BC360: Responsible Conduct in Biochemical Research Syllabus v1.0 Spring 2023

Instructor: Professor Robert Cohen

Office hours and location: Immediately after class in 273 MRB or by appointment

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Class hours & location: Classes will meet in the 1st half of the semester in WAGAR 132 on Thursdays from 10:00 - 11:40 AM. The first class meeting is on Jan. 19

Course description: The objective of this course is to introduce students majoring in biochemical science to concepts and practices that underlie responsible — and irresponsible — conduct in modern scientific research. The course will begin with a brief look at how in the late 20th century the U.S. government became interested in the issue of fraud in science, and how those investigations evolved into a formal definition of research misconduct and requirements among researchers for Responsible Conduct in Science ("RCR") training. Because the public's perception of science and scientists has played a major role in the development of RCR, the class will discuss several examples of (mis)conduct in science that will be drawn from the popular press. Among topics to be discussed are actions that have been taken in response to allegations of misconduct; these discussions will include cases where those actions appear to indicate government (or university!) overreach. Key issues commonly encountered by researchers include data and resource sharing, confidentiality, authorship, and reviewing papers and grants; these will be discussed together with consideration of the many conflicts of interest — both real and perceived — encountered in the course of doing research. Finally, if time permits, the class will discuss the concept of "forbidden knowledge" in the context of responsible conduct of research.

Outcomes: Students in BC360 are expected to become familiar with RCR practices and responsibilities, and to develop an appreciation of the motivations and controversies involved.

Assessment: Students will study accounts of cases that exemplify important issues in the conduct of scientific research. These will be discussed and analyzed in class, in quizzes, and in written assignments.

Grading: Final grades will be based on in-class quizzes (tentatively, 2 tests comprising 50% of total) and take-home assignments (tentatively, 2 assignments comprising 50% of total). There will be no final exam.

Text: There is no required text for this course. Some material will be posted on the Canvas system, and students are expected independently to seek out other sources as necessary.

Other: Use of cell phones during class is prohibited.

Tentative schedule

Date	Торіс
01/19	Course Introduction; FFP and RCR; ASBMB Code of Ethics
01/26	The Baltimore Case; Distinguishing the Crooks from the Jerks
02/02	Giving Credit Where Credit is Due
02/09	More Giving Credit Where Credit is Due; Plagiarism
02/16	Openness in Academia; Universities and Intellectual Property
02/23	Openness in Academia; Regulation by Government
03/02	Regulation by Government Continued; Forbidden Knowledge
03/09	Forbidden Knowledge

Academic Integrity & CSU Honor Pledge; Student Accommodations

This course will adhere to the <u>CSU Academic Integrity/Misconduct</u> policy as found in the General Catalog and <u>the Student Conduct Code</u>.

If you are a student who will need accommodations in this class, please contact me to discuss your individual needs. Any accommodation must be discussed in a timely manner. A verifying memo from The Student Disability Center may be required before any accommodation is provided.

Students seeking an exemption from attending class or completing assigned course work for a religious holiday will need to fill out the Religious Accommodation Request Form and turn it in to the Division of Student Affairs, located on the second level of the Administration building. Once turned in, the Division of Student Affairs will review the request and contact the student accordingly. If approved, the student will receive a memo from the Dean of Students to give to their professor or course instructor.

CSU COVID Guidance

All students are expected and required to report any COVID-19 symptoms to the university immediately, as well as exposures or positive tests from a non-CSU testing location.

- If you suspect you have symptoms, or if you know you have been exposed to a positive person or have tested positive for COVID (even with a home test), you are directed to fill out the COVID Reporter (https://covid.colostate.edu/reporter/).
- If you know or believe you have been exposed, including living with someone known to be COVID positive, or are symptomatic, it is important for the health of yourself and others that you complete the online COVID Reporter. Do not ask your instructor to report for you.
- If you do not have internet access to fill out the online COVID-19 Reporter, please call (970) 491-4600.
- You may also report concerns in your academic or living spaces regarding COVID exposures through the COVID Reporter. You will not be penalized in any way for reporting.
- When you complete the COVID Reporter for any reason, the CSU Public Health Office is notified. Students who report symptoms or a positive antigen test through the COVID Reporter may be directed to get a PCR test through the CSU Health Network's medical services for students.

For the latest information about the University's COVID resources and information, please visit the CSU COVID-19 site: https://covid.colostate.edu/.