PGEOG 13000 Weather and Climate Lab Sections 2L01 and 2L04 Monday/Wednesday 5:00 pm-6:50 pm Fall 2022 Syllabus

Room: Monday: 1001D Wednesday 1028

Lab instructor: Kelsey Parker Email: <u>kparker@gradcenter.cuny.edu</u> Office hours via Zoom: Monday 10am-12pm I can meet outside of office hours via zoom by request

Please don't hesitate to email me with questions and concerns. I will do my best to respond promptly, but if you don't get a response in 2 days (not including weekends), please email me again to remind me. Include PGEOG 13000 in the email subject. If you email me about an upcoming lab, please try to email me as early as possible. If you email me Monday morning about Monday afternoon's lab, I may not see it in time to respond.

Course Description

This is the lab section to an introductory course on weather and climate. This course focuses on understanding the drivers of weather and climate. Lab exercises are meant to enhance your understanding of topics discussed in lecture through application and analysis. Please see your lecture syllabus for more information.

Objectives

• Describe the basic elements that determine weather patterns and climatological features across the earth

Describe the basic chemistry and physics of atmospheric processes

• Discuss the basic concepts related to earth's climate, and what is known about recent climatic changes

Required Materials

Lab Text (Required): Carbone, Greg. *Exercises for Weather and Climate, 9th edition*. Pearson, 2016 ISBN: 978- 0134041360

We will be working on labs in class, so you must have either a hardcopy of the lab or an e-text version which can be written/drawn on in class. The e-text is not recommended if you want to print a hardcopy of each lab due to alignment and other printing errors.

*The lab text is on reserve in the library (Call Number: QC981 .C34 2016). You can photocopy and use this as long as there is no writing in it. Please note that I do not know the condition of this book. If it is missing pages you are still responsible for the work.

*You MUST purchase or use the 9th edition of the Lab Text. You may rent the book as long as you can print the activities. A used book with writing in it is NOT acceptable. Also be wary of missing pages in used editions.

Please also bring a calculator and materials to take notes on

<u>Grades</u>

Your lab grade is 30% of your overall course grade.

Your lab grade will be 20% Participation (Attendance and completing labs in class) and 80% Weekly Blackboard Assignments. I will drop one of your lowest scores on the weekly assignments.

Lab prep, Attendance, and Lateness

You're expected to prepare for the lab by reading the assigned section BEFORE coming to class. I will provide a short overview of the material and you will be in small groups to finish the lab. I will check your assignments at the end of class for participation credit. You must attend labs to get full credit.

After the lab you will have a week to complete an assignment on blackboard that is related to the lab material. The Blackboard assignment is due before class the following week and is meant to be completed individually. If you think your assignment will be late for whatever reason, please let me as far in advance as you can. I will assess on a case by case basis, but if it becomes a habit I will have to begin deducting 20% for each late day.

Please be respectful of yourselves and each other. Inappropriate behavior in our language and/or conduct will not be tolerated. In addition, I respect and affirm all forms of gender expression and identities. If you have a preferred gender pronoun or preference like a "nickname" I will make note. If you have any questions or concerns, please address them with me immediately.

Due to the ongoing COVID-19 pandemic, we must continue to adhere to all guidelines from CUNY. https://www.cuny.edu/coronavirus/#2022. If you are not feeling well, **please do not come to class**. Send me an email and we can discuss how and when you can make up missed assignments.

Syllabus Change Policy

Except for changes that affect implementation of the evaluation (grading) statement, this syllabus is a guide for the course and is subject to change with advance notice. All changes will be announced on Blackboard, by email, and/or in class

Hunter College Statement On Academic Integrity

Hunter College regards acts of academic dishonesty (e.g., plagiarism, cheating on examinations, obtaining unfair advantage, and falsification of records and official documents) as serious offenses against the values of intellectual honesty. The College is committed to enforcing CUNY Policy on Academic Integrity and will pursue cases of academic dishonesty according to the Hunter College 5 Academic Integrity Procedures. Plagiarism, dishonesty, or cheating in any portion of the work required for this course will be punished to the full extent allowed according to Hunter College regulations. Remember that copying answers from the internet, an answer key, or someone else is plagiarism. In this class you can work in groups in lab. In fact, I highly encourage this, but you must always record the answers to the labs in your own words (and in words you understand). Do not give me or your lab instructors any reason to be suspicious or doubt that you are being honest as I will not tolerate cheating. If you are caught cheating / copying on an exam or lab, you will get an automatic zero on the assignment and possibly fail the course. I will also report you and the suspect incident to the office of the Dean of Students.

ADA Policy (for students who have accommodations)

In compliance with the American Disability Act of 1990 (ADA) and with Section 504 of the Rehabilitation Act of 1973, Hunter College is committed to ensuring educational parity and accommodations for all students with documented disabilities and/or medical conditions. It is recommended that all students with documented disabilities (Emotional, Medical, Physical, and/or Learning) consult the Office of AccessABILITY to secure necessary academic accommodations. For further information and assistance please call (212-772-4857)/ TTY (212-650-3230). You must be registered with the Office of AccessABILITY to qualify for the accommodations.

Hunter College Policy On Sexual Misconduct

In compliance with the CUNY Policy on Sexual Misconduct, Hunter College affirms the prohibition of any sexual misconduct, which includes sexual violence, sexual harassment, and gender-based harassment retaliation against students, employees, or visitors, as well as certain intimate relationship. Students who have experienced any form of sexual violence on or off campus (including CUNYsponsored trips and events) are entitled to the rights outlined in the Bill of Rights for Hunter College. a. Sexual Violence: Students are strongly encouraged to immediately report the incident by calling 911, contacting NYPD Special Victims Division Hotline (646-610-7272) or their local police precinct, on contacting the College's Public Safety Office (212-772-4444) b. All Other Forms of Sexual Misconduct: Students are also encouraged to contact the College's Title IX Campus Coordinator, Dean John Rose (jtrose@hunter.cuny.edu or 212-650-3262) of Colleen Barry (colleen.barr7@hunter.cuny.edu or 212-772-4534) and seek complimentary services through the Counseling and Wellness Services Office, Hunter East

1123. CUNY Policy on Sexual Misconduct Link:

http://www.cuny.edu/about/administration/offices/la/Policyon-Sexual-Misconduct-12-1-14-with-links.pdf

Date	Lab Number	Торіс	Questions	Textbook Chapter
8/29	1nm	Syllabus Review Unit Conversions, Lat/Long, Isolines	All	
9/5		No Classes		
9/12	1	Vertical Structure of the Atmosphere	1-22	1
9/19	2	Earth-Sun Geometry	1-6, 9-19	2
9/29 Meet Thursday Sept 29th	3, 4	No Classes 9/26, rescheduled for 9/29 Surface Energy Budget Global Energy Budget	Lab 3: 1-15 Lab 4: 1-5, 11-15	2, 3
10/3	5	Atmospheric Moisture	10-29	4
10/10		No Classes		
10/17	6	Saturation and Atmospheric Stability	1-16, 18-25	4
10/24	9	Weather Map Analysis	1-7	8
10/31	9, 10	Weather Map Analysis Mid-Latitude Cyclones	Lab 9: 8-9 Lab 10: 1-17	9
11/7	12	Thunderstorms and Tornadoes	1-17	10
11/14	13	Hurricanes	1-17	11
11/21	14	Climate Controls	1-22	15
11/28	16	Climate Variability	1-23	14
12/5 (Final Class)	17	Simulating Climate Change	1-16	14

Course Schedule (Monday)

Course Schedule (Wednesday)

Date	Lab Number	Торіс	Questions	Textbook Chapter
8/31	1nm	Syllabus Review Unit Conversions, Lat/Long, Isolines	All	
9/7	1	Vertical Structure of the Atmosphere	1-22	1
9/14	2	Earth-Sun Geometry	1-6, 9-19	2
9/21	3, 4	Surface Energy Budget Global Energy Budget	Lab 3: 1-15 Lab 4: 1-5, 11-15	2, 3
9/28	5	Atmospheric Moisture	10-29	4
10/5		No Classes		
10/12	6	Saturation and Atmospheric Stability	1-16, 18-25	4
10/19		Review/Discussion/Green Roof	None	
10/26	9	Weather Map Analysis	1-7	8
11/2	9, 10	Weather Map Analysis Mid-Latitude Cyclones	Lab 9: 8-9 Lab 10: 1-17	9
11/9	12	Thunderstorms and Tornadoes	1-17	10
11/16	13	Hurricanes	1-17	11
11/23	14	Climate Controls	1-22	15
11/30	16	Climate Variability	1-23	14
12/7 (Final Class)	17	Simulating Climate Change	1-16	14