# I301: Introduction to Informatics

#27345

Spring 2024

**Class Meets**:

Lecture Section: Monday, 12:30-2:00pm, UTC 4.122  
Discussion Section: Wednesday, 12:30-2:00pm, SZB 2.418

**Instructor:** Dr. Stephen C. Slota

Office hours: TBD, and by appointment via email.

Email: Please contact me via Canvas first. stephen.slota at austin.utexas.edu

**Discussion Leader:** Jiaxin An  
Office hours:

Email:

## Course Description

### University Catalog Course Description

### Introduction to the field of informatics, including cultural heritage informatics, health informatics, human-centered data science, social informatics, social justice informatics, and user experience design. Offered on the letter-grade basis only.

### Pre-requisites for the course

None.

### learning outcomes

Through this course students will:

* Gain familiarity with the foundational theories, concepts, and challenges in Cultural Heritage Informatics, Health Informatics, Human-Centered Data Science, Social Informatics, Social Justice Informatics, and User Experience Design.
* Cultivate an appreciation for the importance of working in diverse and inclusive teams, serving diverse audiences, and working toward social justice and equity.
* Use the iSchool’s core values as an ethical framework to analyze current events related to Informatics and formulate independent arguments.
* Understand the perspectives of users and other stakeholders in informatics, including their needs, values, and preferences.
* Develop basic technical proficiency in Informatics related technology.
* Demonstrate written and oral communication and collaboration skills by working effectively as a part of a team while also having individual accountability.

### Course materials

i301 does not have a textbook or course packet. Instead, all readings will be available through Canvas, UT’s Library, or through the World Wide Web.

## How Will You Learn?

### TEACHING MODALITY INFORMATION

The semester is divided into four different main topics:

1. Introduction
   1. The first two or three weeks of the semester we will focus on an overview of the field of informatics and its relationship to information studies. We will also explore some of the fundamental ideas related to the concept of information.
2. Core Values
   1. The next four weeks of the semester will focus on the core values of the UT Austin School of Information. We will discuss what these core values are and explore how to use these core values to guide our actions and reactions to real-world scenarios.
3. Concentrations
   1. The six weeks following the core values section will focus on each of the six different concentrations. We will explore the historical and intellectual background, as well as current events related to each concentration. The goal of this section is to help make sure each student understands all of the concentrations well enough to confidently decide which two Concentration introduction courses they will choose.
4. Wrap up
   1. The last few weeks will include final presentations, discussions, and a review of the semester.

The two class meetings each week will normally be divided among a lecture and a discussion section, although this will vary depending on the topics and assignments we are working on. Students are expected to attend each in-person session on Monday and Wednesday/Friday of each week.

As part of a semester-long group project, students will work in a small group to apply their understanding of the core values and one of the concentrations to propose a solution to a real-world problem or dilemma. Groups will choose a relevant current event to use as their problem or dilemma and develop a proposal and oral presentation to address that problem using the four core values as a lens. More details on the final project are available below.

### Communication

The course Canvas site can be found at [utexas.instructure.com](https://utexas.instructure.com/). Please email me through Canvas. You are responsible for ensuring that the primary email address you have recorded with the university is the one you will check for course communications because that is the email address that Canvas uses.

### UNIVERSITY Policies and resources

For a list of important university policies and helpful resources that you may need as you engage with and navigate your courses and the university, see the [University Policies and Resources Students Canvas](https://utexas.instructure.com/enroll/TP964H) page. The page includes the language of the University Honor Code, Title IX legal requirements for Texas employees, and information about how to receive support through the office of Disability & Access.

## Course Requirements and Grading

### Assignments

The following table represents how you will demonstrate your learning and how we will assess the degree to which you have done so.

| Assignments | Percent of Total Grade |
| --- | --- |
| 1. Attendance and Class Participation | 20% |
| 1. Discussion Questions | 20% |
| 1. Module Quizzes | 10% |
| 1. Core Values Assignment | 10% |
| 1. Final Assignment – Individual Essay | 10% |
| 1. Final Assignment – Peer Review | 10% |
| 1. Final Assignment – Group Essay | 10% |
| 1. Final Assignment – Group Presentation | 10% |

### Late Work and making up missed work

Late assignments will not be accepted unless the instructor approves the late submission ahead of time. If you become ill or experience some kind of emergency, please let the instructor know asap. Once the due date for an assignment has passed, it is more difficult for us to excuse late assignments, but we definitely want to know if something is going on so we can work with you to make sure you succeed in the class!

### GradIng Policy

301 uses the traditional UT Austin undergraduate grading scale:

| Grade | Cutoff |
| --- | --- |
| A | 94% |
| A- | 90% |
| B+ | 87% |
| B | 84% |
| B- | 80% |
| C+ | 77% |
| C | 74% |
| C- | 70% |
| D+ D D- | 67%  64%  60% |
| F | <60% |

### ACADEMIC INTEGRITY EXPECTATIONS

Using someone else’s work in your own writing without giving proper credit is considered plagiarism, a serious form of academic dishonesty that can result in severe penalties. Copying someone else’s work, buying a paper and submitting it as your own, copying and pasting text (even with changes), or borrowing images from an online source, are some examples of plagiarism. Even if you plagiarize accidentally, you can be held responsible and penalized.

Learning to cite sources appropriately is an important part of becoming a professional. When you are unsure about citation, you are encouraged to **ask your instructor** (who is already an expert in the discipline) what is appropriate in the context of your assignment. Consultants at The [University Writing Center](http://uwc.utexas.edu/) can also help you determine whether you are citing sources correctly—and they have helpful guides online for using [direct quotations](http://uwc.utexas.edu/handouts/direct-quotations-using-and-framing/) and [paraphrasing](http://uwc.utexas.edu/handouts/paraphrasing/). Reviewing those skills will help you feel confident that you are handling sources professionally in your writing.

You can read the University’s definition of plagiarism and other forms of academic dishonesty in Sec. 11–402 of the [Student Conduct Code](https://catalog.utexas.edu/general-information/appendices/appendix-c/student-discipline-and-conduct/). For more information, visit the [Dean of Students’ site](http://deanofstudents.utexas.edu/conduct/).

### Religious Holy Days

### By [UT Austin policy](https://catalog.utexas.edu/general-information/academic-policies-and-procedures/attendance/), you must notify me of your pending absence for a religious holy day as far in advance as possible of the date of observance. If you must miss a class, an examination, a work assignment, or a project in order to observe a religious holy day, you will be given an opportunity to complete the missed work within a reasonable time after the absence.

## Course Outline

All instructions, assignments, readings, rubrics and essential information will be on the Canvas website at

[utexas.instructure.com](https://utexas.instructure.com/). Check Canvas regularly. **Changes** to the schedule may be made at my discretion if circumstances require. I will announce any such changes in class and will also communicate them via a Canvas announcement. It is your responsibility to note these changes when announced, and I will do my best to ensure that you are notified of changes with as much advance notice as possible.

### Assignments

#### Attendance/Participation

Positive, thoughtful, and active participation in the discussion sections and at times during the main lecture, is strongly encouraged. Your lived experience, questions, ideas, and even your confusion are valuable contributions to the class and will help make the course more interesting and valuable for everyone!

Attendance and participation go hand in hand; it isn’t enough to just be physically (or virtually!) present, we ask that you also show up having read and thought about the materials for the week and how they relate to your own personal experience and the previous topics covered in class.

Ideally you will be able to attend class every meeting, but we understand that life can get in the way. Each student is allowed two missed classes without consequence. We would really appreciate knowing ahead of time, if possible, that you will not be able to attend class. If it isn’t possible to notify us ahead of time, we would love to know afterward just to make sure that you are alright. If you miss more than two classes your participation grade will drop by one grade level for each missed class. For example, if you miss 3 classes, the highest participation grade you will be able to achieve is a B, and that assumes that every day you attend class you are actively engaged and making valuable contributions.

If you need to miss more than two classes for medical reasons, we will need a doctor’s note and you should definitely get in touch with us to talk through how we might limit the impact of missing class on your semester grade.

#### Discussion Questions

Each week students will prepare and submit to Canvas a discussion question about the assigned reading for that week. Discussion questions are due in Canvas the evening before class. Late discussion questions will not be accepted. The discussion question should be focused on one or more of the required readings, at least 75 words long for each reading, and should make it clear that you have both read and thought about the assigned material.

Your instructor will select a few of the discussion questions to guide the discussion of the week’s readings. We will not have time to discuss a submission from each student during each class. Discussion questions are an opportunity for you to bring your own particular point of view and interests to the material we cover in class, and students are encouraged to connect the material to current events and prior learning both in this class and other courses you may have taken. Discussion questions should be conversation starters. It might help for you to look for an idea or assertion in the reading that you found interesting and would like to talk to your peers about in class. Discussion questions are not “answerable”, if your question has a single correct answer, it probably isn’t a good discussion question!

#### Module Quizzes

A review quiz covering the lecture materials and readings will be available through Canvas. The quiz will become available after that class’s lecture and will be due before the beginning of the next week’s class meeting. The quizzes are meant as a review and are open book, but we expect you to take them on your own, without collaborating with others. The top ten (out of twelve total) scores a student receives on these quizzes will be counted toward the student’s final grade in the course, the other scores will be dropped.

#### Core Values Assignment

During the first half of the semester, students will work in small groups to apply each of the four core values to a dilemma or real-world problem. Students will work together in class to discuss the core value for the week, find and discuss relevant dilemmas, and determine appropriate solutions to propose to those dilemmas. During the final core value discussion section, students will have time to develop a presentation that will convince the leader of an organization related to the dilemma (this may be the CEO or President of the company, for example), to take action that is consistent with all four core values discussed in class. Students will present their pitch during the discussion section. A few outstanding student groups may be asked to present in front of the larger class.

#### Final Assignment

The final assignment for the class is designed to build on the skills learned in the core values assignment above, to develop an independent written discussion of the application of one of the core values to a dilemma, and to work as part of a group to develop a larger written assignment and group presentation.

As part of this assignment, students will work together in small groups to analyze an open-ended dilemma in one of the six different concentrations. Students will select groups and decide on a concentration to work through for the final project.

1. **An** **individual student paper** that analyzes the dilemma using one of the four core values as a lens. Each student will choose a different core value and write a paper of between 1,500 and 2,500 words in length analyzing the dilemma using the lens of that core value.
2. **A peer review** of the individual papers written by the other members of your group. This is a great way to make sure you are familiar with the work of your group members and to start to think about how you might combine your work into a single, holistic document.
3. **A group paper** that combines each of the individual papers into one complete and coordinated paper. This group paper should be more than just a copy and paste version of the different individual papers, it should bring together the three to four different points of view into one, coordinated recommendation for action an audience capable of actually acting on the recommended course of action. This paper should be between 2,000 and 3,000 words long.
4. **A three-to-five-minute group presentation** to the class based on the combined paper that is meant to convince the audience to take the recommended action.

As the foundation for this exercise, the group will find a moral dilemma, with the guidance of the instructor, that is relevant to their concentration. The group will then use that dilemma as the foundation for the four assignments mentioned earlier.

The schedule for this assignment:

1. Module 7 – 2/21 & 2/23
   1. Students select a Concentration and form Final Project Groups.
2. Module 8 – 3/8
   1. Each group will select and submit a dilemma to use as the foundation for their project
3. Module 10 – 3/29
   1. Individual essays due. These essays apply **one** of the core values lenses to the dilemma.
4. Module 12 – 4/12
   1. Peer review due. Students will review the individual essays of the three other members of their group.
5. Module 12-13
   1. Students receive individual grades and feedback on their individual essay.
6. Module 13 – 4/24 &4/26
   1. Students present pitch to the CEO during discussion group
7. Module 14 – 4/29
   1. Students submit final paper that combines each of the individual papers into one synthesized final report.

#### Schedule

The preliminary schedule for the major assignments for this semester is listed below. Each of these assignments and due dates will be discussed in class during the semester, but this schedule is offered as a guide to help you plan your workload throughout the semester:

Weekly, Monday 12:00PM Complete the **review quiz**

Weekly, Sunday 11:59 PM Submit **discussion questions** for that week’s readings

2/21 & 2/23 Select Concentrations and Form Groups for **Final Project**

2/21 & 2/23 **Core Values Pitch to CEO** in Discussion Section

3/8 Submit **Dilemma** to Canvas

3/29 Submit **Individual Essay** to Canvas

4/12 **Peer Review**

4/24 & 4/26 **Final Presentations** in Discussion Section

4/29 **Final Paper** Due

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| --- | --- | --- | --- |
| Introduction | | | |
| Date | Meeting | Agenda | Due |
| Module 1 - Introduction | | | |
| 1/16 | Start of the Academic Term |  |  |
| 1/17 | Discussion | Welcome  Introductions  Syllabus Intro | Nothing due |
| Module 2 – What is Information? | | | |
| Readings | | | |
| 1. [Weaver, W. (1949). The mathematics of communication. Scientific American, 181(1), 11- 15.](https://utexas.instructure.com/courses/1309010/files/60538934/download?wrap=1) 2. Bawden, David, & Robinson, Lyn. (2009).  [The dark side of information:  Overload, anxiety and other paradoxes and pathologies](https://utexas.instructure.com/courses/1309010/files/60542959?wrap=1)   Optional readings:   1. Ackoff, R. L. (1989). [From data to wisdom](https://utexas.instructure.com/courses/1309010/files/60538933/download?wrap=1). *Journal of Applied Systems Analysis* 15:3-9. 2. Bellinger, G., Castro, D., & Mills, A. (2004). Data, information, knowledge, and wisdom, viewed 8/22/2018, [www.systems-thinking.org/dikw/dikw.htm (Links to an external site.)](http://www.systems-thinking.org/dikw/dikw.htm) 3. Braganza, A. (2004). [Rethinking the data-information-knowledge hierarchy: Towards a case-based model.](https://utexas.instructure.com/courses/1309010/files/60538935/download?wrap=1)*International Journal of Information Management. 24*(4), 347 – 356 4. Buckland (1991) [Information as thing.](https://utexas.instructure.com/courses/1309010/files/60538936/download?wrap=1) 5. Shannon, C. (1948). A mathematical theory of communication. Bell Systems Technical Journal. Retrieved from: [https://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=6773024 (Links to an external site.)](https://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=6773024) | | | |
| 1/22 | Lecture | Brief Syllabus Review  What is Information | Readings – complete required readings before lecture |
|  | Discussion | Discuss readings and lecture | Module 2 Quiz Due by 12:00 PM 1/29 |
|  | | | |
| Module 3 – Informatics and Information Studies | | | |
| Readings | | | |
| 1. Dillon, A. (2012). What it Means to be an iSchool. Journal of Education for Library and Information Science, 53(4), 267–273. 2. Honma, T. (2005). [Trippin' over the color line: The invisibility of race in library and information studies.](https://utexas.instructure.com/courses/1309010/files/60538937/download?wrap=1)InterActions: UCLA Journal of Education and Information Studies. 3. Grady, C. (2020). Why the term “BIPOC” is so complicated, explained by linguists. <https://www.vox.com/2020/6/30/21300294/bipoc-what-does-it-mean-critical-race-linguistics-jonathan-rosa-deandra-miles-hercules> 4. Watch Dr. Bobb discuss equity in Computer Science: [https://www.youtube.com/watch?v=Pti9hkvU\_dw&feature=youtu.be (Links to an external site.)](https://www.youtube.com/watch?v=Pti9hkvU_dw&feature=youtu.be) | | | |
| 1/29 | Lecture | Information Studies, Informatics | Readings |
| 1/31 | Discussion | Review quiz  Discuss readings  Form groups for Core Values Presentations | Module 3 Quiz Due by 12:00 PM 2/5 |

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| Core Values | | | |
| Date | Meeting | Agenda | Due |
| Module 4 – Core Values: Information Serves Humanity & Technology for Social Good | | | |
| Readings | | | |
| 1. Vedantam, S., Cohen, R.& Boyle, T. Fake news: An origin story. NPR podcast - <https://www.npr.org/2018/06/25/623231337/fake-news-an-origin-story> 2. Martin, N. (2020). How tech companies can advance data science for social good <https://ssir.org/articles/entry/how_tech_companies_can_advance_data_science_for_social_good> 3. MIT Technology Review. (2015). Why self-driving cars must be programmed to kill [https://www.technologyreview.com/2015/10/22/165469/why-self-driving-cars-must-be-programmed-to-kill/ (Links to an external site.)](https://www.technologyreview.com/2015/10/22/165469/why-self-driving-cars-must-be-programmed-to-kill/) | | | |
| 2/5 | Lecture | Information Serves Humanity | Readings |
| 2/7 | Discussion | Review Quiz  Discuss readings | Module 4 Quiz Due by 12:00 PM 2/12 |
| Module 5 – Core Values: An Interdisciplinary Approach & A People First Perspective | | | |
| Readings   1. Caldwell, W. (2015). Multi/Inter/Trans – disciplinary, what’s the difference? Retrieved from: [https://blogs.lt.vt.edu/grad5104/multiintertrans-disciplinary-whats-the-difference/ (Links to an external site.)](https://blogs.lt.vt.edu/grad5104/multiintertrans-disciplinary-whats-the-difference/) 2. Leetaru, K. (2018). How data brokers and pharmacies commercialize our medical data. Retrieved from: [https://www.forbes.com/sites/kalevleetaru/2018/04/02/how-data-brokers-and-pharmacies-commercialize-our-medical-data/?sh=6c42ca1a11a6 (Links to an external site.)](https://www.forbes.com/sites/kalevleetaru/2018/04/02/how-data-brokers-and-pharmacies-commercialize-our-medical-data/?sh=6c42ca1a11a6) 3. Watch Oliver, J. (2015). Marketing to doctors: Last Week Tonight with John Oliver. Retrieved from: <https://www.youtube.com/watch?v=YQZ2UeOTO3I> (Links to an external site.) | | | |
| 2/12 | Lecture |  | Readings |
| 2/14 | Discussion Section | Review Quiz  Discuss readings  Group work  –group meeting, discuss the dilemma and plan presentations | Module 5 Quiz Due by 12:00 PM 2/19 |
| Module 6 – Informatics and Design | | | |
| Readings | | | |
| 1. Friedman, B. (1996). Value-sensitive design. *interactions*, 3(6), 16-23. 2. Shilton, K. (2013). Values levers: Building ethics into design. *Science, Technology, & Human Values, 38*(3), 374-397. 3. Oh, J., & Lee, U. (2015, January). Exploring UX issues in Quantified Self technologies. In *2015 Eighth International Conference on Mobile Computing and Ubiquitous Networking (ICMU)* (pp. 53-59). IEEE. | | | |
| 2/19 | Lecture |  | Readings |
| 2/21 | Discussion Section | Review Quiz  Core Values Pitch to CEO  Form Final Project Groups | **Submit Core Values Slide Prior to Discussion Meeting**  Module 6 Quiz Due by 12:00PM 2/26 |
| Module 7 – Informatics, Action, and Power | | | |
| Readings | | | |
| * 1. Selbst, A. D., Boyd, D., Friedler, S. A., Venkatasubramanian, S., & Vertesi, J. (2019, January). Fairness and abstraction in sociotechnical systems. In *Proceedings of the conference on fairness, accountability, and transparency* (pp. 59-68).   2. Sadowski, J. (2019). When data is capital: Datafication, accumulation, and extraction. *Big data & society, 6*(1), 1-12.   3. Isin, E., & Ruppert, E. (2020). The birth of sensory power: How a pandemic made it visible?. *Big data & society*, 7(2). | | | |
| 2/26 | Lecture | Core Values Pitch Exemplars | Readings |
| 2/28 | Discussion Section | Discuss Readings  Meet with Final Project groups | Module 7 Quiz Due by 12:00 PM 3/4 |

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| Concentrations | | | | | | |
| Module 8 – Cultural Heritage Informatics | | | | | | |
| Date | | Meeting | Agenda | | Due | |
| Readings | | | | | | |
| 1. Smith, B. (2019, July 11). As technology like AI propels us into the future, it can also play an important role in preserving our past. Microsoft. <https://blogs.microsoft.com/on-the-issues/2019/07/11/as-technology-like-ai-propels-us-into-the-future-it-can-also-play-an-important-role-in-preserving-our-past/> 2. Review: Tharoor, K. (n.d.). Preserving the past: The world’s cultural heritage faces many threats, but it can be protected. Google Arts & Culture. <https://artsandculture.google.com/story/preserving-the-past/_gJCpVjnKrhWKw> | | | | | | |
| 3/4 | | Lecture | Cultural Heritage Informatics | | Readings | |
| 3/6 | | Discussion Section | Discuss readings  Meet with group | | **3/8 Submit Dilemma to Canvas**  Module 8 Quiz Due by 12:00 PM 3/18 | |
| *3/11-3/16 – Spring Break, no class meetings* | | | | | | |
| Module 9 – Social Informatics | | | | | | |
| Readings | | | | | | |
| 1. Kling, R. (2007). [What is social informatics and why does it matter? (Links to an external site.)](http://www.dlib.org/dlib/january99/kling/01kling.html) *The Information Society 23*, 4. Pp. 205 – 220. 2. Meyer, Eric T. (2014). Examining the Hyphen: The Value of Social Informatics for Research and Teaching. In Pnina Fichman and Howard Rosenbaum (Eds.) Social Informatics: Past, Present and Future. Cambridge: Cambridge Scholarly Publishers, 56-72.   Recommended:   1. Sawyer, Steve, and Kristin R Eschenfelder. “[Social Informatics: Perspectives, Examples, and Trends](https://utexas.instructure.com/courses/1309010/files/60605121?wrap=1).” Annual review of information science and technology 36.1 (2002): 427–465. Web. | | | | | | |
| 3/18 | Lecture | | Social Informatics | Readings | | |
| 3/20 | Discussion Section | | Discuss readings  Meet with group | Module 9 Quiz Due by 12:00 PM 3/25 | | |
| Module 10 – User Experience Design | | | | | | |
| Readings | | | | | | |
| 1. Bias, R. (2014). [The tortoise and the (soft)ware: Moore's Law, Amdahl's Law, and performance trends for human-machine systems.](https://utexas.instructure.com/courses/1309010/files/60621897?wrap=1) 2. Krause, R., Rosala, M. (2020). What a UX career looks like today. Retrieved from: <https://www.nngroup.com/articles/ux-career-advice/?lm=definition-user-experience&pt=article> 3. Fleischmann, K. (2009). Sociotechnical interaction and cyborg-cyborg interaction: Transforming the scale and convergence of HCI. *The Information Society.*   Recommended:   1. Gwizdka, J., Hosseini, R., Cole, M., & Wang, S. (2017). T[emporal dynamics of eye‐tracking and EEG during reading and relevance decisions. Journal of the Association for Information Science and Technology](https://utexas.instructure.com/courses/1309010/files/60621910?wrap=1), 68(10), 2299–2312. <https://doi.org/10.1002/asi.23904> 2. *Hinze-Hoare, V. (2007). The Review and Analysis of Human Computer Interaction (HCI) Principles. ArXiv, abs/0707.3638.* <https://arxiv.org/ftp/arxiv/papers/0707/0707.3638.pdf> 3. Interview of Jacek Gwizdka, UT Austin professor; <https://utexas.hosted.panopto.com/Panopto/Pages/Embed.aspx?id=662f7663-9143-4511-8114-4f1afa5830ac&v=1> 4. If you are really interested, check out this free youtube course created by Eric Nordquist – Clinical Associate Professor at the iSchool: <https://www.youtube.com/playlist?list=PLXRPK3PusGtxrJuKfM1l3MJhGeBZCHD2C> | | | | | | |
| 3/25 | Lecture | | User Experience Design | Readings | | |
| 3/27 | Discussion Section | | Writing workshop  Meet with group  Submit essay | **3/29 Individual Essay**  Module 10 Quiz Due by 12:00 PM 4/1 | | |
| Module 11 – Human Centered Data Science | | | | | | |
| Readings | | | | | | |
| 1. Cosley, B. (2021). Human-Centered Data Science: When succeeding in data science means interacting with humans. Retrieved from: [https://towardsdatascience.com/human-centered-data-science-3d92066bf779 (Links to an external site.)](https://towardsdatascience.com/human-centered-data-science-3d92066bf779) 2. IBM. (2020). What is Data Science? Retrieved from: <https://www.ibm.com/cloud/learn/data-science-introduction>   Watch:   1. UT Austin VPR. (2020). Into AI: Machine learning. [https://www.youtube.com/watch?v=C91zJ0ko2Ek&list=PLIil3TfyMHXQ3TgeyjQg5\_hBQCfeZIlXK (Links to an external site.)](https://www.youtube.com/watch?v=C91zJ0ko2Ek&list=PLIil3TfyMHXQ3TgeyjQg5_hBQCfeZIlXK (Links%20to%20an%20external%20site.))   Recommended:   1. Harford, T. (2014), Big data: A big mistake?. Significance, 11: 14-19. <https://doi.org/10.1111/j.1740-9713.2014.00778.x> 2. Provost, Foster, and Tom Fawcett. [*Data science and its relationship to big data and data-driven decision making.*](http://online.liebertpub.com/doi/pdf/10.1089/big.2013.1508) Big Data 1.1 (2013): 51-59. | | | | | | |
| 4/1 | Lecture | | Human Centered Data Science | Readings | | |
| 4/3 | Discussion Section | | Review previous quizzes  Discuss readings  Meet with group | Module 11 Quiz Due by 12:00 PM 4/8 | | |
| Module 12 – Health Informatics | | | | | | |
| Readings | | | | | | |
| 1. Bath, P. A. (2008). Health informatics: Current issues and challenges. Journal of Information Science, 34(4), 501 – 518. 2. Ovide, S. (2021, April 14). Can medical Alexas make us healthier? The New York Times. [https://www.nytimes.com/2021/04/14/technology/alexa-virtual-assistant-health-care.html (Links to an external site.)](https://www.nytimes.com/2021/04/14/technology/alexa-virtual-assistant-health-care.html) | | | | | | |
| 4/8 | Lecture | | Health Informatics | Readings | | |
| 4/10 | Discussion Section | | Review previous quizzes  Discuss readings  Meet with group | **4/12 – Peer Review**  Module 12 Quiz Due by 12:00 PM 4/15 | | |
| Module 13 – Social Justice Informatics | | | | | | |
| Readings | | | | | | |
| 1. Read Chapter 1 - Dimensions of International Justice and Social Justice for an excellent framework to think about these issues: United Nations. (2006). Social Justice in an open world: The role of the United Nations. Retrieved from: [https://www.un.org/esa/socdev/documents/ifsd/SocialJustice.pdf (Links to an external site.)](https://www.un.org/esa/socdev/documents/ifsd/SocialJustice.pdf) 2. Kusner, M. J., Loftus, J., Russell, C., & Silva, R. (2017). Counterfactual Fairness. *Advances in Neural Information Processing Systems*, 4066–4076. 3. Sadowski, J. (2019). When data is capital: Datafication, accumulation, and extraction. *Big Data & Society*, *6*(1), 1-12. | | | | | | |
| 4/15 | Lecture | | Social Justice Informatics lecture | Readings  Module 13 Quiz Due by 12:00 PM 4/29 | | |
|  |  | |  |  | | |
| Module 14 – Group Work Time | | | | | | |
| 4/22 | Final Review Lecture and Course Wrap-up | |  | | |  |
| 4/24 | Assignment | | **Final Group Paper Due 4/29**  **Group Experience Review Due 4/29**  **CEO Pitch ready for discussion section meeting.** | | |  |

## Respectful Conversations

Below is a list of guidelines to keep in mind as we have conversations in class. These guidelines will help us have conversations around difficult or challenging ideas, while remaining respectful of one another and allowing for open dialogue:

* Be intentional about your language. Think about the language you are using, not just in terms of intent, but also in terms of impact. If someone says something you hear as offensive, consider that they may not realize they have said something hurtful. If someone calls you out for saying something offensive, remember that your intent can be different than your impact. Ask yourself, before you engage, if your words will effect change, understanding, and empathy.
* Respectfully challenge the idea, not the person. Focus on the facts or ideas you want to communicate, without attacking the person.
* Don’t make assumptions. When you’re unsure about something someone has said, ask for clarification and be willing to listen to the response.
* Encourage understanding. If you are part of a discussion that has become harmful or offensive, do your part to encourage empathy and understanding.
* Avoid generalizing or over-simplifying. Being too general may overshadow the heart of the matter and appear as insensitive.
* Use facts graciously, not to shut down a conversation. Remind people that this is a conversation. Everyone’s personal experience matters. Recommend that people share information to deepen the discussion, not to shut down the conversation
* Do not tokenize people. Individuals can only speak to their own experiences. Do not look to others to speak on behalf of their race, gender, ethnicity, or other groups they may identify as being a part of.
* Acknowledge common ground. Even if you don’t wholeheartedly agree with someone, if you can appreciate something they’ve said or done, let them know.
* Call people “in” not “out”. When you are holding someone accountable for an offensive or ignorant statement, think about how to address the hurt they caused and still engage them in the conversation.

# Resources

## Style Manuals

Students will need to cite all sources for their essays in APA format. Purdue University Online Writing Lab (OWL) offers a great overview on how to do this:

<http://owl.english.purdue.edu/owl>

Style manuals are located under Research and Citation.

# University Policies

## Religious or Holy Day Observance

"A student who misses classes or other required activities, including examinations, for the observance of a religious holy day should inform the instructor as far in advance of the absence as possible, so that arrangements can be made to complete an assignment within a reasonable time after the absence.” (<http://www.utexas.edu/student/registrar/catalogs/gi04-05/ch4/ch4g.html>)

## Email

“Electronic mail (e-mail), like postal mail, is a mechanism for official University communication to students. The University will exercise the right to send e-mail communications to all students, and the University will expect that e-mail communications will be received and read in a timely manner.” (<http://www.utexas.edu/student/registrar/catalogs/gi04-05/app/appn.html>). I will reply to student emails within 24 hours on weekdays and 48 hours on weekends barring a rare and extenuating circumstance.

## Personal Pronouns

Professional courtesy and sensitivity are especially important with respect to individuals and topics dealing with differences of race, culture, religion, politics, sexual orientation, gender, gender variance, and nationalities. Class rosters are provided to the instructor with the student’s legal name, unless they have added a “preferred name” with the Gender and Sexuality Center (<http://diversity.utexas.edu/genderandsexuality/publications-and-resources/>). I will gladly honor your request to address you by a name that is different from what appears on the official roster, and by the gender pronouns you use (she/he/they/ze, etc). Please advise me of any changes early in the semester so that I may make appropriate updates to my records. For instructions on how to add your pronouns to Canvas, visit <https://utexas.instructure.com/courses/633028/pages/profile-pronouns>. More resources are available on the Gender and Sexuality Center’s website, [www.utgsc.org](http://www.utgsc.org).

## University Resources for Students

### Services for Students with Disabilities

The university is committed to creating an accessible and inclusive learning environment consistent with university policy and federal and state law. Please let me know if you experience any barriers to learning so I can work with you to ensure you have equal opportunity to participate fully in this course. If you are a student with a disability, or think you may have a disability, and need accommodations please contact Services for Students with Disabilities (SSD). Please refer to SSD’s website for contact and more information: <http://diversity.utexas.edu/disability/>. If you are already registered with SSD, please deliver your Accommodation Letter to me as early as possible in the semester so we can discuss your approved accommodations and needs in this course.

### The Sanger Learning Center

Did you know that more than one-third of UT undergraduate students use the Sanger Learning Center each year to improve their academic performance? All students are welcome to take advantage of Sanger Center’s classes and workshops, private learning specialist appointments, peer academic coaching, and tutoring for more than 70 courses in 15 different subject areas. For more information, please visit  <http://www.utexas.edu/ugs/slc> or call 512-471-3614 (JES A332).

### Basic Needs Security

Any student who faces challenges securing their food or housing and believes this may affect their performance in the course is urged to contact the Dean of Students for support. UT maintains the UT Outpost (https://deanofstudents.utexas.edu/emergency/utoutpost.php) which is a free on-campus food pantry and career closet. Furthermore, please notify us if you are comfortable in doing so. This will enable us to provide any resources that we may possess.

### Other Resources

Undergraduate Writing Center: <http://uwc.utexas.edu/>

Libraries: <http://www.lib.utexas.edu/>

ITS: <http://www.utexas.edu/its/>

Student Emergency Services: <http://deanofstudents.utexas.edu/emergency/>

## BeVocal

BeVocal is a university-wide initiative to promote the idea that individual Longhorns have the power to prevent high-risk behavior and harm. At UT Austin all Longhorns have the power to intervene and reduce harm. To learn more about BeVocal and how you can help to build a culture of care on campus, go to: [*https://wellnessnetwork.utexas.edu/BeVocal*](http://wellnessnetwork.utexas.edu/BeVocal).

## LAND ACKNOWLEDGMENT

As the flagship institution in our state university system, it is important that The University of Texas at Austin demonstrate respect for the historic and contemporary presence of Indigenous Peoples in Texas and, particularly, in the greater Austin area. To that end, it is incumbent upon The University of Texas at Austin to recognize that our campus resides on what were historically the traditional territories of Indigenous Peoples who were dispossessed of their homelands. Land Acknowledgements are an expression of gratitude and appreciation to the Indigenous Peoples, the traditional caretakers of the land, for the use of their lands on which we work, study, and learn.

## Land Acknowledgment

I would like to acknowledge that we are meeting on Indigenous land. Moreover, I would like to acknowledge and pay our respects to the Carrizo & Comecrudo, Coahuiltecan, Caddo, Tonkawa, Comanche, Lipan Apache, Alabama-Coushatta, Kickapoo, Tigua Pueblo, and all the American Indian and Indigenous Peoples and communities who have been or have become a part of these lands and territories in Texas, here on Turtle Island.

To learn more, you can visit this [Tribal Land Map](https://native-land.ca/) and review [10 Ways to be a Genuine Ally to Indigenous Communities](https://www.amnesty.org.au/10-ways-to-be-an-ally-to-indigenous-communities/), by Amnesty International.

## Important Safety Information:

If you have concerns about the safety or behavior of fellow students, TAs or Professors, call BCAL (the Behavior Concerns Advice Line): 512-232-5050. Your call can be anonymous. If something doesn’t feel right – it probably isn’t. Trust your instincts and share your concerns.

The following recommendations regarding emergency evacuation from the Office of Campus Safety and Security, 512-471-5767, <http://www.utexas.edu/safety/>

Occupants of buildings on The University of Texas at Austin campus are required to evacuate buildings when a fire alarm is activated. Alarm activation or announcement requires exiting and assembling outside.

* Familiarize yourself with all exit doors of each classroom and building you may occupy. Remember that the nearest exit door may not be the one you used when entering the building.
* Students requiring assistance in evacuation shall inform their instructor in writing during the first week of class.
* In the event of an evacuation, follow the instruction of faculty or class instructors. Do not re-enter a building unless given instructions by the following: Austin Fire Department, The University of Texas at Austin Police Department, or Fire Prevention Services office.
* Link to information regarding emergency evacuation routes and emergency procedures can be found at:
* [www.utexas.edu/emergency](http://www.utexas.edu/emergency)

## Title IX Reporting

Title IX is a federal law that protects against sex and gender-based discrimination, sexual harassment, sexual assault, unprofessional or inappropriate conduct of a sexual nature, dating/domestic violence and stalking at federally funded educational institutions. UT Austin is committed to fostering a learning and working environment free from discrimination in all its forms. When unprofessional or inappropriate conduct of a sexual nature occurs in our community, the university can:

1. Intervene to prevent harmful behavior from continuing or escalating.
2. Provide support and remedies to students and employees who have experienced harm or have become involved in a Title IX investigation.
3. Investigate and discipline violations of the university’s [relevant policies](https://titleix.utexas.edu/relevant-polices/).

Beginning January 1, 2020, Texas Senate Bill 212 requires all employees of Texas universities, including faculty, report any information to the Title IX Office regarding sexual harassment, sexual assault, dating violence and stalking that is disclosed to them. Texas law requires that all employees who witness or receive any information of this type (including, but not limited to, writing assignments, class discussions, or one-on-one conversations) must be reported. **I am a Responsible Employee and** **must report any Title IX related incidents** that are disclosed in writing, discussion, or one-on-one. Before talking with me, or with any faculty or staff member about a Title IX related incident, be sure to ask whether they are a responsible employee. If you would like to speak with someone who can provide support or remedies without making an official report to the university, please email [advocate@austin.utexas.edu](mailto:advocate@austin.utexas.edu). For more information about reporting options and resources, visit <http://www.titleix.utexas.edu/>, contact the Title IX Office via email at [titleix@austin.utexas.edu](mailto:titleix@austin.utexas.edu), or call 512-471-0419.

Although graduate teaching and research assistants are not subject to Texas Senate Bill 212, they are still mandatory reporters under Federal Title IX laws and are required to report a wide range of behaviors we refer to as unprofessional or inappropriate conduct of a sexual nature, including the types of conduct covered under Texas Senate Bill 212. The Title IX office has developed supportive ways to respond to a survivor and compiled campus resources to support survivors.

## Counseling and Mental Health Center (CMHC)

Students who are struggling for any reason and who believe that it might impact their performance in the course are urged to reach out to Bryce Moffett if they feel comfortable. This will allow her to provide any resources or accommodations that she can. If immediate mental health assistance is needed, call the Counseling and Mental Health Center (CMHC) at 512-471-3515 or you may also contact Bryce Moffett, LCSW (iSchool CARE counselor) at 512-232-4449. Bryce’s office is located in FAC18S and she holds drop in Office Hours on Wednesday from 2-3pm. For urgent mental health concerns, please contact the CMHC 24/7 Crisis Line at 512-471-2255.

## Sharing of Course Materials is Prohibited

### No materials used in this class, including, but not limited to, lecture hand-outs, videos, assessments (quizzes, exams, papers, projects, homework assignments), in-class materials, review sheets, and additional problem sets, may be shared online or with anyone outside of the class without my explicit, my written permission. Unauthorized sharing of materials may facilitate cheating. The University is aware of the sites used for sharing materials, and any materials found online that are associated with you, or any suspected unauthorized sharing of materials, will be reported to [Student Conduct and Academic Integrity](https://deanofstudents.utexas.edu/conduct/) in the Office of the Dean of Students. These reports can result in initiation of the student conduct process and include charge(s) for academic misconduct, potentially resulting in sanctions, including a grade impact.

## CONFIDENTIALITY OF Class RecordingS

Class recordings are reserved only for students in this class for educational purposes and are protected under FERPA. The recordings should not be shared outside the class in any form. Violation of this restriction by a student could lead to Student Misconduct proceedings.

## Getting Help with technology

Students needing help with technology in this course should contact the [ITS Service Desk](https://its.utexas.edu/contact) or [insert contact information for your local support unit(s) and for course materials, software, hardware, or other technology used in your course].

## content warning

### Our classroom provides an open space for the critical and orderly exchange of ideas through discussion. Some readings and other content in this course will include topics and comments that some students may find offensive and/or traumatizing. I’ll aim to forewarn students about potentially disturbing content and I ask all students to help to create an atmosphere of mutual respect and sensitivity.

## artificial intelligence

The creation of artificial intelligence tools for widespread use is an exciting innovation. These tools have both appropriate and inappropriate uses in classwork To ensure all students have an equal opportunity to succeed and to preserve the integrity of the course, students are not permitted to submit text that is generated by artificial intelligence (AI) systems such as ChatGPT, Bing Chat, Claude, Google Bard, or any other automated assistance for any classwork or assessments. This includes using AI to generate answers to assignments, exams, or projects, or using AI to complete any other course-related tasks. Using AI in this way undermines your ability to develop critical thinking, writing, or research skills that are essential for this course and your academic success.

Students may use AI as part of their research and preparation for assignments, but text that is submitted must be written by the student. Students should also be aware of the potential benefits and limitations of using AI as a tool for learning and research. AI systems can provide helpful information or suggestions, but they are not always reliable or accurate. Students should critically evaluate the sources, methods, and outputs of AI systems. Violations of this policy will be treated as academic misconduct. If you have any questions about this policy or if you are unsure whether a particular use of AI is acceptable, please do not hesitate to ask for clarification.