

GEOG 5720/6720; HONS 3087
Panama Study Abroad - Climate Change and Environmental Management
Spring 2018; 3 Semester Hours

Professors: Chandana Mitra
Office: 2046 Haley Center
Phone: 334- 844-4229/ (334) 844-3462
E-mail: chandana@auburn.edu
Office Hours: By appointment only

Required Text Book and Materials:

Reading material will be either uploaded on Canvas or printed and handed over in class.

COURSE CONTENT

Students will acquire basic knowledge and skills on the science of climate change; human vulnerability and analyze historical trends in climatic variability in the Republic of Panama. This course is intended to give students a general understanding of the potential impacts of climate change on Panama's environmental and human resources. Through a mix of lectures, hands-on laboratory exercises and field trips, students will explore direct and indirect effects of a changing climate on water resources management.

Throughout the course, students will learn to use technologies and to apply cutting-edge research methodologies for the analysis and monitoring of natural and human systems affected by climate change. The acquired knowledge and interests developed by the students will lead to the implementation of their research capstone in GEOG 5720/6720.

The course will be instructed in English.

OBJECTIVES

At the end of the study abroad program, the student will:

1. Develop an in-depth knowledge of the various components of environment of Republic of Panama and tie all elements together to get a broader understanding of environmental sustainability, present and future.
2. Recognize and critically analyze the concepts influencing water, ecology, forest, urban management, human habitats in Panama and apply them to surrounding scenarios.
3. Realize and access the problems of Panama on a local to global scale and identify ways of adaptation and mitigation which are self-sustaining.
4. Apply knowledge gained from lectures, field trips and the invited presentations on sustainability and cities, to identify problems, find solutions and check out suitability in particular regions.
5. Become confident and ready to take up challenges, skills which students will learn through class discussions, participation in team activities, interaction within class and outside too. Understand the benefits of a study abroad program.
6. Learn new ways of doing research and in-depth study of topics related to climate change and environmental management.

GRADE STRUCTURE

Throughout the course, students will carry out class assignments (50%) based on lectures, in-class practices and field experiences. There will also be a final capstone project worth 50% of the final grade.

Grade Distribution

Percentage	Final Grade
90–100	A
80–89	B
70–79	C
60–69	D
< 60	F
Failure due to attendance	FA

Please note. Attendance at all program activities is mandatory and is crucial to student success in this course. Students will be expected to contribute to discussions, be involved in excursions and hands-on exercises, be punctual and cooperative, and respect instructors, guides and supervisors. Any unethical or unacceptable behavior will be reported to the Academic Honor Council with the recommendation for a failing course grade.

AU Policy on Academic Integrity: Students guilty of cheating will receive at a minimum an F for the course and a notation on their transcript that they have been found guilty of academic dishonesty. If you are in doubt about appropriate citation of the work of others in your own papers or projects, you should consult with the instructor in advance and should read carefully the regulations published in THE TIGER CUB.

Accommodations for Students with Disabilities: Students with a disability who need accommodation must get a memo from the Program for Students with Disabilities. An accommodation memo and instructor verification form can be obtained for this purpose from the Program for Students with Disabilities, 1244 Haley Center (334-844-2096).

Class Behavior: Students are expected to treat each other with courtesy. Positive attitude and cooperation is encouraged amongst classmates. Refer to this link to have a better idea: <https://sites.auburn.edu/admin/universypolicies/Policies/PolicyonClassroomBehavior.pdf>

COURSE ACTIVITIES:

Class lectures will be in the form of PowerPoints lectures and seminar style. Students must be thorough with the class readings, as active participation is required in class. The class will meet once every two week. Materials will be provided to the students through Canvas. The class will be in Panama during spring break. That one week there will be may lectures and field trips on which students will be given assignments.

Class capstone project will be done in groups of 2 (undergrads) or individually (for graduates). The project will consist of the development of and presentation on a topic that involves any of the processes of environmental and human interaction with climate change in Panama. This project will help the students to relate and apply what they learnt during the semester especially the week at the Water Center for the Humid Tropics of Latin America and the Caribbean, CATHALAC (for its abbreviation in Spanish). Details will be discussed in class and a written guideline will be provided.

Class assignments will be spread out over the semester. Assignments have to be done individually or as teamwork, as specified in class by the instructor. While discussion and group activity is encouraged, the submitted assignments should be the student's individual work. The

assignments will consist of short question/answers or brief write-ups based on papers read and lectures.

Pre-departure online lectures and readings:

- Introduction to CATHALAC and Program Overview
- Panama: Past, Present and Future
- Geography and Climate of Panama
- Benefits of Study Abroad – Dr. Uttiyo Roy Chowdhury, Director, Study Abroad, Clemson University
- Read and discuss papers on environmental management in various climates

Provisional Calendar –2018 Research & Study Abroad Program ** Subject to changes

March 2016 Study Abroad Program – GEOG 5720/6720; HONR 3087

Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday
10 Depart from Auburn Arrive to Panama Airport Pickup Lodging at City of Knowledge	11 -Morning and Afternoon Session- Panama City Tour (T) -Evening session- Welcome Dinner Welcoming words by Program staff	12 -Morning Session- Climate Change overview (S) Water Resources in Panama and Panama Canal Watershed Management (S) Introduction to GIS - Review (S) -Afternoon session- Visit to the Panama Canal - Miraflores Visiting Center (T)	13 -Morning Session- Data Management and Processing of Climatic Scenarios (S) -Afternoon session- Data processing using Google Earth and GIS Application (L) GIS Lab Session (L)	14 - Day off - Visit Panama City on your own	15 Visit Azuero Peninsula – Activities will be planned later	16 Visit Azuero Peninsula – Activities will be planned later
17 Visit Azuero Peninsula – Activities will be planned later	18 Depart from Panama Airport Drop-off Arrive to Auburn					

(S)= Seminar; (T)= field trip; (L)= Lab session