Syllabus for PADM 590: Biotech and Ethics for Public and Health Administration
(3 Credit Hours)

Instructor	Stephanie Larson, MA
Class Day and Time	Fridays, 4:00-6:30pm
Class Location	Social Sciences Building 3030
Office Hours	By Appointment
Email	StLarson@UNM.edu
Skype	Stephanie.a.larson2
Phone	(619)760-3762 [**Please no texts after 9pm**]

About Your Instructor
Name: Stephanie Larson (Pronounced: Stef-a-nee; Lar-son)
What to call me: Stephanie or, if you don't feel comfortable using my first name, then Ms. Larson is fine
Preferred Pronouns: She/Her/Hers

Course Description:
We live in a world saturated in ever-advancing technology. Although this technology has improved our personal and professional lives, it also raises contentious ethical issues and dilemmas. From artificial intelligence in the clinical setting to government facial recognition to identify citizens, we have reached a critical moment in society that calls for an informed population that can not only understand the issues at hand, but engage in well-reasoned discourse to promote more balanced policy and organizational application of technology.
In this course we will develop the tools to address today's most pressing biological and technological ethical issues and dilemmas. The course will begin with an introduction to ethical principles and theories. We will then develop the reading, reasoning, and communication skills to approach the major issues. The rest of the class will be spent engaged in the study of five key issues: security and surveillance; censorship, misinformation, and the internet; big data; artificial intelligence and automation; biodata and biohacking.
Assignments will include a presentation examining a case related to any of the class topics; a short, written, case analysis chosen from a list provided by the instructor; end-of-unit quizzes; and a final research-based paper.

Course Objectives and Student Learning Outcomes:
Competencies addressed: Ethical Theory and Application—Students will learn and apply ethical theory and principles to biological and technological cases that may arise in public and health administration settings.

Upon completion of this course, the student will be able to:

- Explain the current and anticipated biological and technological issues most relevant to the fields of public and health administration
- Identify the major frameworks for approaching biological and technological ethical dilemmas
- Critically approach and assess cases from multiple perspectives that differ significantly from their own position on the issue
- Work as both an individual and part of a team to develop and communicate evidence-based methods for approaching ethical dilemmas
- Apply the basic principles of professional writing and scholarly research to effectively communicate with academic, professional, and public audiences

Textbooks and Supplies:
All readings will be available on our course UNM Learn site.

Access and Accommodations
I strive to create an inclusive learning environment for all. I am invested in your success in this class and at UNM, so please let me know if anything is preventing you from doing your best work. This can include your own learning strengths, any classroom dynamics that you find uncomfortable, ESL issues, disability or chronic illness, and/or personal issues that impact your work. I will hold such conversations in strict confidence.
In accordance with University Policy 2310 and the Americans with Disabilities Act (ADA), academic accommodations may be made for any student who notifies the instructor of the need for an accommodation. It is imperative that you take the initiative to bring such needs to the instructor's attention, as I am not legally permitted to inquire. Students who may require assistance in emergency evacuations should contact the instructor as to the most appropriate procedures to follow. Contact Accessibility Resource Center at 277-3506 (voice) or arcsrvs@unm.edu (email) for additional information.

Class Ground Rules
Ethics, by its very nature, elicits opinions from all perspectives. You will, in all likelihood, find many situations during class in which you disagree with your colleagues and the authors we read. The goal in these situations is to respectfully engage with a range of perspectives. While this class will challenge you to think about and engage with difficult topics, it is not a free license to demean, threaten, or harass classmates who may hold views that differ from yours. Hate speech, harassment, threats, or any other actions that create an unsafe or hostile classroom environment will result in immediate dismissal from the classroom, and disciplinary action.

Plagiarism
Plagiarism is the use of an original idea, data, or information that is not common knowledge without properly attributing said content to its original source through a reference and citation. It is also possible to plagiarize yourself if you reprint material you have previously written without letting your reader know the material is not new.
Plagiarism does not depend on intent. Many cases of plagiarism are unintentional and due to sloppy notetaking, citations, or poor understanding of the boundaries of plagiarism. In this class students will learn about plagiarism and how to avoid it through careful notetaking and familiarity with the American Psychological Association (APA) citation style.

Please note that I have a zero-tolerance policy for plagiarism. If you turn in work that is not your own without attribution to the originator, you will receive an F on the assignment and possibly face disciplinary action from the department. Please be proactive and reach out if you have any questions about whether you might be committing plagiarism. There is no penalty for being proactive and consulting me. I'm always happy to help!

Assignment Breakdown

Assignment Type	Percentage
Weekly Reading Summaries	10%
Active Participation	20%
Discussion Leader	20%
Final Op-Ed Project	50% (Total)
• Topic Selection	• 5%
• Lit Review	• 10%
• Op-Ed Draft	• 5%
• Final Presentation	• 15%
• Final Draft	• 15%

Assignment Descriptions

Weekly Reading Summaries: 10%
Beginning in week six you will be responsible for submitting a one to two-page word summary of the class readings. (In terms of word count this roughly translates to a composition of 250 to 500 words.) Summaries are due on BlackBoard at 11:59pm the Thursday before class.
These summaries are low stakes and will be graded based on completion. The weekly reading summaries are a free space for you to brainstorm and engage with the material at hand. The goal of this weekly brainstorming is to help you generate ideas, questions, and connections that you can develop during class discussion.
- Your summaries must contain the following information in order to receive full credit:
    - A summary of the key ethical issue(s) for the class topic at hand
    - Potential stakeholders/the point of view they represent
    - A link between the issue and your current or future career
    - Lingering questions you plain to raise in class
Discussion leaders are exempt from submitting a reading summary for the week they are scheduled to present.

Active Participation: 20%
Ethics is, by nature, a discussion-based discipline; hence, the weight of participation in this class. Participation will be based on active, substantial contributions you make to class discussion. TO get full points for participation please come to class every day, read the material, and prepare to take part in class discussion and group exercises. Participation grades will be assigned through a holistic review of the student's performance throughout the semester.

Discussion Leader: 20%

Students should take an active role in learning by leading class discussion. Early in the semester students will be asked to sign up to lead one class discussion. The student will develop a lesson plan to lead the first thirty minutes to an hour of class. The student may design and organize their lesson however they see fit, but the assignment must include the following elements:

- An introduce the topic and ethical issues at hand
    - This will require the student presenter to conduct research on the topic beyond the assigned readings
- A class discussion of the assigned readings
- Connection of the ethical issues at hand with a case study
    - This element will also require research beyond the assigned class readings. The student presenter's case study cannot come from the class readings.
- A class activity that helps students link the ethical issues with their personal and professional lives

Discussion leaders must submit an outline or PowerPoint 48 hours prior to the presentation.

Final Op-Ed Project: 50%

An op-ed is an opinion piece in which the author takes a stance on a particular issue. Both *The New York Times* and *Los Angeles Times* are particularly good sources for examples of writing in this genre. For this assignment, students will hone their research, analytical, and public scholarship skills by composing an op-ed. The component pieces of the final op-ed project are as follows: .
- **Select Topic:** 11:59pm Friday, Feb. 21
    - 5% of Grade
- **Literature Review:** 11:59pm Friday, Mar. 12
    - 10% of Grade
- **Op-Ed Draft:** 11:59pm Friday, Apr. 10
    - 5% of Grade
- **Final Presentation:** 4:00pm Friday, May 8 (
    - 15% of Grade
- **Final, Polished Op-Ed:** 11:59pm Friday, May 15
    - 15% of Grade

Please see separate assignment sheet posted to BlackBoard for more details about expectations and grading criteria .

Class Schedule

The Schedule of Activities is subject to change at the instructor's discretion.

Ethics Toolbox

Week	Date	Lesson	Due
One	Jan. 24	Class Introduction	**Assignments:** • None **Required Readings**: • None
Two	Jan. 31	Introduction to Ethics I: Theories, Principles, and Approaches	**Assignments:** • 11:59pm Thursday, Jan. 30: Submit one question about the course • 11:59pm Thursday, Jan. 30: Sign up for discussion leader **Required Readings:** 1. Fieser, "Ethics" (link) 2. Beauchamp & Childress (PDF): a. "Moral Norms" pp. 1-29 b. "Moral Character" pp. 30-61 c. "Moral Theories" pp. 351-389 3. Timmons, "Introduction to Moral Theory" p. 1-21 (PDF)
Three	Feb. 7	Introduction to Ethics II: Proactionary and Precautionary Approaches	**Assignments:** • None **Required Readings:** 1. McLean, "Thinking Ethically About Human Biotechnology" (link) 2. "Precautionary Principle: Origin, Definitions and Interpretation" (PDF) 3. Holbrook & Briggle, "Knowing and Acting" (link) 4. Kaebnick et al. "Precaution and Governance for Emerging Technologies" (PDF) • Marchant, "The Precautionary Principle: An 'Unprincipled' Approach to Biotechnology Regulation" (PDF) **Optional Readings:** • "Rio Declaration on Environment and Development" (link) • "Environmental Risk Management in New Zealand" (link) • "The Nature of Science" (link) • "The Nature of Technology" (link)

| Four | Feb. 14 | Communicating Ethics: Writing and Research Refresher | **Assignments:**
• 11:59pm Thursday, Feb. 13: Op-ed example

Required Readings:
• Swain & Swain, "Essential Preliminary Steps to Effective Writing" pp. 3-16 (PDF)
• Shipley, "And Now a Word from Op-Ed" (PDF)
• Hall, "Op-Ed and You" (PDF)
• Neill, "What Aristotle and Joshua Bell can Teach us about Persuasion" (video link)
• Lamott, "Shitty First Drafts" (PDF)

Optional Readings:
• Swain & Swain, "The Mechanics of Writing" pp. 17-38 (PDF)
• "Op-Ed Writing: Tips and Tricks" (link)
• "Paraphrase" (link)
• "Literature Reviews" (link)
• "Learn How to Write a Review of Literature" (link)
• "Write a Literature Review" (link)
• "The Literature Review: A Few Tips on Conducting It" (link)
• "How to Make a Great Presentation" (video link) |

Survey of the Field

| Five | Feb. 21 | No Class | **Assignments:**
• **11:59pm Fri., Feb 21: Choose a topic for your literature review**
• Optional: meet with instructor to discuss topic and resources (office hours listed on BlackBoard)

Required Readings:
• None |
| Six | Feb. 28 | Security and Surveillance | **Assignments:**
• 11:59pm Thursday, Feb. 27: Reading Summary

Required Readings:
1. Macnish, "Surveillance Ethics" (link)
2. Morley, "Wearable Sensors: An Ethical Framework for Decision-Making" (link)
3. Maddox, "Tech and Health Care Need Their Own 'Hippocratic Oath' to Make Digital Health Work" (link)
4. Lahey, "A Watchful Eye in Hospitals" (PDF) |

			5. Durkin, "When Visits Become 'On the Record'" (link) 6. Wallace, "Ethics: Electronic Surveillance of Nurses in the Workplace: Ethical Considerations" (link) 7. Sorell & Draper, "Telecare, Surveillance, and the Welfare State" (PDF) **Optional Readings:** • Klosowski, "Your Visitors Deserve to Know They're on Camera" (PDF) • Swisher, "Be Paranoid about Privacy" (PDF) • Garvie, "You're in a Police Lineup Right Now" (PDF) • Shell, "The Employer-Surveillance State" (PDF) • Marchant, "What are the Best Practices for Ethical Use of Nano sensors for Worker Surveillance?" (link) • Selinger & Hartzog, "What Happens When Employers can Read Your Facial Expressions" (PDF)
Seven	Mar. 6	Misinformation and Censorship	**Assignments:** • 11:59pm Thursday, Mar. 5: Reading Summary **Required Readings:** 1. Fieser, "Censorship" (link) 2. Seleglid, "A Tale of Two Studies: Ethics, Bioterrorism, and the Censorship of Science" (PDF) 3. Mavrovic, "The Dangers and Ethics of Social Media Censorship" (link) 4. "Fake News and Censorship" Twin Challenges for Law and Global Health in the Digital Age" (link) 5. Marks, "Online Content Moderation as Public Health Regulation" (link) 6. Wu et al. "Why Health Professionals Should Speak Out Against False Beliefs on the Internet" (link)
Eight	Mar. 13	Biodata Collection, Consent, and Distribution	**Assignments:** • 11:59pm Thursday, Mar. 12: Reading Summary • **11:59pm Friday, Mar. 13: Literature Review** **Required Readings:** 1. Sharon, "Apple and Google Plan to Reinvent Healthcare. Should we Worry?" (link) 2. "Tools to Help Healthcare Providers Deliver Better Care" (link) 3. Copeland, "Google's 'Project Nightingale' Gathers Personal Health data on Millions of Americans" (PDF)

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5. Mongoven, "Project Nightingale: The Need to Connect Data with Dignity" (link)
6. Fussell, "Google's Totally Creepy, Totally Legal Health-Data Harvesting Operation" (PDF)
7. "Will Companies be able to Access Patient Data?" (link)
8. Lake et al. "How We Are Talking to Alexa" (link)
9. Kobie, "Everyone Should Be Worried by Big Tech's Huge NHS Data Grab" (PDF)

Optional Reading:
• 23andMe,"Privacy Highlights" (link)
• "The Ethics of Catching Criminals Using their Family's DNA" (link)
• Seife, "23andMe is Terrifying, but not for the Reasons the FDA Thinks" (link)
• Bala, "Why Are You Publicly Sharing Your Child's DNA Information?" (PDF) |
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| Nine | Mar. 20 | **No Class; Enjoy Spring Break** | |
| Ten | Mar. 27 | **One-On-One Online Class Meetings** | **Assignments:**
• Prepare any questions you might have about your final project |
| Eleven | Apr. 3 | Human Enhancement and Disability Bioethics | **Assignments:**
• 11:59pm Thursday, Apr. 2: Reading Summary

Required Readings:
1. "Human Enhancement" (link)
2. Brock, "Enhancements of Human Function: Some Distinctions for Policymakers" (PDF)
3. Sandel, "Designer Children, Designing Parents" (PDF)
4. Ouellette, *Bioethics and Disability: Toward a Disability-Conscious Bioethics* pp. 1-71 (PDF)
5. Singer, *Practical Ethics* pp 181-191 (PDF)
6. McBryde Johnson, "Unspeakable Conversations" (PDF)

Optional Readings:
• Silvers "A Fatal Attraction to Normalizing: Treating Disabilities as Deviations from "Species-Typical" Functioning" (PDF) |

			- Rothstein et al. "Ethical Implications of Epigenetics Research" (PDF) - Explore the "Ethical Issues in Synthetic Biology" Website (link)
Twelve	Apr. 10	Biotech and Distributive Justice	**Assignments:** 11:59pm Thursday, Apr. 9: Reading Summary **11:59pm Friday, Apr. 10: Op-Ed Draft** **Required Readings:** "Distributive Justice" (link) - Faden & powers, "Biotechnology, Justice and Health" (link) - Hildebrandt & Marron, "Justice in CRISPR/Cas9 Research and Clinical Applications" (link) - Begley, "First CRISPR Treatment for Blood Diseases Shows Early Benefits in Two Patients" (PDF) - Dressler & Kelly, "Ethical Implications of Medical Crowdfunding: The Case of Charie Gard" (PDF) - Snyder & Cohen, "Medical Crowdfunding for Unproven Medical Treatments: Should GoFundMe Become a Gatekeeper?" (PDF) - Eissenberg, "Direct-to-Consumer Genomics: Harmful or Empowering?" (PDF) **Optional Readings:** - Wired, "Biologist Explains One Concept in 5 Levels of Difficult-CRISPR" (video link) https://www.youtube.com/watch?v=sweN8d4_Mug - Mayo Clinic, "CRISPR Explained" (video link) https://www.youtube.com/watch?v=UKbrwPL3wXE - Last Week Tonight with John Oliver, "Gene Editing" (video link) https://www.youtube.com/watch?v=AJm8PeWkiEU
Thirteen	Apr. 17	Algorithms, Policy, and Decision-Making	**Assignments:** 11:59pm Thursday, Apr. 16: Reading Summary **Required Readings:** - Brogan, "What's the Deal With Algorithms?" (link) - Martin, "Ethical Implications and Accountability of Algorithms" (link) - Turner Lee et al. "Algorithmic Bias Detection and Mitigation: Best Practices and Polices to Reduce Consumer Harms" (link)

			4. Vartan, "Racial Bias Found in a Major Health Care Risk Algorithm" (PDF) 5. Hoffman, "Racial Bias in Pain Assessment and Treatment Recommendations, and False Beliefs about Biological Differences between Blacks and Whites" (PDF) 6. Obermeyer et al. "Algorithmic Bias in Health Care: A Path Forward" (link) **Optional Readings:** • Noble, *Algorithms of Oppression* Excerpts TBD (PDF) • Eubanks, *Automating Inequality* Excerpts TBD (PDF)
Fourteen	Apr. 24	Artificial Intelligence and Automation	**Assignments:** • 11:59pm Thursday, Apr. 23: Reading Summary **Artificial Intelligence**: 1. "Artificial Intelligence" Philosophy (link) 2. "AI and Its Implications on Public Administration" (link) 3. West et al. "Discriminating Systems: Gender, Race, and Power in AI" (link) 4. "Policy Recommendations: Control and Responsible Innovation of Artificial Intelligence" (link) 5. Citron & Calo, "The Automated Administrative State" (link) 6. Andersen et al. "How Governments can Harness the Power of Automation at Scale" (link) 7. Graeber, "On the Phenomenon of Bullshit Jobs: A Work Rant by David Graeber" (link) **Optional Readings:** • Kornhaber, "Sympathy for Janet on *The Good Place*: The Show is the latest example of pop culture thinking through whether Siri has a soul" (PDF) • Graeber, *Bullshit Jobs: A Theory* Excerpts TBD (PDF) • Lindsay, "The Impact of Automation on Public Administration" (PDF) • Skim: Automation Technology Applied to Public Service (link)
Fifteen	May 1	The Future of Biotech Ethics: What Next?	**Assignments:** • 11:59pm Thursday, Apr. 30: Reading Summary **Required Readings:** • Assigned by discussion leaders—Check BlackBoard

| Sixteen | May 8 | **Online Class Meeting Final Presentations** | **Assignments:**
• <mark>**11:59pm Thursday, May 7: final presentation outline or visual aid**</mark>

Required Readings:
• None |

<mark>**Finals Week (No Class):** Final Op-Ed Due Friday, May 15 at 11:59pm</mark>