Bioscience PhD
Bioethics Track

BIOS 783 Interdisciplinary Research Methods in Bioethics
Meg Brindle

Course Description:

This course provides a foundation in research methods from the variety of disciplines students need to better understand and analyze research conclusions in bioethics. It does not claim to be exhaustive in research methods skills, but strives to provide analytical skills students will need to discern good v. flawed research in a number of venues. In addition, it endeavors to provide an overview of resources which students may use in pursuit of their own research agendas, ranging from on-line data bases in law and medicine on the internet to the Institute of Ethics Library at Georgetown University.

The course includes an overview of traditional ethics approaches such as the deductive and inductive approach and builds on analyzing the case method approach. In law, students will become more familiar with legal research by engaging in a project in a law library, and becoming familiar with the ways lawyers use precedent and case law. The course also provides an overview of quantitative methods and qualitative methods used in ethics research. Finally, there is a module on grantmanship that seeks to acquaint students with grantmanship resources and writing.

Course Rationale:

The course is designed to better prepare students for the dissertation level and knowledge of interdisciplinary methods would be the primary rational of the course. In addition to preparing students for traditional dissertation and then post graduate research and publishing, the course would provide a more in-depth insight into how various players in the ethics debate arrive at their decision making and policy rationales. If one is to debate successfully as a policymaker with a lawyer or scientist, it is critical to understand that discipline’s research methodology or “language.” Thus, the course would prepare students to understand as well as to better participate in research-oriented debate.

We also acknowledge that our PhD path seeks to advance students who will not follow an academic route, but who will possess credentials to serve on boards and to provide consulting, where again knowledge of varied research methodology would be critical to both follow the arguments of diverse perspectives, analyze conclusions and recognize excellent v. flawed research.

The abiding rational of the course is to develop critical analytical skills in reviewing research. We expect that students who wish to pursue a form of research methodology in greater depth can benefit from the numerous electives offered at GMU in research methodologies at the graduate level such as, for example, Quantitative Methods.
**Course Objectives:**

To acquaint students with the variety of resources available toward performing bioethical research;

To prepare students to better comprehend and utilize varied research methodologies;

To enable students to better prepare dissertation foundations in multi-disciplinary research, including legal research, ethics research methods; quantitative and qualitative methodologies;

To enable students to develop pragmatic skills in grantmanship;

To prepare students for either an academic route or consulting role by grasping multidisciplinary research frameworks;

To provide critical analysis skills for discerning flawed research and flawed conclusions.

**Course Outline:**

**Module One: Resources and Research Methods in Ethics**

Week One: Introduction and Review of traditional ethics methodology  
Week Two: Internet sources and assignment  
Week Three: Visit to Georgetown Institute of Ethics  
Week Four: Assignment, reviewing and comparing/contrasting papers in varied venues from academic to trade press

Readings in Ethics

**Module Two: Resources and Research Methods in Law**

Week Five: Visit to law library to demonstrate resources with assignment in tracking legal case.  
Week Six: Tracking an ethics issue via historical legal precedents  
Week Seven: The use and abuse of case law

Readings: Legal cases. Literature from Legal Journal on Precedent use and Case law

**Module Three: Qualitative Research Methods**

Week Eight: Historical methods – use of sources, understanding causation, historical origins of ethics issues, misuse of history
Week Nine: Other forms of Qualitative Research such as the use of Narrative, Storytelling and conversation. TBA by instructor and class composition

Writings from Sarah Cobb, the use of conversation to develop and reconstruct conflict
Brindle, M. ‘Games Decision makers play’
Modell, J., ed. *Qualitative methods in History*

**Module Four: Quantitative methods**

Week Ten: Overview of statistical methods for students to be cognizant of reading statistical analysis and to be aware of ways statistics can be misused.
Week Eleven: Analysis of quantitative methods in policy analysis.

Readings in Quantitative methods

Week Twelve: Issues in Professional Ethics: cases and controversies

**Module Four: Grantmanship**

Week Twelve: The grant review process in bioethics, Visit from NSF or NIH

Week Thirteen: Review/Analysis of successful and nonsuccessful grants
Week Fourteen: Drafting a Grant Proposal

Week Fifteen: Student presentation of research project

**Assignments:**

Students will review and critique articles germane to each module and write papers critiquing and editing the articles demonstrating the logic and strengths and weaknesses of the argument.

There will be three critical analysis papers due with each worth 15 pts.
This includes one analysis each of: 1) quantitative; 2) qualitative methods and 3) an assignment using legal methods of case law and precedent

**Final Paper Description:**

Students will have the option of:
1) A literature review on a selected topic which will provide a summary of the literature as well as critique. This assignment will have a two-fold objective of demonstrating how to perform a solid literature review and how to differentiate forms of research analysis the student will want to use or disregard.
2) A grant proposal (without the budget). Students may write the qualitative section of a grant proposal on a selected topic developing rationale, objectives and
description of their project. They will need to demonstrate the project’s efficacy with a real call for proposals and outline a plan for performing the study. While intended as practice, it would be ideal if the grant proposal could be developed into an actual proposal.

**Grading:**

| Critical analysis essays:   | 15% each x 3 = 45% |
| Final Paper                | 30%               |
| Classroom Discussion       | 15%               |
|                           | **100%**          |