# Weather and Climate PGEOG 13000 - 02 Tuesday/Thursday 5:30-6:45 pm West Bldg W511

## **General Information:**

Instructor: Geoffrey Fouad

Email: gf1015@hunter.cuny.edu

Office hours: Tuesday 3-5 pm Office: North Bldg 1044

## **Meeting Information:**

Classes are in person (West Bldg W511). 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/P20000006953/9780135213131

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 second class in the following week	30% (12 at 2.5% per week)
Exam 1	September 28	15%
Exam 2	November 2	25%
Exam 3	December 19 (5:20-7:20 pm)	30%

<sup>\*</sup>A quarter of your final grade will be assigned from the accompanying lab (please see your lab syllabus for grading of that part of the course)

A	≥90%
В	80-89%
С	70-79%
D	60-69%
F	<60%

Late quizzes are not accepted because you have a week to complete them.

If you need an extension, the excuse with documentation should be sent prior to the due date. No assignments accepted after class on December 14.

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 before the second class of the following week

#### 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 <a href="https://hunter.cuny.edu/students/health-wellness/accessibility/">https://hunter.cuny.edu/students/health-wellness/accessibility/</a>).

#### **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 <a href="https://www.hunter.cuny.edu/diversityandcompliance/title-ix">https://www.hunter.cuny.edu/diversityandcompliance/title-ix</a>, and seek complimentary (free) assistance at <a href="https://hunter.cuny.edu/students/health-wellness/counseling-and-wellness-services/">https://hunter.cuny.edu/students/health-wellness/counseling-and-wellness-services/</a>.

**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	Drop at 75% tuition
8/31			refund (8/31)
9/5	Solar radiation	Chapter 2	
9/7			
9/12	Temperature	Chapter 3	
9/14			
9/19	Atmospheric moisture	Chapter 4	
9/21			
9/26	Synthesis		
9/28	Exam 1		
10/3	Clouds and precipitation	Chapter 5	
10/5			
10/10	Monday schedule (no class)	Chapter 6	
10/12	Air pressure and winds		
10/17	Circulation	Chapter 7	
10/19			
10/24	Air masses	Chapter 8	
10/26			
10/31	Synthesis		
11/2	Exam 2		
11/7	Midlatitude cyclones	Chapter 9	
11/9		Selected reading	
11/14	Thunderstorms and tornadoes	Chapter 10	
11/16		Selected reading	
11/21	Hurricanes	Chapter 11	
11/23	Holiday		
11/28	Hurricanes (continued)	Selected reading	
11/30	Forecasting	Chapter 12	
12/5	Climate change	Chapter 14	
12/7			
12/12	Reading day		Withdrawal (12/11)
12/19	Exam 3 (5:20-7:20 pm)		