BASIC COURSE INFORMATION

Course Meeting Dates & Times:
5 meetings
2 hours per meeting
October 2nd through October 30th, 11 am to 1 pm

Course Location:
177 Stanley Hall, Berkeley Campus

Instructor:
Victoria Sharma, PhD, is the Program Manager for Responsible Conduct in Research at UC Berkeley. Formerly program director for Biotechnology, Mathematics and Green Chemistry at UC Berkeley Extension, she has extensive experience in career counseling and professional-development programs both in industry and academia, as well as experience in mentoring, teaching and academic program creation and execution. Previously, she has held positions as a researcher and project leader at Novartis Vaccines and Diagnostics and at Chiron Corporation. She was also a fellow at Genentech after receiving her doctorate degree in biochemistry and biophysics from UC Berkeley. Victoria has been teaching, managing, and developing RCR courses at Berkeley since 2011.
Phone: (510) 469-7762
E-mail: vsharma@berkeley.edu

Instructor Availability: It is best to email me. I should return your email within 1 working day.

COURSE DESCRIPTION

Course Prerequisites:
Only approved applicants may register for this course, if you are not sure of your status, please speak with your instructor.

Overview of Course:
The purpose of this course is to ensure the requirements set forth by granting bodies and Berkeley policies are satisfied with respect to training in Responsible Conduct in Research for all investigators.

Learning Objectives:
- Conflict of interest – personal, professional, and financial
- Policies regarding human subjects, live vertebrate animal subjects in research, and safe laboratory practices
- Mentor/mentee responsibilities and relationships
- Collaborative research including collaborations with industry
- Peer review
- Data acquisition and laboratory tools; management, sharing and ownership
- Research misconduct and policies for handling misconduct
- Responsible authorship and publication
- The scientist as a responsible member of society, contemporary ethical issues in biomedical research, and the environmental and societal impacts of scientific research
Methods of Instruction:
Lecture, case study and group discussions.

Supplemental Readings:

**Introduction to the Responsible Conduct of Research** Nicholas H. Steneck illustrations by David Zinn (available for download [here](#)).
**On Being a Scientist, 3rd Edition** Committee on Science, Engineering, and Public Policy; Institute of Medicine; Policy and Global Affairs; National Academy of Sciences; National Academy of Engineering (available online [here](#)).

Websites and Links:

- RCR Casebook: Stories about Researchers Worth Discussing
- Research Ethics: A Novel Approach
- National Center for Professional & Research Ethics
- National Science Foundation Office of Inspector General
- Office for Human Research Protections (OHRP)
- Office of Research Integrity (ORI)
- Online Ethics Center for Engineering and Research
- Project for Scholarly Integrity

**GRADING AND EVALUATION PROCEDURES**

Evaluation:
Attendance is required to receive credit for the course. Signatures of students will be collected at the end of each class to demonstrate attendance. If you miss one session, you can make up the session by writing a 1-2 page commentary on the case studies available below. If you must miss more than one session, it must be for research purposes (i.e. travel to an investigation site or a meeting for presentation). You will still be required to make up the session as described above.

There is one required homework assignment. The homework assignment is to download from the choices below one case study and discuss this case with your PI or other mentor. Please write 1-2 pages about this discussion and email it to me by the last day of class.

Make-up Case Study for Session 1
Make-up Case Study for Session 2
Make-up Case Study for Session 3
Make-up Case Study for Session 4
Make-up Case Study for Session 5

**SCHEDULE**

Topics by Session:

**Session 1:**
Reading- Part I, *Introduction to the Responsible Conduct of Research* Nicholas H. Steneck illustrations by David Zinn.

Introduction
Research Misconduct
Session 2:  
Reading- Part 2, section 3 through 4 f, Introduction to the Responsible Conduct of Research  
Nicholas H. Steneck illustrations by David Zinn.

The Protection of Human Subjects  
The Welfare of Laboratory Animals

Session 3:  
Reading- Part 2, section 5 (all), Part 3 section 6 (all), Introduction to the Responsible Conduct of Research  
Nicholas H. Steneck illustrations by David Zinn.

Conflicts of Interest  
Data Management Practices

Session 4:  
Reading- Part 3, section 7 (all), section 8 (all), Introduction to the Responsible Conduct of Research  
Nicholas H. Steneck illustrations by David Zinn.

Mentor and Trainee Responsibilities  
Collaborative Research

Session 5:  
Reading, Part 4, (all), Part 5 (all), Introduction to the Responsible Conduct of Research  
Nicholas H. Steneck illustrations by David Zinn.

Authorship and Publication  
Peer review  
Wrap-up

EVALUATION OF COURSE AND INSTRUCTOR

End of Course Evaluation Process:

It is UC Berkeley policy that all courses be evaluated as part of an overall campus mandate to evaluate and improve the quality of teaching. Evaluation responses are reviewed by the program director after the course ends and after final grades are turned in and filed. The student evaluations are not designed to measure learning, but they do provide feedback in a variety of areas that affect the learning process.

POLICIES

Classroom Decorum:

- No eating (unless allowed in room)  
- Turn off cell phones  
- Ground rules for discussion – respect.

The syllabus and schedule are subject to change.