

Empower Your Students: Bring a State of the Planet Course to Your School

Thomas Eisner¹, Lynn E. Fletcher¹, Jason G. Hamilton², David P. McCobb¹ and Mary Lou Zeeman^{*1,3}

Cornell's State of the Planet course was conceived and developed by an interdisciplinary group of graduate students and faculty, and was an instant success among students [1,2]. It is a multidisciplinary course about how we can address the global crises we collectively face. The goal is to transcend the paralyzing despair that has been descending on concerned college students, and instead deliver a realistic message of empowerment and hope. In the words of one student "...*The course encourages me to think more globally - it has made me feel that I can in fact have an impact and that what I do in lifestyle, education, and career can matter to the environment...*" In this essay, we describe the original course vision, with some implementation tips. Note that the vision is extremely robust, and can be given whatever slant works for you at your school, from mathematical analysis of climate data to inspiring behavior change through the arts.

Vision. While higher education becomes increasingly specialized, centers for sustainability everywhere are broadening their scope to recognize that the health of the planet and its people, climate, biodiversity, natural resources, social justice, energy and infrastructure are inseparable. Indeed, a refocusing of our attention on the connections between people, the environment, communities and businesses is at the heart of sustainable development. A State of the Planet course features lecturers from across campus and the local community to illustrate the interconnectedness of our global problems and their solutions. It can inspire students to bring a global perspective to their more specialized studies and to motivate action and involvement throughout their lives. To implement this vision, three themes ran through our course:

Whatever your talent, whatever your passion, you can use them to help the planet. Everything about the interdisciplinary design of the course can be aimed at conveying this profoundly empowering philosophy. We invited a different lecturer almost every day, drawn from a wide variety of disciplines and walks of life. The sustainability framing, established in the first week, brought a natural cohesion to the course. Lecturers were invited to describe a global problem from their own particular perspective, progress to discussing solutions that their specialty can help to provide, and conclude with ideas for what the students in this classroom can do to help now and in the future. It is extremely important to meet with lecturers a few weeks before their lecture, to urge them towards spending at least 60% of the time on solutions, rather than the typical 95% on describing the problems. Indeed, this is essential to delivering a message of empowerment and hope. Local activists are especially good at focusing on solutions. An example schedule can be found at our website [2].

Don't let perfection be the enemy of the good. A central feature of academic training is that we hone our minds to criticize flawed ideas in search of elegance and perfection. An unfortunate side effect of such training is the rejection of many imperfect, but nevertheless beneficial ideas, and the "analysis paralysis" trap. To counter this, throughout the course, proposed solutions and actions can be judged against each other and against the alternative of inaction, rather than against an abstract concept of perfection.

Do something now! By conducting action projects, students can experience first-hand the energizing and uplifting effects of becoming part of the solution. Action projects can be led by graduate or undergraduate student teaching assistants (TAs). Our TAs were trained by campus and community sustainability educators to create an active learning community, and to help students connect with existing groups, focus their ideas, design an achievable timeline and overcome barriers. Homework exercises can also encourage students to action. For example, students can calculate and reduce their carbon footprint, and that of a friend; they can design a T-shirt or bumper sticker to inspire behavior change, and they can write a letter to a decision maker about an issue of their choice. It helps to split the letter assignment into

pieces: 1) choose an issue you care about, 2) who has decision-making power over the issue? 3) research that person, 4) write that person a letter (not a college essay) about the decision, using what you know about their background to be compelling to them.

The course works well when taught on a pass/fail basis, with homework assignments but no exams. This gives students freedom to follow up on what most inspires them, whether it be mathematical modeling of climate systems, data collection, infrastructure design, conservation of biodiversity, making policy, or inspiring behavior change. Go ahead: give it a try! It was a life-changing experience for all of us.

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1. Department of Neurobiology and Behavior, Cornell University, Ithaca, NY 14853
2. Department of Biology, Ithaca College, Ithaca, NY 14850
3. Department of Mathematics, Bowdoin College, Brunswick, ME 04011

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[1] K.L. Rypien, J. Anderson¹, J. Andras, R.W. Clark, G.A. Gerrish, J.T. Mandel, M.L. Nydam & D.K. Riskin, *Students unite to create State of the Planet course*. Nature, 447, p775, 14 June 2007.

[2] *Cornell State of the Planet course, 2008 website*
<http://www.nbb.cornell.edu/neurobio/BioNB321/index.html>