

Syllabus

Sustainability Concepts and Methods: Mercury in Guyana

PHC 6934 (ref# 18035) / CNG 6933(ref# 12678) / GEO 6119 (ref # 18740)

Spring 2009

Course Description: An interdisciplinary review of sustainability concepts and research methods for studying sustainability, focused on the developing country context. The case focus of the course will be mercury issues in Guyana.

Objectives: Upon completion of this course the student should be able to:

- 1) Discuss and evaluate definitions of sustainability.
- 2) Discuss developing country perspectives on sustainability.
- 3) Discuss aspects of the developing country context that affect and shape projects with sustainability goals.
- 4) Identify and integrate sustainability research approaches (and/or experts) across disciplines.
- 5) Apply Hg environmental sampling, population surveying, and systems modeling methods.
- 6) Discuss the value (and limitations) of the above methods from both scientific and social perspectives.

Pre-Requisites: College Algebra, College Chemistry and/or Biology

Credit Hours: 3 units

Dates / Times / Location/ Format: January 5 to April 24. W 2 - 2:50. ENC 3006. In-class discussion and laboratory.

There may also be a couple required 3-hour labs to be completed in coordination with instructor

March 14 to 22 (Spring Break). Mandatory field research trip to Guyana.

Attendance / Participation: Students are expected to regularly participate in the class discussion and activities. The field research trip to Guyana is required.

Instructor Information:

Name:	Amy Stuart, PhD	Maya Trotz, PhD	Fenda Akiwumi, PhD
Office	COPH 1116	ENG 220	NES 314
Office Hours (tentative)	T, Th 3 - 4:30 pm	T 3-4:30 pm, W 10-11:30 am	T, Th 1 - 2:30 pm
Phone	974-6632	974-3172	974-6887
Email	astuart@hsc.usf.edu	matrotz@eng.usf.edu	fakiwumi@cas.usf.edu

Preferred method of contact: The instructors' preferred method of contact is face-to-face during office hours (to be announced during the first week of class). We will also respond to email and phone messages on a limited basis. Reply times may vary up to several days.

Course Outline: January 5 – March 13 (1-hour discussions)

(Tentative)

- Definitions and perspectives on sustainability
- Developing country case studies
- Human subjects protections in research
- Introduction/review of methods and tools
- Field research and project planning

March 14 – 22 (Field research trip to Guyana)

- Environmental sampling for Hg
- Population surveys
- Informant interviews and available data gathering
- Collaboration with University of Guianas students and faculty

March 23 – April 24

- Laboratory analyses
- Survey and interview data analyses
- Systems model development and application
- Project discussion, writing, and presentation

April 22 *Student group presentation of project report*

April 24 *Final class project report due*

Instructor

Responsibilities:

Dr. Akiwumi will oversee the first half of the in-class course content (January – February) on sustainability concepts, the developing country context, methods introduction, and human subjects protections.

Dr. Trotz will lead the field research instruction and Spring break trip planning and instruction.

Dr. Stuart will oversee the second half of the in-class course content (March – April) on systems modeling, analysis of the collected data, and the project writing.

Reading

Materials:

Reading materials will be provided via blackboard, library course reserve, via internet links, or as class handouts (at the discretion of the instructors).

Grading:

Scale:

Class Participation:	40%
Project Report and Presentation:	50%
Assignments	10%

The course will be graded satisfactory/unsatisfactory (S/U).

Types of
Assessments:

Class participation: We expect all students to regularly participate in the class discussions and to be present and involved in laboratory and field work.

Project report and presentation: Each student is expected to enthusiastically and professionally contribute to the team project through research, writing, and presentation.

Assignments: There will a few graded individual and group homework assignments and over the course of the semester.

Safe-Assignment and other plagiarism checking methods may be used to ensure academic honesty.

Late and Make-up Policies: Students are required to participate in the field research trip during Spring Break. If you cannot make the trip for any reason (personal, professional, political, logistical), do not take the course.

Students are also expected to turn in assignments on time and to be present to participate in the laboratories and discussions. If you miss a class or anticipate missing a class, you should contact a fellow student to get any needed information or announcements.

Other Classroom and University Policies:

Academic Dishonesty and Disruption of the Academic Process: Academic dishonesty or disruption of the academic process in any form, including plagiarism, will not be tolerated. See the following for a discussion of forms and consequences, at <http://www.grad.usf.edu/newsite/catalog/main.asp> and <http://www.cte.usf.edu/plagiarism/index.html>. A tutorial on plagiarism can be found at <http://www.cte.usf.edu/plagiarism/plag.html>

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Lectures may not be recorded without prior permission of the instructor. All unauthorized recordings of class are prohibited. Recordings that accommodate individual student needs must be approved in advance and may be used for personal use during the semester only; redistribution is prohibited.

Americans with Disabilities Act (ADA): The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. If you have a disability requiring an accommodation, you should contact the USF Office of Academic Support and Accommodations for Students with Disabilities to apply for services. Services offered are discussed at <http://www.asasd.usf.edu/index.htm>

Student Handbook: <http://www.sa.usf.edu/handbook/>

Electronic Equipment Usage: Electronic equipment, including computers, cell phones, personal digital assistants, etc. must be turned off prior to entering the classroom. This equipment is disruptive to the class and distracting to students and the instructor.

Additional Resources for Students:

Library Resources: USF Library Resources and Services: <http://www.lib.usf.edu/>

Shimberg Health Sciences Library: <http://hsc.usf.edu/library/>