

PGEOG 25100 – Spring 2021
EARTH SYSTEMS SCIENCE II
Lecture Instructor: Professor Randy Rutberg
Lab Instructor: Mr. Thomas Carboni

CLASS SCHEDULE:

LECTURES: Tuesday/Friday, 11:10 AM – 12:25 PM

LABS: Tuesday, 12:45 PM – 1:35 PM (Asynchronous – See Below)

Prof. CARBONI CONTACT INFORMATION:

Office Blackboard Collaborate in Course Room

E-mail Thomas.Carboni72@myhunter.cuny.edu

Office Hours: Tuesday 2:00 – 2:30, *please make appointment via email in advance*

PREREQUISITES:

Each of you must have passed the first part of this two-course sequence (PGEOG 25000), or have permission of the instructor

EMAIL POLICY:

You may email me with any questions you have regarding the lab material. I'm here to help but you must make an attempt to solve your own problems first. This means reading the required material and thinking before you send me an email. In your email you must include PGEOG 251 in the subject line and sign your full name as it appears in CUNYfirst. In addition, you **MUST** use your hunter email when contacting me. You can expect to have your email messages returned within 36-48 hours.

GENERAL LAB INFO:

This class will be held in asynchronous format. There will be pre-recorded lab videos posted once every week or two depending on the lab. Labs will consist of exercises designed to introduce students to some of the concepts and skills necessary to study environmental systems in a quantitative fashion. These include basic mathematical concepts and the use of computer simulations, or models, to understand the earth from a "systems dynamics" perspective. We will continue to work on modeling exercises and data visualization and analysis. Previous experience from Earth System Science I will be assumed and basic familiarity with the Windows operating system, MS WORD, and MS EXCEL, is expected. Computer labs will be provided to you.

Most labs take two weeks. Labs are expected to be posted on blackboard by a given date and time.

Group work – is allowed and is encouraged for all labs and assignments; However, the final work **MUST** be individual. If students choose to work in groups, students must: (1) inform the professor which students are working together; and (2) hand in **INDIVIDUAL** lab reports, written in the student's own words and style.

REQUIRED MATERIALS

No textbooks are required for the class; however, you may need to reference the lecture text at times. In addition, you need access to a computer and be able to log into the geography department computers remotely to access a program called STELLA as well as MatLab.

GRADES

Voicethread/writing assignments 15%

Problem sets: 15%

Labs 30%

3 Exams 30%

Independent project 10%

LAB ASSIGNMENTS

Group work is encouraged (See above). Assignments will be accepted late but at a 10% penalty per day. If you experience extenuating circumstances, you must contact me within 24 hours of the due date of the assignment to discuss course of action.

- Assignments must be submitted electronically (on blackboard) in .pdf format.
- When submitting your assignments electronically, the document name must have the following format:

lastname_firstname_assignmentname_pgeog251.pdf

Example: Carboni_Tom_Lab1_pgeog251.pdf

This naming rubric helps me keep track of student work. If you do not name your documents as specified above, I do not guarantee that they will be graded.

In addition, within the document itself, you must include your full name, assignment title and any other students with whom you worked. All work must be presented in a clear and professional manner. If I cannot read it, I cannot grade it.

In your labs, you will have to include an Introduction, Methods / Procedure, Results and Discussion, and Conclusion section. This will be discussed and gone over in a recording posted on blackboard.

SYLLABUS CHANGE POLICY

Except for changes that substantially affect implementation of the evaluation (grading) statement, this syllabus is a guide for the course and is subject to change with advance notice. Updates will be posted regularly on BlackBoard.

The professor reserves the right to alter or add topics and assignments as needed.

As with all courses at Hunter College:

As per CUNY, an **Unofficial Withdraw (WU)** is assigned to students who **attended a minimum of one class**. It is important to understand the definition of a WU and the difference between this grade and an F grade. The conditions for assigning the WU grade include:

1. A student's enrollment has been verified by the course instructor, and
2. The student has severed all ties with the course at any time before the final exam week and, consequently, has failed to complete enough course work -- as specified in the course syllabus -- to earn a letter grade, and
3. The student has not officially withdrawn from the course by completing the process for a W grade, or made arrangements to receive an INC.

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 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 AccessABILITY, 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 affirms the prohibition of any sexual misconduct, which includes sexual violence, sexual harassment, and gender-biased harassment retaliation against student, employees, or visitors, as well as certain intimate relationship. 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 strongly encouraged to contact the College's Title IX Campus Coordinator, Dean Jean Rose (jtrose@hunter.cuny.edu or 212-650-3262) or Colleen Barry (colleen.barry@hunter.cuny.edu or 212-772-4534) and seek complementary 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-link.pdf>

**** A tentative schedule of classes, lab topics, and due dates are provided on the next page and will be updated on BlackBoard as needed ****

PGEOG 25100 – ESS II Spring 2021: COURSE SCHEDULE

**** Tentative Schedule (subject to change) ****

Tentative Syllabus Readings specified by chapter, with no author (e.g. “Ch. 9: The Biosphere and Biodiversity”) refer to the main text of the class (Kump, Kasting, and Crane) which the students are expected to have. Other readings, specified by author, are supplied as pdf files.

Class No & Date	Lab #	Lab Topic	Related Lecture Reading	Assign. Due
1. Tue – 2/2	1	Syllabus Review and Lab Format Overview; Exponential Growth, S-shaped growth	Chapter 9, 13	-----
2. Tue – 2/9	1	Exponential Growth, S-shaped growth	Chapter 9, 13	-----
3. Tue – 2/16	1	Exponential Growth, S-shaped growth	Chapter 9, 13	-----
4. Tue – 2/23	2	Stochastic Processes, S-shaped growth, Forest Succession, and Climax Community	Chapter 10,11,18	Lab 1 Due
5. Tue - 3/2	2	Stochastic Processes, S-shaped growth, Forest Succession, and Climax Community	Chapter 10,11,18	-----
6. Tue – 3/9	3	Biodiversity Index	Chapter 11, 12	Lab 2 Due
7. Tue – 3/16	3	Biodiversity Index	Chapter 11, 12	-----
8. Tue – 3/23	4	Basic Concepts in Chemistry for Studying Biogeochemical Cycles	Chapter 12, 14	Lab 3 Due
9. Tue – 3/30	-----	No Class – Spring Break!	-----	-----
10. Tue – 4/6	4	Basic Concepts in Chemistry for Studying Biogeochemical Cycles	Chapter 12, 14	-----
11. Tue – 4/13	5	On Climate, Climate Change and Sound Investment	TBA	Lab 4 Due
12. Tue– 4/20	5	On Climate, Climate Change and Sound Investment	TBA	-----
13. Tue– 4/27	6	Matlab and Data	TBA	Lab 5 Due
14. Tue– 5/4	6	Matlab and Data	TBA	-----
15. Tue – 5/11	6	Matlab and Data *(Due Friday 5/14)	TBA	Lab 6 Due*
16. Tue – 5/18	-----	Reading Day. No Class	-----	

Hunter Academic Calendar with Important Dates:

<https://hunter.cuny.edu/students/registration/academic-calendar/>