

PGEOG 130 - Weather & Climate
Section 02
Spring 2018
Web-Enhanced

Class Meetings:

Lecture: Monday / Wednesday, 5:35 to 6:50 PM, HN 1036
Lab (sec. 2L02): Wednesday, 7:00 to 8:50 PM, HN 1028

Instructor Rocky Garcia*
Email: rgarcia@gradcenter.cuny.edu
Office hours: By appointment only
Department of Geography HN 1006, 212-772-5265
Course website: <http://www.geo.hunter.cuny.edu/tbw/wc.labs.spring.2018/index.html>

* Note: the best way to contact me is through your Hunter College Email – You must include the course name (PGEOG 13000) in your subject line and sign your name as it appears in CUNYfirst. I try to answer all emails within 24 hours. Allow for a 48-hour delay on the weekends.

Required Text:

The Atmosphere: An Introduction to Meteorology, **13th edition**, Lutgens and Tarbuck, 2016. Pearson/Prentice Hall. ISBN 978-0321984623.

The 10th edition, or later, of the required text is acceptable (and less expensive). You MUST be registered for a weekly lab. Lab schedules can be found at:
<http://www.geography.hunter.cuny.edu/tbw/wc.labs.spring.2018/index.html>

Required Course Lab Manual: You are required to have your lab manual for the first day of lab. *Exercises for Weather and Climate*, by Greg Carbone, 9th Edition, Lab Manual. ISBN 9780321984623.

Course Description

In this 4-credit course we will explore meteorology and climatology and how weather and climate affect us and nature. Topics will include weather forecasting, climate change and environmental issues relating to weather and climate.

Expected Learning Outcomes

The student who successfully completes this course can:

- Recognize the basic chemistry and physics of atmospheric processes.
- Analyze current and forecasted weather patterns.
- Describe past climate change and how it relates to the present and future.
- Discuss feedback mechanisms and how they relate to climate.
- Describe how climate affects biogeography

- Illustrate the nature of scientific inquiry and how hypotheses are formulated and tested as well as learn about the development of some significant scientific theories.

Schedule subject to change.

Jan	29	Monday	Course Intro/Chapter 1 - Intro to the Atmosphere
	31	Wednesday	Chapter 1 - Intro to the Atmosphere
Feb	5	Monday	Chapter 2 - Heating Earth's Surface & Atmosphere
	7	Wednesday	Chapter 2 & Chapter 3 – Temperature
	12	Monday	Lincoln's Birthday, college is closed
	14	Wednesday	Chapter 3 - Temperature
	19	Monday	President's Day, college is closed
	21	Wednesday	Chapter 4 - Moisture & Atmospheric Stability
	26	Monday	Chapter 5 - Condensation & Precipitation
	28	Wednesday	Chapter 6 - Air Pressure & Winds
Mar	5	Monday	Chapter 7 - Circulation of the Atmosphere
	7	Wednesday	Chapter 7 - Circulation of the Atmosphere / EXAM Review
	12	Monday	Midterm Review
	14	Wednesday	Midterm Ch. 1-7
	19	Monday	No Class Scheduled
	21	Wednesday	Chapter 8 – Air Masses
	26	Monday	Chapter 9 - Weather Patterns
	27	Wednesday	Chapter 9 - Weather Patterns
Apr	2	Monday	No Class Scheduled
	4	Wednesday	No Class Scheduled
	9	Monday	Chapter 10 - Thunderstorms & Tornadoes
	11	Wednesday	Friday Schedule
	16	Monday	Chapter 10 - Thunderstorms & Tornadoes
	18	Wednesday	Chapter 11 - Hurricanes
	23	Monday	Chapter 12 – Weather Forecasting
	25	Wednesday	Chapter 12 – Weather Forecasting
	30	Monday	Chapter 12 – Weather Forecasting
May	2	Wednesday	Chapter 13: Air Pollution
	7	Monday	Chapter 14 - Climate Change
	9	Wednesday	Chapter 14 - Climate Change
	14	Monday	Chapter 14 - Climate Change
	16	Wednesday	Reading Day
	21	Monday	No Class Scheduled
	23	Wednesday	Final Exam: Chapters 1-15, labs 9-16 *Note earlier start to exam (5:20 – 7:20pm) <u>CR/NC forms will not be accepted at the final exam.</u>

GRADING SYSTEM

Midterm exam	30%
Final exam	35%
(14) Lab exercises	25%
(12) Pre-lab quizzes	10%

GRADING POLICIES

The grade of IN (incomplete) will be given in only the most extraordinary and documentable circumstances and only at the request of the student within 48 hours of the date and time of the course final exam. At the time of the request you, the student, must also complete a Contract to Resolve an Incomplete Grade in consultation with me, your instructor. We will agree on what needs to be completed and when it will be due and, if you meet the mutually agreed upon conditions, your course grade will be recomputed and a new grade, if appropriate, will be submitted. I will allow only one semester in which you can resolve the IN/FIN. After that time no request will be considered. The contract form is available in the Department of Geography office, HN 1006, during normal business hours.

Only those students who have completed all required coursework are eligible for CR/NC. This includes the taking of all exams and quizzes (including pre-lab quizzes), and the completion of ALL laboratory exercises. Hunter's CR/NC policy and the appropriate form can be found at <http://www.hunter.cuny.edu/advising/how-to/file-credit-no-credit-cr-nc>. Credit/No Credit forms may not be submitted at the final exam. You may submit CR/NC forms at one of the last two lectures of the semester.

Lecture attendance is required and I will periodically take attendance either by sending around a sign-in sheet, via in-class place name quizzes or via a question sheet you fill out and submit when we watch videos. If you miss more than three lectures you will not be eligible for the course grade curve at the end of the semester.

I am available for questions before, during and after lecture, either publicly or privately. Ask me questions! There's no such thing as a dumb question in this class. Public questions are good because there are probably other students with the same or similar question.

Lab attendance is required and it is important you are in your seat at the time your lab begins. There will be a pre-lab quiz during the first ten minutes of every lab on the material covered in that day's lab exercise. You must come to lab prepared by reading the entire lab prior to your scheduled lab period. If you don't understand the lab material then you should read the textbook chapter concerning that lab and refer to your lecture notes about the subject. I will cover lab subjects in lecture before the lab.

If you arrive to lab any time during the first ten minutes, you may work on the pre-lab quiz but all quizzes must be turned in at the ten minute mark. No one may take a pre-lab quiz at any time other than the first ten minutes of the lab period. During the pre-lab quiz you will submit completed labs from the previous week. Labs submitted after the first ten minutes of the lab period are considered late. After the pre-lab quiz your lab instructor will lecture for 15-45 minutes, depending on the subject. Since you will have received a lecture about the lab material in the lecture portion of the course this lecture will be a summary about the important points and your lecture instructor will point out some of

the lab's pitfalls. After the lab instructor's lecture you will work on the lab. You may work on the lab with others **but** your work must be your own and we look closely at answer's that are word-for-word the same on two or more labs. This is plagiarism and will not be tolerated. All work must be in your own words. You are not required to complete labs during the lab period. Labs are due at the beginning of the next lab meeting and so you have at least a week to complete labs. Therefore, your lab grades should be consistently in the A/B range. If not then you are not putting in the necessary effort.

Late labs will have the grade reduced 20 points for each DAY they are late unless you have a valid excuse that can be documented. This rule will be strictly enforced.

Photocopied, emailed and/or faxed labs are not permitted. You may make a blank copy of a lab and then fill in the answers showing your work and calculations. Lab answers must be neat and you must show all math calculations and use proper units of measurement to receive credit for an answer. If your lab instructor cannot read your answers, your answers will be marked wrong. If an answer cannot neatly fit in the space provided, use a separate lined sheet of paper for your answers. Make sure your answers are properly numbered.

As said earlier, lab attendance is mandatory. Your overall lab grade will be reduced by 5% for each unexcused absence beyond one absence. Expect to spend the entire one hour and fifty minutes in lab. If you leave early and then have questions you lose the right to ask your lab instructor for extra help.

For students who are also parents: If the choice is missing class or bringing your child to class, I would rather you bring them with you. Please discuss this with me personally before doing so.

There is a lot of information posted on the course web site. Read it first before asking questions.

Exams are multiple-choice and require you to fill in those little circles with a number 2 pencil. Don't forget an eraser. We do not bring pencils to exams. If you have never filled out a Hunter College Scantron form used on exams, request a blank form from your professor and practice filling it out properly before the exam day. **If you incorrectly fill out a Scantron form, 20 points will be deducted from your exam grade because I will have to manually grade your exam.**

If you must carry on a conversation, leave the room. Talking during lectures or videos is distracting to others. Be considerate. If you forgot to put your cell phone on vibrate and it rings, it's not the end of the world. But if you must answer it, leave the room.

Clean up after yourself. Don't leave your empty water bottles, coffee cups, etc.

You are responsible for learning the names of both your lecture and lab instructors. You will be required to write in the name of your lab instructor on exams and quizzes so they are graded properly. Failure to do so correctly will result in your quiz not being graded and you will receive a zero for that quiz.

"I'm not good at math!" Calculations involve basic arithmetic and algebra learned in secondary school which should not be a problem. Basic function calculators are acceptable in lab but never allowed in exams. The first lab of the semester will include calculations similar to later labs. If you have difficulty with the math in the first lab you have 4-5 weeks in which to review/remember your high school math and come up to speed.

Laptop, Notebook and other Computers in Class.

I ask you generally not to use laptops/notebooks, etc., in class. If you need or strongly prefer a laptop for taking notes or accessing readings in class for any reason, please come talk with me, and I am happy to make that work. I'll just ask you to commit to using the laptop only for class related work.

There are a few reasons why I don't want laptops in class:

- If you have your laptop/notebook open it's almost impossible not to look at email or surf the internet. Multitasking is a distraction and there are studies that indicate multitasking has a negative impact on learning.
- You're probably bothering the people around you and negatively impacting their learning environment. A study published in 2013 found that not only did the multitasking student in a classroom do worse on exams on the material, so did the peers who could see the computer. In other words, the off-task laptop use distracted not just the laptop user but also the group of students behind the laptop user.
- I like student participation in lecture. If you are on a laptop, your peers and I are often looking at the back of your computer screen and the top of your head, rather than all of us making eye contact with each other. Learning happens best in a classroom when everyone is actively engaged with one another in the exchange of information.
- Several studies have shown that students who manually write notes have better retention of the material.

Other Rules & Policies:

I do not give extra credit. Whatever effort you would put into an extra credit assignment, put into completing the labs and studying for exams and quizzes.

If a problem develops during the semester relating to this course **DO NOT LET THE PROBLEM BECOME SERIOUS BEFORE DISCUSSING IT WITH YOUR INSTRUCTOR.** It is better to talk early-on so we can attempt to find a solution. All conversations are in strict confidence.

Students requiring special consideration during exams must make arrangements with the Office of Accessibility and tell your instructor of the arrangements prior to any exam.

Exam-Related Rules

Electronic devices, i.e., cell phones, programmable calculators, calculators, PDAs, IPODs (or any such electronic device) and/or ear phones or ear buds of any kind are prohibited from all exams. They must be turned off and put away. Violators will be required to leave the exam, a grade of zero will be recorded and disciplinary action will be initiated through the Dean of Students.

Write neatly. You must fill in all of the required information neatly and correctly on exam question and answer sheets. If you don't, points will be deducted from your exam grade.

Bring your No. 2 pencils for all exams. Exams use answer sheets where you darken the correct circle with a number 2 pencil that you provide (along with an eraser). Bring your own sharpened pencils. None will be provided.

I do not exempt graduating seniors from the final exam.
Exams consist of multiple choice and short answer questions.

Because exams will emphasize vocabulary and concepts, the best way to prepare for them is to pay particular attention to words or bold or italicized terms in the textbook. Do the same for words or terms that are emphasized during lectures. Pay close attention to graphs, charts and pictures. Study with two or more people. If you can explain it to another, you know it well.

The Dean of Students has advised NOT to allow students to use a dictionary of any kind during exams. The rationale is that students who take this course should have passed the Developmental English requirements (if required to do so) and, therefore, have no need for a dictionary. If you need help with a word or two during an exam, raise your hand and someone will come to help you.

Once the first student has completed the exam and left the room no late comers will be admitted to the exam. All late comers admitted to the exam must return their exam at the end of the scheduled exam time. No additional time will be allowed.

Hunter College Policy 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 the CUNY Policy on Academic Integrity and will pursue cases of academic dishonesty according to the Hunter College Academic Integrity Procedures.

ADA Policy: 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 Accessibility, located in Room E1214B, to secure necessary academic accommodations. For further information and assistance, please call: (212) 772- 4857 or (212) 650-3230.

Hunter College Policy on Sexual Misconduct: In compliance with the CUNY Policy on Sexual Misconduct, Hunter College reaffirms 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 relationships. Students who have experienced any form of sexual violence on or off campus (including CUNY-sponsored 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, or 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) or Colleen Barry (colleen.barry@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/Policy-on-Sexual-Misconduct-12-1-14-with-links.pdf>

Some last thoughts...

This is an intro-level course that many students take to satisfy a science requirement. This course may be different from other 100-level courses you have taken in that later chapters of the textbook build on material learned in earlier chapters. So..... if you fall behind it is difficult to catch up. You should spend time every week studying the course material.

There's a lot of material to cover in the course and the textbook is packed with information. If you give equal importance to all material, you will be overwhelmed. A good guide is if I cover a subject in class it is important and you should pay close attention to it in the text. Lab exercises go into more detail about the most important concepts in the course so lab is very important.