

# **A Curriculum in Ethics: Complementarity and Specialization**

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## INTRODUCTION

Ethics is defined as “a set of principles of right conduct,” or “the rules or standards governing the conduct of a person or the members of a profession.” Although there are already ethics curricula in place at the University of California, Berkeley, they tend to be directed toward a particular audience; that is, the curricula are geared only toward the majors of the department. Dr. Hiroshi Komiyama (President, University of Tokyo) once mentioned that knowledge within academia is becoming too specialized, making the knowledge within each discipline too esoteric for non-specialists to understand. It was with this realization that I hoped to design a curriculum on ethics that would address this problem.

## PROPOSAL

I propose that we have an ethics curriculum that is organized in two modules. The first module is a preliminary course that is a brief survey on ethics-related issues regarding each discipline. The second module is a follow-up course that focuses on a particular discipline. The following is an overview of the basic structure of the curriculum. Students will have the option of choosing which discipline they wish to pursue with the second module.

## MODULE I: COMPLEMENTARITY

The humanities and science are often viewed as polar opposites within academia, when the fact is that they are interdisciplinary. This module will focus on revealing the *complementarity* of different disciplines (e.g. philosophy vs. physics, ethics vs. chemistry), where *complementarity* is “the interrelation of reciprocity whereby one thing supplements or depends on the other.”

### *Curricular Components*

- Lecture
  - Department/Professor Lectures

- Guest Lecturers
- Debate/Discussion
- Activities
- Assignments
  - Reading
  - Research
  - Essays
- Exams/Quizzes

### *Topics*

One way to organize the curriculum is by areas of occupation:

- Military
- Natural Resources
- Engineering
- Medicine
- Technology

Another way is by discipline:

- General
- Science
  - Engineering
  - Chemistry
  - Math
  - Physics
  - and so on...
- Humanities
  - Rhetoric
  - Business
  - ~ Studies
  - Political Science
  - and so on...

As a preliminary course that surveys the issues regarding each discipline, yet also presents their interdependence, students can learn to view subjects from different points of views as well as develop an understanding of real-world issues. Furthermore, this module allows students to explore potential areas of study for their future careers.

## MODULE II: SPECIALIZATION

Whereas the first module focuses on presenting the complementarity of different disciplines, this second module will focus on presenting the important issues relevant to a particular discipline, or *specialization*. By focusing on the topics in a certain area, *specialization* allows students to develop a more in-depth understanding of the area of study that they find most interesting. Organization of course material is at the discretion of the instructor. Ideally, the instructor would be a representative of an academic department (i.e. departmental professor), assuming that they have a more developed understanding of issues regarding their area of expertise, though a student (or a group of students) who is (are) knowledgeable of the issues regarding the discipline may also be chosen to lead the course

## CONCLUSION

Although this paper focuses on developing an ethics curriculum that is designed for students, the curriculum would be even more effective if it also involved faculty in such a way that they would also be informed and be able to incorporate the information into *their* respective courses. A top-down approach, whereby the relevance and importance of real-world issues is emphasized in other courses, can help remind students the significance of ethics in their area of study as well as in their future careers. This brings up some questions such as what would be the difference between faculty, staff, and student curricula? What is most needed in ethics curricula for effective teaching? Also, how would departments differ in the method of teaching and/or issues covered? Conducting interviews with faculty and staff from the different departments as well as contacting relevant advisors and outside sources is a way to answer these questions.

Decisions regarding ethical issues can have a powerful impact on people. My hope is that developing this curriculum can help the future generations of UCB students be prepared to make better-informed decisions in their careers.

## RESOURCES

- <http://www.athabasca.ca/html/syllabi/phil/phil371.htm>
  - Athabasca University course syllabus for Philosophy (PHIL) 371(Ethics, Science, Technology, and the Environment) - just a list of topics, including military + technology
- <http://pages.towson.edu/ladon/ethics/ethicsyl.htm>
  - Towson University course site on Professional Ethics for Scientists (includes info on mentors, fraud, plagiarism; bibliography), thorough
- <http://www.agcomm.iastate.edu/Cherney98/cherney197.syll.html>
  - Iowa State University, Ethics & Animal Science, from agriculture and food sciences standpoint, topics
- <http://biology-web.nmsu.edu/serrano/courses/306g/306syllabus.html>
  - New Mexico State University, Science and Ethics, has well-rounded coverage of topics categorized according to professional areas of science
- <http://www.cl.cam.ac.uk/DeptInfo/CST/node23.html>
  - University of Cambridge, CS Prof Practice and Ethics; aims, lectures, objectives
- <http://www.cpsr.org/> (computer professionals for social responsibility)
- <http://www.uwplatt.edu/~drefcins/254syll.html>
  - UWPlatt Science, Technology, and Ethics Syllabus, more philosophical standpoint, has links to some articles
- <http://ocw.mit.edu/OcwWeb/Electrical-Engineering-and-Computer-Science/6-805JEthics-and-Law-on-the-Electronic-FrontierSpring2002/Syllabus/index.htm>
  - MIT, General Information for Ethics and Law on the Electronic Frontier, has course calendar of policy/technology issues (note: course organized between MIT EECS dept and Harvard Law)
- <http://www.ethics.ubc.ca/courses/2005-2006/inds530a-005.pdf>
  - UBC; Science, Society, and Ethics syllabus; questions, people, readings
- <http://onlineethics.org/>
  - Online Ethics Center for Engineering and Science at Case Western Reserve University
  - thorough, extensive, links

- advisors from a variety of disciplines in addition to engineering and science, including philosophy, psychology, history and sociology, and include individuals with oversight responsibilities for ethical behavior for professional societies, corporations and government agencies as well as academics.
- <http://onlineethics.org/edu/see/syllabus.html>
  - course syllabus for Science, Engineering Ethics
- [http://www.lawrence.edu/fast/BOARDMAW/syl\\_phil10.html](http://www.lawrence.edu/fast/BOARDMAW/syl_phil10.html)
  - Lawrence University; topics, 'NEWS,' links, acronyms, biomedical
- <http://www.kzoo.edu/phil/biomed98.html>
  - Kalamazoo College; list of topics, assigned text
- [http://www.neijs.org/jmep/medical\\_syllabus.htm](http://www.neijs.org/jmep/medical_syllabus.htm)
  - New England Institute of Jewish Studies, Medical Ethics, topics
- <http://ocw.mit.edu/OcwWeb/Anthropology/21A-216JSpring-2005/Syllabus/index.htm>
- <http://ocw.mit.edu/OcwWeb/Anthropology/21A-216JSpring-2005/CourseHome/index.htm>
  - MIT, Bio-Medical Ethics, lecture notes