Tentative Syllabus
SCI 511: Ethics and Practice of Science (2 Credits)
Fall Semester, 2009

Catalog Course Description:
Ethical issues related to scientific integrity and the consequences of scientific misconduct. Training on the responsible conduct of research and related compliance issues. Focus on oral and written communication related to publications, grants and professional presentations as well as other career-building skills.

Time: 6:30 pm to 8:30 pm on Wednesdays
Room: 364 SEB
Instructor: Michael D. Sevilla, Distinguished Professor, Department of Chemistry
Office: 248 SEB; phone: 2328, email: sevilla@oakland.edu

Textbook:
There is no text for this course; however a variety of readings will be supplied. Electronic resources will be posted on Moodle and materials will be distributed in class. This class is based on materials from 2009 Conference on Teaching Survival Skills and Ethics. This NIH-funded program is copyrighted by Beth A Fischer and Michael J Zigmond of the University of Pittsburgh; their material is used with permission. Their program maintains accessible resources at the following website: www.survival.pitt.edu.

Tentative Schedule: Please note that topics and/or order of coverage are subject to change depending on availability of relevant guest speakers and other circumstances.

9/9/09 Overview of course; ethics and practice of science
        Defining misconduct: plagiarism, falsification, fabrication

9/16/09 Ethical behavior in the working laboratory: Case Studies involving research misconduct. See: http://ori.dhhs.gov/misconduct/cases/ and The Marty Brown Case.

9/23/09 Being a trainee; the trainee/trainer relationship; laboratory notebooks, data treatment. Case Studies: The Jessica Banks Case

9/30/09 Scientific writing: the research article, authorship and order

10/7/09 The Scientific Reviewing Process – Professor Barry Winkler
        Using/evaluating the scientific literature; literature searches; when is a citation necessary, Misconduct Case Studies: The Charlie West Case

10/14/09 Grants and Grantmanship: Research funding, grant writing,

10/21/09 Ethical issues in the scientific enterprise: review of papers and proposals,

10/28/09 Professional meetings: oral, poster presentations

11/4/09 Mentoring and networking

11/11/09 Conflict of interest; intellectual property: Business and academic conflicts

11/18/09 After the degree: Career choices in science: the interview, CV

11/25/09 Student presentations

12/2/09 Student presentations (last day of class)

Grading: 25% class discussion/participation including case studies
        50% written assignments
        25% oral presentation

Academic Conduct: Academic misconduct will result in your own case history.
Assignments

9/09/09 Read the Marty Brown case and write a brief report of the issues and the appropriate actions that could be taken. The Marty Brown Case. at http://poynter.indiana.edu/mr/mr-main.shtml
9/16/09 Read the Jessica Banks Case write a brief report of the issues and the appropriate actions that could be taken.
9/23/09 TBA
9/30/09 Write an overview of the critical components of the scientific paper.
10/7/09 Write a brief report of the Charlie West Case
10/14/09 TBA
10/21/09 Report with short presentation on topic in research integrity to be assigned
10/28/09 Prepare a power point on a research topic
11/4/09 Prepare an example poster on a research topic
11/11/09
11/18/09 Prepare a CV and letter for job application
11/25/09 Term Paper and presentations
12/2/09 Presentations (last day of class)