

Chesapeake Project 2010

Philosophy 256

The Philosophy of Biology I

Fall 2010

Professor: Erin Eaker (eaker@umd.edu)

As a participant in the Chesapeake Project 2010 workshop on incorporating sustainability across the curriculum at UMD, I was excited to meet colleagues from such a vast array of disciplines. It was fascinating to see what “sustainability” means in such different contexts. I participated in the workshop because I wanted to update my introductory philosophy of biology course, a course I’d taught at other universities but not at UMD. This course primarily focuses on theoretical issues arising from the theory of evolution and molecular biology. While the course has sometimes had a unit on biotechnology and related ethical problems, I want sustainability issues to be more integrated throughout the course where possible. Also, I wanted to take advantage of our location in the Chesapeake Bay watershed to incorporate local examples into our discussions of ecology, the interdependence of living systems, and the ethics of human impact on the environment. All of the issues arise locally and affect us daily. I plan to incorporate sustainability issues into the course content in three main ways:

I. As students are learning about the theory of evolution I will lead them in a discussion of how the theory of evolution contributes to our understanding of ourselves in relation to other living things. I will prompt them to think about what attitudes and values might be proper to this understanding.

II. As we discuss theoretical issues in molecular biology and genetics I will lead students in a discussion of the ethical implications of biotechnology—on a personal and on a global level.

II. I am also adding a major section to the course that will address the complex ethical challenges that confront the human inhabitants of the Chesapeake Bay region. To this end we will first get a brief introduction to the Bay ecology and its history on an evolutionary scale and on a human scale. I plan to take interested students on a field trip onboard the Chesapeake Bay Foundation’s skipjack *Stanley Norman* for a day of learning. CBF experts will teach us about the American Oyster, *crassostrea virginica*, as a lens for understanding the greater biological system of the Chesapeake Bay. I hope the lessons learned on this historic oyster dredge boat (built in 1902) will provide students with more of a historical context for understanding the complex biological and economic issues shaping the Bay’s ecology. After the trip, students will complete a project exploring some aspect of the ethical dilemmas facing the human inhabitants of this special region.