PGEOG 251 – Spring 2022 EARTH SYSTEMS SCIENCE II
LAB SECTION INFORMATION AND OBJECTIVES
Lab Instructor: Carolien Mossel

CLASS SCHEDULE:
LABS: Section 1: Tuesday 12:45- 1:35 PM, Room 1090B Hunter North
Section 2: Tuesday 1:45-2:35 PM, Room 1090B Hunter North

Ms. Mossel CONTACT INFORMATION:
Office TBA
E-mail (*)TBA
Office Hours: **By appointment via Zoom (flexible times available)**

* **Note**: the best way to contact me is via email – (1) You must include the course name or number in your subject line (2) You must include your entire name in your email (3) I try to answer all emails within 24 hours. Allow for a 48-hour delay on the weekends.

COURSE OBJECTIVES
The three main objectives of this course are:

1. To introduce students to "systems thinking" in the context of the earth system. Systems- thinking is critical in all areas of study, and particularly in the fields of environmental studies and earth sciences.

2. To introduce students to quantitative analysis. In the lab portion of this course we will be introduced to some of the concepts necessary to study environmental systems in a quantitative fashion. Labs are meant to provide students with a number of identifiable skills that can be applied in other courses as well as in work environments.

3. To provide students with a sufficiently broad, yet integrated, understanding of the earth system to identify particular areas or sub-disciplines that they would like to pursue in more detail.

COMPUTER LABS
Computer labs will be held once per week in room 1090B Hunter North. 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, as well as using computer simulations, or models, to understand the earth from a "systems dynamics" perspective. STELLA® modeling software will be used in modeling exercises. No previous experience in computer modeling or STELLA software is expected, although basic familiarity with the Windows operating system, MS WORD and MS EXCEL, is expected. Computer labs will be provided to you.

Most labs take 2 weeks. Labs are expected to be emailed to the professor before the beginning of the next lab.

Group work – is allowed for some labs. For individual labs, discussions and consultations are allowed but the 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, unless otherwise stated in the lab instructions.

GRADES
Grades are based on lab exercises and classroom participation.

Lab portion	30%
Lecture portion	60%

Lab:

Lab exercises	75%
Lab participation	5%
Lab exam	20%

ASSIGNMENTS
Lab assignments are to be submitted on BlackBoard under "Assignments". Email submission is generally NOT accepted. Certain labs you may hand in hand-written (lab 2, and 5). You will need to name your assignments as follows:
Last name – first name – lab # e.g. Winner_Angelika_Lab1

EXAMS
The exams will be based on the material covered in class, in the textbook and concepts that are learned through the lab portion of the course.

a) Grades follow Hunter's grading system: 90-100 = A; 80-89 = B; 70-79 = C; 60-69 = D; <59 = F.

Tardiness in handing in assignments and labs:
Every students can submit one lab late (within a reasonable time scale, i.e. not more than 1 week). After that, lab grades will be penalized for lateness.

Classroom policies: No cell phones; classroom participation is crucial in the lab section

Absolutely no eating and drinking in the computer lab!!! The lab manager regularly checks on us, and violators risk getting their computer lab access removed! They will at least be suspended for 1 day.

ATTENDANCE
Attendance is required at all labs. Only one unexcused absence is allowed from lab sessions. Each unexcused absence after the maximum allowable will result in a decrease of 5% from the student's final grade.

As with all courses at Hunter College:

Academic Dishonesty: Please be advised that 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.

> **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.

See the following report by the Hunter College Senate for more details: http://www.hunter.cuny.edu/senate/assets/Documents/Hunter%20College%20Policy%20on%20Academic%20Integr ity.pdf

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, in Room E1214B, to secure necessary

LI = Low Impact

PGEOG 250 – ESSI, Fall 2021: Lab SCHEDULE

(SUBJECT TO CHANGE)

Class#	Date	Day	Tuesday 12:45-1:35 PM	Tuesday 1:45-2:35 PM Lab Section
1	2/1	Tu	**Syllabus Day: Introduction to EXCEL, Basic algebra review (LI)**	**Syllabus Day: Introduction to EXCEL, Basic algebra review (LI)**
	2/8	**Tu**	**No class- Friday Schedule**	**No class- Friday Schedule**
2	2/15	Tu	**Lab 1**. S-shaped growth: logistic model	**Lab 1**. S-shaped growth: logistic model
3	2/22	Tu	Cont'd Lab 1	Cont'd Lab 1
4	3/1	Tu	**Lab 2**. Stochastic	**Lab 2**. Stochastic Processes, S-shaped
5	3/8	Tu	Lab 2 (cont'd)	Lab 2 (cont'd)
6	3/15	Tu	**Lab 3**. biodiversity index	**Lab 3**. biodiversity index
7	3/22	Tu	Lab 3 (cont'd)	Lab 3 (cont'd)
8	3/29	Tu	**Lab 4**. Chemistry	**Lab 4**. Chemistry
9	4/5	Tu	**Lab 5.** On Climate, Climate Change, and Sound Investments	**Lab 5.** On Climate, Climate Change, and Sound
10	4/19	Tu	**No Class- Spring Recess**	**No Class- Spring Recess**
	4/26		Lab 5. (cont'd)	Lab 5. (cont'd)
10	5/3	Tu	**Lab 6**. Data, Statistics, Observations	**Lab 6**. Data, Statistics, Observations
11	5/10	Tu	Lab 6 (cont'd)	Lab 6 (cont'd)
	5/17	Tu	**Lab exam**	**Lab exam**

LAB SCHEDULE SUBJECT TO CHANGE (YOU WILL BE GIVEN NOTICE)