

**GRAD 214: Ethics and the Responsible Conduct of Research
Spring 2021, First Year Students**

Faculty Director: Liz Silva, PhD, Interim Dean, elizabeth.silva@ucsf.edu

Coordinators: Jeff Nicklas, PhD(c), jeff.nicklas@ucsf.edu

Location: Morning remote sessions 9:00AM – 12:00PM **via Zoom**

Time policy: *A Qualtrics login link will be used for attendance and will close 10 minutes after each session begins. Late arrivals or early departures will NOT be given credit for the session and will need to make up the session the next time this course is offered. If you are having technical difficulty logging into Zoom and/or CLE, please contact Jeff Nicklas at jeff.nicklas@ucsf.edu for assistance.*

Laptop policy:

This course uses lectures, case studies, and group discussions to teach students about some of the most important but difficult responsible practice topics facing professional researchers. Therefore, students are expected to be fully engaged in all class lectures and discussions, and the course organizers and directors ask you to refrain personal or research-related work during class time.

Sign-in policy: You **MUST** complete the Qualtrics login link, which provides the Zoom information, within the first 10 minutes every session to receive credit for the session!

Attendance Policy: Students are expected to participate in all eight sessions of GRAD214.

If a student must miss a session due to an unavoidable conflict or illness, a think piece can be written to make-up each missed session. See below for think piece instructions. Please submit the completed think piece via the Moodle/CLE by Monday June 14th, 2021.

Students who miss more than a day of sessions will not pass GRAD214 and will be required to re-take the course next year.

Absences must be approved in advance. Please contact Jeff Nicklas (jeff.nicklas@ucsf.edu) and your program administrator as soon as possible if you will be missing a session.

Final Assignment Short Essay: Each student is required to complete a final writing assignment. For this short essay, please choose a session topic and write:

- Your own case study. The first 1-2 paragraphs of the short essay should be a case study you have created. This can be drawn from your imagination, your own experience, or

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something from the news or popular culture. *If you are writing from your own experience, please de-identify all characters (change names, departments, institutions, and titles).* Use the case studies on the Moodle/CLE as a template.

- Analysis of the case study: For the rest of the essay, analyze your case study using the topics you learned in the course. For example, describe possible reasons why the events in the case happened the way they did, what could have been done differently, and resources available for similar situations.

Short Essay Format Requirements:

- 2 pages; double spaced; one-inch margins; 12-point font
- Word document saved as "*LastName.FirstName.Essay2021*"
- Original work; citations should be consistent but do not need to be in a specific format

Please submit the completed essay via the Moodle/CLE by Monday June 14th, 2021.

Make-Up Think Piece Requirements: If you miss a session, you are required to create a think piece on the topic responding to the case study associated with the missed session. A think piece should be no shorter than 1 page, double spaced, and 12 point font. Please read all session materials on Moodle/CLE (especially the lecture PowerPoint) carefully and then write a think piece that responds to the case study using the concepts introduced by the session materials.

Please submit the completed think piece via the link on the Moodle/CLE page for the session you missed by Monday June 14th, 2021.

Think Piece Format Requirements:

- 1-2 pages; double spaced; one-inch margins; 12-point font; include name of missed session
- Word document saved as "*LastName.FirstName.TP2021*"
- Original work; citations should be consistent but do not need to be in a specific format

Session Forums: Each session has a related online forum. These optional forums are an opportunity for you to apply the themes of each session to real-life challenges, questions, concerns, and ruminations. These need not be polished; however, they should reflect how *you* experience and make sense of the weekly topic.

Statement on Accommodation: Students who require a physical, medical, or learning accommodation may contact Disability Management (<https://hr.ucsf.edu/hr.php?org=c&AT=cm&S=Disability+Management>).

In compliance with Education Code Section 92640(a), students may arrange to turn in course deliverables at a time that does not conflict with their religious observances.

ZOOM SCHEDULE

Day, Start Time	Session	Presenter(s)
Monday, June 7, 9:00am	Scientific Misconduct and Ethics in Science	Bruce Conklin
Monday, June 7, 10:30am	Science in the Genomic Era: Biomedical Research and Human Subjects	Aimee Medieros
Tuesday, June 8, 9:00am	Scientific Record Keeping and Data Management	Ariel Deardorff
Wednesday, June 9, 9:00am	Animal Welfare in Research	Carine Elkhoraibi & Vijay Namboodiri
Wednesday, June 9, 10:30am	Diversity and Equity	D'Anne Duncan
Thursday, June 10, 9:00am	Publications and Peer Review	Kaveh Ashrafi & Elizabeth Silva
Friday, June 11, 9:00am	The Art of Mentorship and Being Mentored	Elizabeth Silva
Friday, June 11, 10:30am	Conflicts of Interest: Science Outside of the Academy	Gretchen Keiser & Joseph Bondy-Denomy

Detailed Schedule and Session Information
ZOOM Meeting ID and Password will be updated via CLE

Monday, June 7th, 2021

9:00am – 10:30am

Scientific Misconduct and Ethics in Science: Bruce Conklin

Developing a well-reasoned response to an ethical problem in scientific research. The meaning of research misconduct and the regulations, policies, and guidelines that govern research misconduct in PHS-funded institutions. Includes topics such as fabrication, falsification, and plagiarism; error vs. intentional misconduct; institutional misconduct policies; identifying misconduct; procedures for reporting misconduct; protection of whistleblowers; and outcomes of investigations, including institutional & federal actions.

10:30am – 12:00pm

Science in the Genomic Era: Biomedical Research and Human Subjects: Aimee Medieros

Issues pertaining to biomedical research and human subjects' protections in the genomic era: privacy, confidentiality and protection of human tissue donors; management of genomic data; informed and open consent; and ethical issues in genomics research with vulnerable populations.

Tuesday, June 8th, 2021

9:00am – 10:30am

Scientific Record Keeping and Data Management: Ariel Deardorff

Accepted practices for acquiring and maintaining research data. Proper methods for record keeping and electronic data collection and storage in scientific research. Includes defining what constitutes data; keeping data notebooks or electronic files; data privacy and confidentiality; data selection, retention, sharing, ownership, and analysis; data as legal documents and intellectual property, including copyright laws.

10:30am – 12:00pm

No session

Wednesday, June 9th, 2021

9:00am – 10:30am

Animal Welfare in Research: Carine Elkhoraibi & Vijay Namboodiri

Issues important in the use of animals in conducting research. Includes topics such as definition of research involving animals, ethical principles for conducting research on animals, federal regulations governing animal research, institutional animal care and use committees, and treatment of animals.

10:30am – 12:00pm

Diversity and Equity: D'Anne Duncan

Introduce students to issues related to diversity and equity both within the lab environment and the larger scientific community. Discuss the social impacts of scientific research. Explore how larger social and institutional structures affect scientific research as well as how such power structures impact those working on such projects, including students, PIs, and others.

Thursday, June 10th, 2021

9:00am – 10:30am

Publications and Peer Review: Kaveh Ashrafi & Elizabeth Silva

The purpose and importance of scientific publication, and the responsibilities of the authors. Includes topics such as collaborative work and assigning appropriate credit, acknowledgments, appropriate citations, repetitive publications, fragmentary publication, sufficient description of methods, corrections and retractions, conventions for deciding upon authors, author responsibilities, and the pressure to publish. Also, the purpose of peer review in determining merit for research funding and publications. Includes topics such as, the definition of peer review, impartiality, how peer review works, editorial boards and ad hoc reviewers, responsibilities of the reviewers, privileged information and confidentiality, institutional animal care and use committees, and treatment of animals.

10:30am – 12:00pm

No session

Friday, June 11th, 2021

9:00am – 10:30am

The Art of Mentorship and Being Mentored: Elizabeth Silva

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Introduce students to the responsibilities of mentors and trainees in predoctoral and postdoctoral research programs. Includes the role of a mentor, responsibilities of a mentor, conflicts between mentor and trainee, collaboration and competition, selection of a mentor, abuse of the mentor/trainee relationship, and policies for handling misconduct.

10:30am – 12:00pm

Conflicts of Interest: Science Outside of the Academy: Gretchen Keiser & Joseph Bondy-Denomy

The definition of conflicts of interest and how to handle conflicts of interest. Types of conflicts encountered by researchers and institutions. Includes topics such as conflicts associated with collaborators, publication, financial conflicts, obligations to other constituencies, and other types of conflicts.