and methods of a life or physical science.
- (2) Apply the scientific method to explore natural phenomena, including hypothesis development, observation, experimentation, measurement, data analysis, and data presentation.
- (3) Use the tools of a scientific discipline to carry out collaborative laboratory investigations (see the lab section).
- (4) Gather, analyze, and interpret data and present it in an effective written laboratory or fieldwork report (see the lab section).
- (5) Identify and apply research ethics and unbiased assessment in gathering and reporting scientific data.

Required Material:*Textbook*

- *The Atmosphere: An Introduction to Meteorology* at:

<https://www.pearson.com/en-us/subject-catalog/p/atmosphere-the-an-introduction-to-meteorology/P200000006953/9780135213131>

Hint: A freely available version of the textbook in PDF form is on the internet

Selected reading

- Paired with class discussions to meet goals listed above

Blackboard

- The course is administered on Blackboard (see <https://hunter.cuny.edu/information-technology/services/accounts-access/blackboard/>)

Grading:

Quizzes	Due before corresponding exam	30% (12 at 2.5% per week)
Exam 1	October 1	15%
Exam 2	November 8	25%
Exam 3	December 16 (9:00-11:00 am)	30%

*Your final grade includes 30% assigned from the accompanying lab (please see your lab syllabus for grading of that part of the course)

For your final grades, minus grades (e.g., B-) are not applied, but plus grades (e.g., B+) are according to:

<https://hunter-undergraduate.catalog.cuny.edu/policies-and-requirements/academic-requirements/grading-policies/grading-definition>

Late quizzes are not accepted after the exam for which they are relevant (i.e., you should use quizzes to study for an upcoming exam).

If you need an extension, the excuse with documentation should be sent prior to the due date.

No assignments accepted after final exam period.

Group work: You may work in groups to complete quizzes, but it does not benefit you to copy answers. The quizzes are intended for you to gauge your progress and prepare for exams.

Quizzes

- Open-book, formative assessment to gauge your engagement with each class including five multiple-choice questions to be submitted weekly to keep up with course content

Exams

- Summative assessment of your knowledge of the prior weeks of material (not cumulative). You will answer a total of forty questions, five from each of the prior classes, demonstrating your understanding of fundamental concepts and arguments

Academic Integrity:

Academic dishonesty (e.g., plagiarism) is a serious offense in regards to academic integrity which defeats the purpose of a college education. As such, this course enforces the “CUNY Policy on Academic Integrity” and applies Hunter’s procedures of “Academic Integrity.”

Accommodations:

In compliance with the American Disability Act, Hunter College is committed to ensuring educational parity and accommodations for students with documented disabilities and/or medical conditions. It is recommended that students with documented disabilities (e.g., emotional or physical) consult the Office of AccessABILITY to secure necessary academic accommodations (see <https://hunter.cuny.edu/students/health-wellness/accessibility/>).

Sexual Misconduct:

Sexual misconduct, and more broadly harassment of any variety, is not tolerated, and will be referred to the appropriate compliance office for review. You are urged to refer misconduct to Hunter’s Title IX Campus Coordinator, Dean John Rose (john.rose@hunter.cuny.edu), or see <https://www.hunter.cuny.edu/diversityandcompliance/title-ix>, and seek complimentary (free) assistance at <https://hunter.cuny.edu/students/health-wellness/counseling-and-wellness-services/>.

Diversity, equity, inclusion, and pronouns: We live in a diverse world in which our diversity should be celebrated. Please notify me of your correct pronouns, and understand that our classroom is an inclusive environment where each of us can come together to learn.

Class Policies: The following policies are in place to help you learn.

- (1) Do not copy-paste from classmates (you will not learn doing this)
- (2) During class time, let's focus and limit distractions of any kind
- (3) Please be on time and treat others respectfully
- (4) Complete reading before class (this will help you finish assignments faster)
- (5) Study actively (e.g., ask/answer your own questions)

Schedule: This schedule is subject to change.

Class	Subject	Reading	Deadlines
8/29	Introduction	Chapter 1	
9/2	Labor Day (no class)		Drop at 75% tuition refund (9/3)
9/5	Introduction continued		
9/9 9/12	Solar radiation	Chapter 2	
9/16 9/19	Temperature	Chapter 3	
9/23 9/26	Atmospheric moisture	Chapter 4	
9/30 10/3	Synthesis No class		Exam 1 (due 10/1)
10/7 10/10	Clouds and precipitation	Chapter 5	
10/15 10/17	Air pressure and winds	Chapter 6	
10/21 10/24	Circulation	Chapter 7	
10/28 10/31	Air masses	Chapter 8	
11/4 11/7	Synthesis Exam 2		Exam 2 (due 11/8)
11/11 11/14	Midlatitude cyclones	Chapter 9 Selected reading	
11/18 11/21	Thunderstorms and tornadoes	Chapter 10 Selected reading	
11/25 11/28	Hurricanes Thanksgiving (no class)	Chapter 11	
12/2 12/5	Hurricanes (continued) Forecasting	Selected reading Chapter 12	
12/9 12/12	Climate change	Chapter 14	Withdrawal (12/14)
12/16	Exam 3 (9:00-11:00 am)		Exam 3 (due 12/16)

Classes follow Monday schedule