Online Environmental Biology

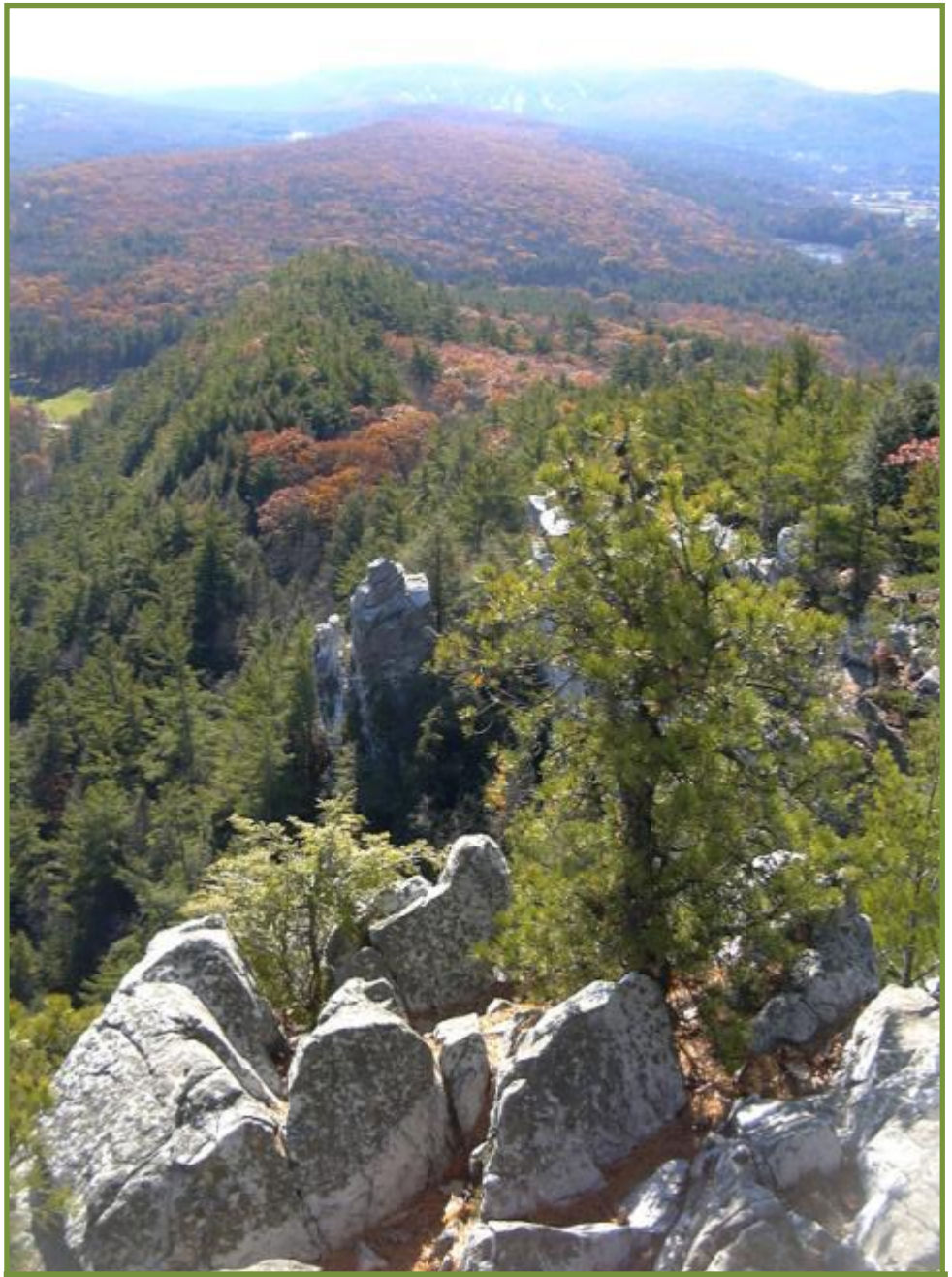
is a CORE Lab Science Class that is taught online. You'll learn how our environment works and how your actions – things you buy, things you do, things you eat – affect the environment. You'll learn the scientific method by designing and carrying out a hands-on six-week lab investigating the impacts of Acid Rain or Road Salt on the environment, along with smaller weekly labs. You'll learn how to **protect yourself and your (future) family from environmental hazards** such as mercury (in seafood), lead (lead paint in houses), Radon (in your shower!), BPA (in plastic bottles), and the like. In this fast paced class you should expect a LOT of reading, writing, thinking, and investigating.

Text: To save money we'll use a slightly older version of *Essential Environment* by Withgott and Brennan. Get the 3rd edition, which will cost between $11 and $23.

Writings: After reading the book and learning about some aspect of the environment, you'll use your knowledge to address some question that I pose, posting your thoughts online. Other students will read your post and comment on it.

Readings: You'll read two to three chapters a week, about 60-90 pages. Additionally, you'll read other student's postings and comment on them.

Labs: Labs have several purposes: to teach you to "do science," to illustrate course topics such as sustainability, and to analyze the impacts of **your actions** to the environment.



Earn class credit by experiencing the environment! For example, hiking and writing about **Monument Mountain** counts for 10 points!

The Extra Mile I want you to get out in the world, experience the environment, and enrich your life. To "encourage" this, you're **required** to do an "Extra Mile" assignment each week. For the course, you're required to do 50 points (about 10 a week, but you can do more or less on any given week). However, you can earn up to a maximum of 75 points (i.e., 50 of which are regular credit, 25 would be **extra credit**). You must keep a Word file with the evidence of your efforts, which I'll collect and grade at the end of the course. Each activity must be documented and carefully labeled with the total deserved credit. Generally, you'll do the activity, and write a short reflective paragraph on what it was about, what you learned, how it connects to the concepts of the course, etc. You might want to embed pictures in the document. Sloppy, weak work will receive no credit. You may not receive credit for activities you do as part of a class assignment for this or any other class. **You may not count activities that you did before this semester started** (like that spring break trip to the islands). This will be due the last week of class. Here are some examples, there are more in the course syllabus, and maybe you can think up some of your own:

• Participate in a River Cleanup	10 each
• Visit a state park and report	10 each
• Visit a national park and report	20 each
• Visit another country and report	20 each
• Visit a museum, (report)	10 each
• Visit a zoo, (report)	10 each
• Go to any Trustees of Reservation Property	10 each
• Drive, walk, ride, bike to another state (report)	3 each state
• Take an overnight camping trip (report)	10
• Go rock climbing r&r	10
• Plant a garden r&r	10
• Install a low-flow shower or toilet	10
• Take a day hike (more than 3 miles) report	10
• Attend a guest lecture (details later) report	10

Schedule

Week 1
- Introduction to Environmental Science;
- Environmental Economics and Environmental Policy

Week 2
- Environmental Systems: Chemistry, Energy, and Ecosystems;
- Evolution, Biodiversity, and Population Ecology;
- Species Interactions and Community Ecology

Week 3
- Human Population;
- Soil, Agriculture, and the Future of Food

Week 4
- Cities, Forests, and Parks: Land Use and Resource Management;
- Geology , Minerals, and Mining;
- Fresh Water, Oceans, and Coasts

Week 5
- Nonrenewable Energy;
- Renewable Energy;
- Global Climate Change

Week 6
- Environmental Health and Toxicology;
- Waste Management;
- Sustainable Solutions

Grading

Postings	500
Labs	500
Extra Mile	50
Total	1050

I think this is the most valuable course you can take during your academic career.

For more information or if you have any questions, contact:

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