GRAD 721: Research Ethics  
Prof. Douglas MacLean, Department of Philosophy

This is a one-credit course. It meets two hours each week for seven weeks. The course has two aims. First, students are introduced to concepts, rule, and issues that are central to research ethics. Second, we aim through readings and discussion to develop skills in critical thinking and ethical analysis.

Class preparation: Students are expected to spend approximately one hour each week preparing for the seminar. All the readings are online, and students post comments on the reading. No other exams or written work is required. Class participation: Students are expected to attend each meeting and to participate in discussions of all the topics.

Topics

Week 1: Introduction, and the relation between ethics and egoism
- What do we mean by “research,” and what do we mean by “ethics”?
- What is the relation between ethics and egoism or rational self-interest?
- A sample case of research misconduct: What pressures and other factors create temptations for successful, tenured researchers to falsify their work or fabricate data?

Week 2: Research misconduct and lying
- Definitions and penalties for fabrication, falsification, and plagiarism.
- A detailed case study of academic misconduct. What are the issues? What happens to graduate students who report misconduct? How are graduate students and post-docs protected when a professor is found guilty of misconduct?
- What are the ethical responsibilities of bystanders?
- Fabrication, falsification, and plagiarism are all species of lying. What is lying? And why is lying wrong?

Week 3: Probability, statistics, and critical thinking
- What are the psychological barriers to good critical thinking? What is the relevance of these problems for researchers and for research subjects?
- What should we know about statistics? What is the meaning and justification of ‘statistical significance’?
- Examine the puzzling ‘decline effect’ in statistically significant findings.

Week 4: Human subjects research, informed consent, and IRBs
- A history of misconduct of the use of human subjects in research.
- Problems of obedience and authority.
- What is the value of informed consent?
- Do IRBs protect human research subjects, or do they hinder research?

Week 5: Animals and the Environment

- Do we have ethical responsibilities to animals? Why?
- Do individuals have duties with respect to climate change?

Week 6: Mentoring, authorship, and intellectual property

- Students will have interviewed their mentors. We report on the results of these interviews.
- Who should be an author of an article, and how should disputes about authorship be resolved?
- What is intellectual property? Why and how is it protected? What are the benefits and the costs of allowing individuals and institutions to “own” intellectual matter?

Week 7: Social responsibility of scientists

- What are the issues of diversity and under-representation in research universities?
- Understanding stereotype effects
- Where can one go for further information, to report concerns about misconduct, to learn more about the ethical codes of various professions, or to find out where at UNC cutting-edge issues in research ethics are being discussed and debated?