

# Regional Climatology

GEOG 202 Spring 2005

MWF 9:00-9:50 am, SCHU 311

Instructor: Dr. Tracy H. Allen, Department of Geography, SUNY College at Oneonta

*Office*: 323 Milne Library, Department of Geography

Office Hours: M 3:00-5:00pm & T 9:00-11:00am or by appointment, or if my door is open, come in.

If you need to see me I will be available. Office hours are set aside for you!

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E-mail: allenth@oneonta.edu

Course Website: http://employees.oneonta.edu/allenth/

# Required text and additional readings:

There are no required texts for this course. Refer to the Course Readings Handout for a list of required reading material. Just because we do not have a text does not mean that you should not do the reading. Readings will be copied and passed out during class or will be placed on electronic reserve in Milne Library or the Geography Department.

## Course Description and Purpose:

This course explores the spatial aspects of climate, from global climatic regions to local microclimates. The purpose of the course is to provide you with a strong conceptual and emerging analytical understanding of the processes and patterns of climate, climatic phenomena, human impacts on climate, and climatic impacts on humans. The class is divided into three major climatological topics: climatic classification, the atmosphere, and climatic regions. Integrated throughout the class are discussions on applied climatology. The first part of the course covers basic atmospheric process and circulation patterns, by which a common background is established among class members. This course is designed as a lecture, hands-on lab, and discussion class. Readings will be assigned and discussed in a seminar format.

#### Policies:

Exams: If you miss an exam or quiz, I will not allow you to make up the work unless you have written proof that adequately validates your absence. Only under "dire" circumstances (as to what "dire" constitutes, this will be decided by the instructor on an individual basis) will exams or quizzes be accepted after the assigned date. If you do not call, leave a voice mail, or e-mail me prior to missing an exam or quiz, I will not allow you, under any circumstance, to make up the work. Call ahead and be responsible.

Plagiarism and Cheating Policy: Know the college policies regarding plagiarism and cheating. With the Internet it is so easy to simply copy and paste other people's work into your own assignment. Refrain from doing this. It is stealing and is unethical. When I read something that appears out of synk with your writing style, I do check for plagiarism. By simply typing the phrase in question into Google or other search engines, it is very easy to find the source. I detest cheating of any kind. Students that feel they must stoop to this level of misrepresentation will earn a failing grade in the class.

Lab Exercises: All assignments must be **completed**. If you hand in an assignment late and after the said assignment has already been graded and passed back to the class, **I will not accept it.** If you miss a lab/recitation that requires



in-class group discussion, the best grade that you can receive on the assignment is 80%. Make arrangements with me **early** if you anticipate missing an important class activity. **All assignments that need to be picked up late will require you to come to my office**. I will not bring extra copies to class the following class period. Generally, extra copies can be found in a box attached to my office door.

*Return Policy:* Because I expect you to take exams, quizzes, and assignments on time, I hold myself to the same standards. I will return your work promptly.

Classroom Policy: I expect general rules of etiquette and respectful behavior to be followed. Be respectful to me and your fellow students. If you plan to talk during lecture, mumble so that no one can hear you. If I can hear your conversation, I will stop class and ask you to speak such that the entire class can hear - after all the conversation "must be" important. No full course meals or smoking in the classroom.

*E-mail Policy:* There are days when I receive as many as 15 e-mails from students. I simply cannot respond to them all right away. Therefore, if you have an issue that you need to discuss, make the effort to meet with me in person either before or after class, during office hours, or anytime that the door to my office is open. **I will only discuss grades in person,** NOT via e-mail or phone. This is college policy. I will not give you your final grade - the college will notify you.

Cell Phone Policy: I am sorry that I have to make this policy, but there are too many phones in the classroom creating many interruptions and distractions. You may carry your phone into the class; however keep it out of sight or permanently fixed to your person or bag while in class. Do not talk, play video games, check your email, take pictures, play music, electrify your professor, or otherwise use your phone in any manner while in class. In the event that you should receive a call in class, be certain to have the ringer set to off and do not answer the call. Feel free to call your friend back later and tell him/her how great class was today. While these rules are hard and fast, they are doubly hard and fast during exam periods.

# Grading Criteria:

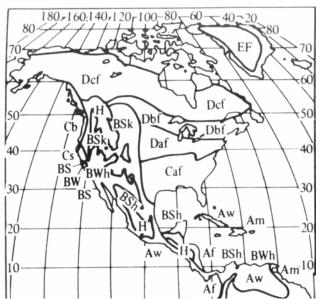
Work Completed	Possible Points	Grading Scale
Class Participation, Article Summary, Homework, Lab Exercises, and Discussions	30	200 - 185 points = A 184 - 180 points = A- 179 - 175 points = B+ 174 - 165 points = B 164 - 160 points = B- 159 - 155 points = C+ 154 - 145 points = C 144 - 140 points = C-
Research Paper and Class Presentation	45	
First Exam	35	
Second Exam	40	
Third Exam	50	139 - 135 points = D+ 134 - 125 points = D
200 Total Possible Points	200 Total Possible Points	
Extra Credit: Climatic Article Reviews	Maximum 6 points	119 - 0 points = F

# Article Summary Outline and Discussion:

You need to come to class in order to participate in group and lecture discussions. One or more class periods will be reserved for discussion regarding an article addressing climate. The article will correspond with the relevant lecture topic of the week. You will be expected to be prepared. Read the article in advance, prepare an essay summarizing the main points, prepare two discussion questions, and be ready to discuss the article. Also, from time to time I will give homework for discussion in the next class. Do the work or your participation grade will suffer. If you do not come to class, you cannot receive points for the discussion portion of the exercise.

#### Recitation/Labs:

There are three class periods where you will participate in a lab/recitation exercise. We are fortunate to have a small class. Lab days will require classroom-wide group presentations and debates. All classes, including lecture days, will adhere to a seminar style discussion format. I want you to be involved in discussion to the greatest extent possible. The labs are designed to put you in touch or give you a hands-on application of materials covered. I



believe the best way to learn is by doing. The labs will allow you to more deeply explore lecture topics. Labs will be in the format of short discussion, essay, true/false, short answer, labeling, and map work. If you do not attend the lab you will not receive a grade greater than 80%. Once a lab is handed out, you have one week to complete the work.

# Research Paper and Presentation:

Select a topic of interest to you, regarding climate, pursue that topic through research, and write a six-page paper. Finally, you will present your findings in the form of a class presentation utilizing a presentation software package (such as Power Point, Corel Presents, or Front Page via the Internet). The last three or four classes will be dedicated to student presentations.

#### Exams:

There are three exams in this course. Exams will cover information discussed in class and text material. If you do not come to class, you will not do well on the exams. 80% of the exams' content will be taken directly from your class notes. Each exam will be incrementally more difficult. Exam One is the easiest and the final is the most difficult.

## Class Discussions:

There are many class periods where you will participate in an in-class recitation and discussion. The discussions will be in a small group format and designed to put you in touch or give you a hands-on application of materials covered in class. I believe the best way to learn is by doing. The discussion will allow you to deeper explore lecture topics. Points awarded for the discussion will largely be based on attendance. It is in your interest to come to class. If you miss the discussion, you can't make up the points. These are easy points to attain if you just come to class.

### Extra Credit -- Climate Article Critique/Review:

Find two journal, magazine, or newspaper articles about climate and write a review of those articles. Write two article reviews for full credit. Include the source at the top of your review. Use a standard reference format. The review should consist of a short summary of the central theme and a critique (strengths and weaknesses of the work). Each article review must be a minimum of one page in length, typed, and double spaced. The articles on which you report cannot be older than **six months**.

Two well-written reviews may receive the maximum of 6 points added to the final grade for the course; for example, a final grade consisting of 174 points may become 180, which would equate to an "A-" grade in the class. If you choose to review a newspaper article or sensational newsstand article (i.e., Time or Newsweek), the maximum score you may receive is 2.5 points per review. I encourage you to use a primary source (a journal) and maximize your potential to receive the full 6 points. If you write an exceptional critique, I will award you an additional 1 point above the maximum score of 6 points. It pays to do good work. Failure to follow these instructions will result in no points awarded. **Due date:** before the final exam.

## Attendance, Participation and Tardiness:

Regular attendance is expected and necessary. My lectures come from a variety of sources. If you do not come to class, it will be impossible to do well on the exams. You should keep up with the lectures and the reading, as the materials will be strongly cumulative. To make this a better class, your individual insight, feedback, and participation are necessary. Throughout the term, I reward students who come to class with bonus points or hints on potential exam questions. Please let me know if you are having any problems with the material. **Always arrive on time** or let me know if you plan to make class late. Late arrivals disrupt class. Being tardy multiple times will result in expulsion from the class. I look forward to meeting with you and having an enjoyable term

Course Outline and Schedule: I will try to keep to this schedule, but some changes are inevitable.

Week	Торіс	Reading	
Week 1 1/19	Introduction to climatology. Global and micro scale and basic climatic controls.	water, topography, current gos Islands.  There are n recently written regional	
Week 2 1/24	Basic climatic controls – Latitude, land vs. water, topography, current  Climate Case Study - Climate of the Galapagos Islands.		
Week 3 1/31	Climate Case Study - Climate of the Galapagos Islands, cont  Atmospheric heating and temperature.  Basic Processes in Heating and cooling the Atmosphere.	climatolog text books  For each week there	
Week 4 2/7	Energy Budget for the Earth and its Atmosphere. Atmospheric pressure and wind; Moisture and precipitation.	is a REQUIRE reading.	
Week 5 2/14	Horizontal Atmospheric Pressure and the nature of Wind; air masses and atmospheric disturbances.  First EXAM on Wednesday, 2-16-05!!!!!!	have gathered readings	
Week 6 - 2/21	College closed for the week. Winter break. Get some sun. Go to a warm climate.	from journals	
Week 7 2/28	General Atmospheric Circulation Model. Climatic classification; creating climographs.	books an newspape regarding	
Week 8 3/7	Koeppen and Thornthwaite Climatic Classification systems. Subsurface water, water budget, and climatic implications	each topic  All reading	
Week 9 3/14	Climate of highlands. Case Study: Highland Climate and Human Activities in Middle and South America.	are on reserve i the librar	
Week 10 3/21	Polar regions: Tundra, taiga and alpine; polar regions and glaciers. Case study: Super-antifreeze - Polar plants withstanding the cold. Morphoclimatic conditions in polar regions.	They are organized : Week 1 Climatolog Reading ar	
Week 11 - 3/28	College closed for the week. Spring break. Have fun. Enjoy an exotic climate.	Week 2	
Week 12 4/4	Micro and mesothermal climates. Temperate regions; warm Climates.  Case study: Hurricanes and climate  Second EXAM on Monday, 04-4-05!!!!	Climatolog Reading an so on	
Week 13 4/11	Mediterranean regions; Steppe Regions Begin desert regions.	Stay curr on the reading You will	
Week 14 4/18	Desert regions. The Sahel drought; desertification; microclimates and morphology.	expected contribute reading discussion	
Week 15 4/25	Climate change. Is the climate really changing? History of climate change.  Causes of regional and global climate change.	See the creadings	
Week 16 5/2	Case study: Is Earth heating up? Student presentations begin.		
Week 17 5/9	Student presentations end. Review for the exam. The paper is due Monday, 5-9-05.		