

BIO 416: Biomedical Research Ethics

Syllabus, Spring 2020

Course and Faculty Information

Course Description: Biomedical Research Ethics will explore ethical issues that arise in the conduct of research and the results of research—emerging biotechnologies. Specifically, the course is made up of four units on: research with human subjects, research with animals, misconduct in science, and emerging biotechnologies. As an applied ethics course, the emphases within these topics will include describing common practices in biomedical research, exploring ethical principles, professional norms, and laws that shape responsible conduct of research, and developing of ethical problem-solving skills. Effectively constructing and communicating an argument about a research ethics topic will be one of the main aims of this course.

Credits: 3

Prerequisites: minimum 45 hours; Credit is allowed for only for BIO 416 or HPS 410

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Course Overview

For this course you will:

1. Complete readings, view video clips, and listen to podcasts
2. Participate in the discussions
3. Take unit quizzes
4. Do two short ethical writing exercises
5. Write two case analyses
6. Create two timelines

Readings, Clips, and Podcasts

Content assignments are given in the in each module on the Canvas site. Complete them on or before the day suggested in the schedule and you should do well.

Discussions

Discussion aim to help you reflect on, process, and integrate the information learned from

assigned readings and other content in conversation with your peers and one of the course instructors. Read the instructions carefully, participate early and often, and you'll do well. Remember to abstain from personal attacks. But do feel free to actively and constructively disagree. Please avoid bland responses like "wow interesting point, I didn't think of it that way." If you think something is interesting, say why.
YOU CANNOT MAKE UP A MISSED OR LATE DISCUSSION.

Quizzes

There will be short quizzes (approx. 8-10 items) for each unit of the course. The last day to do the quiz is on the last day of each unit. The quiz will be made up of multiple choice, true-false, and other simple questions. You will always have 30 minutes to complete the quiz. Feel free to consult any and all of your texts. The time limit does mean that you should do your reading prior to attempting the quiz.

The quiz in Week 1 will cover your knowledge of the syllabus and other Unit 1 material. All other quizzes will focus on the Units content.

The purpose of the quizzes is to encourage you to complete readings/media we assign. Each question will be worth one clicker point. The questions are not intended to trick you. Remember sharing your answers with another student, or posting the quiz materials and answers online, is a violation of Academic Integrity and will be treated as such.

Two Timelines:

You will be asked to create two timelines about an important case in biomedical research ethics history. One of these will be built around the creation of the Limulus Amebocyte Lysate test. The other, about the events related to the Tuskegee Syphilis Experiments. Details about these projects will be given in the respective assignment prompts.

Mini Ethics Writing Exercises

You will be asked to write two short "ethics exercise" assignments we call "mini-assignments." These are constructed to get you to focus on just one important feature of a case. Details about these writing exercises will be given in the respective assignment prompts.

Case Analyses

The case analysis essays are exercises in critical reading, and argumentation. You will be asked to pick one of two cases (events/scenarios) that involve problems in biomedical research ethics. You'll have to apply what you've learned in your readings and through your discussion and mini assignment work to crafting a well-formed ethical argument. Then, you have the **option to revise your first case assignment, or to do another one for your final.** The assignments themselves are available for you at any time on the Canvas page. And more will be said about how to tackle them in the first few weeks of class.

Writing

Biomedical Research Ethics is a General Studies Literacy and Critical Inquiry (L) core course. The heart of this requirement is that you develop your ability to think critically

and communicate in writing and verbally effectively. L courses have substantial writing components. Specifically, they must include writing that requires gathering, interpreting, and evaluating evidence, and they structure writing assignments to provide you feedback that aids in the development of communication skills.

Course Learning Outcomes

The long and short of these objectives? I want you to feel comfortable talking about the ethics of biomedical research fluently with your friends, family, and the people you decide to argue with online. So, the big writing assignments, they're to help you work on communicating complicated ideas about science and ethics to a general audience. The readings, they give you enough of the background and history so that you're literate in the subject: literacy of this sort helps you constructively doubt the claims of experts, and to formulate good and convincing arguments about what we should be doing.

At the completion of this course, students will be able to:

Identify ethical dimensions of current biomedical research practices

- Be able to describe ethical standards for the design, conduct, and reporting of research in the life sciences.
- Employ ethical principles, legal standards, and professional norms to respond to ethically complex situations in the conduct of biomedical research.
- Discuss regulatory approaches to achieve ethical goals in biomedical research.
- Explain ethical principles, legal standards, and professional norms in the areas of misconduct in science, research with human subjects, research with animal subjects, and ethics of emerging technologies.
- Identify ethical dimensions of current biomedical research practices
- Formulate an ethical argument concerning ethically complex situations in the conduct of biomedical research.

Textbook

There is one required text for the course:

- Shamoo, Adil E. and David B. Resnik. *Responsible Conduct of Research*. 3rd ed. Oxford; New York: Oxford University Press, 2014.

The text is available through Amazon.com and other online booksellers. It is also available at the ASU Bookstore and on reserve at Noble Science Library.

All other assigned content materials will be posted in the course Canvas site.

Course Access

Your ASU courses can be accessed by both my.asu.edu and myasucourses.asu.edu; bookmark both in the event that one site is down.

Computer Requirements

This is a fully online course; therefore, it requires a computer with internet access and the following technologies:

- Web browsers ([Chrome](#), [Mozilla Firefox](#), or [Safari](#))
- [Adobe Acrobat Reader](#) (free)
- [Adobe Flash Player](#) (free)
- Webcam, microphone, headset/earbuds, and speaker
- Microsoft Office ([Microsoft 365 is free](#) for all currently-enrolled ASU students)
- Reliable broadband internet connection (DSL or cable) to stream videos.

Note: A smartphone, iPad, Chromebook, etc. will not be sufficient for completing your work in ASU Online courses. While you will be able to access course content with mobile devices, you must use a computer for all assignments, quizzes, and virtual labs.

Help

For technical support, use the Help icon in the black global navigation menu in your Canvas course or call the ASU Help Desk at +1-(855) 278-5080. Representatives are available to assist you 24 hours a day, 7 days a week

Student Success

To be successful:

- check the course daily
- read announcements
- read and respond to course email messages as needed
- complete assignments by the due dates specified
- communicate regularly with your instructor and peers
- create a study and/or assignment schedule to stay on track
- access [ASU Online Student Resources](#)

Grading

We will generally assign grades for this course as follows:

Unit Quizzes (1, 2, 3, 4, & 5): 20 points each, 100 points total. (20% of course grade)
Case Analysis, Draft Version: 100 points. (20% of course grade)
Case Analysis, Revision or New Case: 100 points. (20% of course grade)
Discussions (1, 2, 3, 4, & 5): 20 points each, 100 points total. (20% of course grade)
Timeline (Horseshoe Crab, & Tuskegee): 25 points each. (10% of course grade)
Mini Assignment (1, & 2): 25 points each. (10% of course grade)

Your grade will be determined based on the following grading schema:

Grade	Percentage	Points Range
A+	100% - 98%	500 - 490
A	<97-93%	489 - 465
A-	<92-90%	464 - 450
B+	<89-87%	449 - 435
B	<87-83%	434 - 415
B-	<82-80%	414- 400
C+	<79-77%	399 - 385
C	<76-70%	384 - 350
D	<69-60%	349 - 300
E	<59%	299 - 0

Submitting Assignments

All assignments, unless otherwise announced, **MUST** be submitted to the designated area of Canvas. Do not submit an assignment via email.

Assignment due dates follow Arizona Standard time. Click the following link to access the [Time Converter](#) to ensure you account for the difference in Time Zones. Note: Arizona does not observe daylight savings time.

Grading Procedure

Grades reflect your performance on assignments and adherence to deadlines. Grades on assignments will be available within 72 hours of the due date in the Gradebook.

Discussions

Read the instructions carefully, participate early and often, and you'll do well. Remember to abstain from personal attacks. But do feel free to actively and constructively disagree. Each discussion will be specific about point allocation.

Quizzes

Most of the quiz questions are graded automatically. Though a few of them require manual grading and so take a bit more time.

Timeline assignment

In this assignment you'll be graded according to these criteria: 1) the degree to which you've included all the relevant historical events; 2) the quality and completeness of your ethical annotation (explained in detail in the assignment instructions).

Cases and mini assignments

Both of these assignment types are graded according to specific rubrics given with the assignments themselves.

Academic Integrity

Remember, if you cheat in an ethics class that just makes you a bad person. But jokes aside, academic honesty is expected of all students in all examinations, papers, laboratory work, academic transactions, and records. The possible penalties include, but are not limited to, appropriate grade reductions, course failure (indicated on the transcript as a grade of E), course failure due to academic dishonesty (indicated on the transcript as a grade of XE), loss of registration privileges, disqualification, and dismissal. For more information, see <http://provost.asu.edu/academicintegrity>[Links to an external site.](#). Additionally, required behavior standards are listed in the [Student Code of Conduct and Student Disciplinary Procedures](#)[Links to an external site.](#), [Computer, Internet, and Electronic Communications policy](#)[Links to an external site.](#), and outlined by the [Office of Student Rights & Responsibilities](#)[Links to an external site.](#). Anyone in violation of these policies is subject to penalties.

Late or Missed Assignments

Notify the instructor **BEFORE** an assignment is due if an urgent situation arises and you are unable to submit the assignment on time.

Follow the appropriate University policies to request an [accommodation for religious practices](#) or to accommodate a missed assignment [due to University-sanctioned activities](#).

Communicating with the Instructor

You may ask either instructor questions of an individual nature by email any time. Please try to contact the TA responsible for your grading first, before you contact the instructor. If you don't get a timely reply from them or your issue is about them, please feel free to contact me. You can expect a response within 48 business hours. I've also provided my phone number for urgent issues. If you must use it send a short text with your name and a brief description of your urgent problem or situation. Otherwise email should suffice.

Community Forum

This course uses a discussion topic called "Community Forum" for general questions and comments about the course. Prior to posting a question or comment, check the syllabus, announcements, and existing posts to ensure it's not redundant. You are encouraged to respond to the questions of your classmates.

Email questions of a personal nature to your instructor. You can expect a response within 72 hours.

Chat

The Chat tool in Canvas allows students and teachers to interact in real time. Use Chat only for informal course-related conversations unless your instructor informs you otherwise. Chat is not ideal for questions about assignments; instructors are not required to monitor it and conversations may be buried or lost.

Email

ASU email is an [official means of communication](#) among students, faculty, and staff. Students are expected to read and act upon email in a timely fashion. Students bear the responsibility of missed messages and should check their ASU-assigned email regularly.

All instructor correspondence will be sent to your ASU email account.

ASU Online Course Policies

View the [ASU Online Course Policies](#)

Accessibility Statements

View the [ASU Online Student Accessibility](#) page to review accessibility statements for common tools and resources used in ASU Online courses.

If any other tools are used in this course, links to the accessibility statements will be listed below this sentence.

Syllabus Disclaimer

The syllabus is a statement of intent and serves as an implicit agreement between the instructor and the student. Every effort will be made to avoid changing the course schedule but the possibility exists that unforeseen events will make syllabus changes necessary. Remember to check your ASU email and the course site often.