

Byrne Seminar: Biodiversity and Global Health (11:090:101:21)

Dr. Diane Adams, Marine and Coastal Sciences Building 204E

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Food Sciences Room 109, Tuesdays 2:15-3:35 pm

Course Overview: The Millennium Development Goals challenged the world to improve the conditions for millions of people around the world. We have made great strides in improving global health, including reducing under-five childhood stunting from 40% to 25%, and nearly halving childhood mortality in two decades. We are now challenging the world to continue to develop in a 'sustainable' manner. We will discuss and debate the role of environmental sustainability in maintaining and improving global health. Can we feed the world and prevent under nutrition without razing our forests, grasslands and coasts? Will the most sustainable cures come from the lab, the forest or the sea? We will explore the tensions and areas of potential co-benefits between biodiversity conservation and global health using examples from around the developing world.

Course objectives:

- Understand political and on-the-ground challenges and opportunities for sustainable development
- Identify ways to improve human and environmental health simultaneously
- Understand policy from the perspective of different countries
- Introduction to research at Rutgers
- Increase interactions with other students and faculty
- Explore local institutions as gateways to the world

Grading:

Participation (20%). A major objective of Byrne seminar courses is to introduce you to faculty and other students. To do this you must attend class and actively participate. *If you have two or more unexcused absences, you will automatically receive no credit.* Active participation can be through discussions in small groups or the larger class.

Assignments (40%). Six assignments will be assigned throughout the course. The bottom grade will be dropped. Details for each assignment will be provided on Sakai. Most will be 1 page, and no more than 2 pages long. **All assignments are due by Noon the day before class.** Late assignments will not receive credit.

Final project (15% presentation, 25% written). Throughout the course you will have the opportunity to research and explore intersections between human health and biodiversity. This will culminate in a short ~3 min (time to be determined by number of students enrolled) presentation, a 3 page written report, and a 1 page pamphlet or brief. **Due Nov 17th at 5 pm.**

Schedule

Sept 1: Backstories; Current and proposed development goals

Assignment: Position piece: Are the new sustainable development goals environmentally sustainable? OR Propose a project idea that would contribute to a health related goal and an environment related goal.

Sept 8: **NO CLASS** – Monday classes meet

Sept 15: Global Health issues (Introduction to Demographic Health Survey)

Assignment: Map two health issues at the global and national level

Sept 22: No Class

Sept 29: Biodiversity loss

Assignment: Identify the major threats to biodiversity loss in the nation or region chosen for Assignment 1.

Oct 06: The intersection of Global Health and Biodiversity: Theory of Change;

Case Study*: Cookstoves in Nepal

Assignment: Mining case study

Oct 13: Nutritional-related disease; Case study*: Rickets in Bangladesh

Oct 20: Zoonoses; Case study*: Ebola

Assignment: Venn Diagrams and a theory of change connecting your health issue and biodiversity

Oct 27: No Class

Oct 30: Field Trip to UN

Assignment: Reflections on UN trip.

Nov 03: Lightning Presentations

Nov 10: Review Sustainable Development goals; Debrief

*Case studies subject to change, pending current events and class interest.