

I 305: RESEARCH METHODS FOR INFORMATICS

(UNIQUE COURSE NUMBER 28125)

Spring 2025

CLASS MEETS: Mondays, Wednesdays, 2:00 PM - 3:30 PM; SZB 3.508

Instructor: Dr. Kayla Booth

Pronouns: She/Her

Email: kayla.booth@ischool.utexas.edu

Office Hours: Wednesdays 4:00 PM – 5:00 PM (or by appointment)

Office Hours Location: See Course Slides

Course Description

In this age of information, we repeatedly hear the phrase “Do your research!”, but what does that mean? And more importantly, why does it matter? This course is broken into two parts designed to provide a foundation to begin answering these questions:

1. The first half of the course is an introduction to research, exploring what research is, what research can look like within the field of Informatics, and how Informatics research can be leveraged for social good.
2. The second half of the course dives deeper into “research methodology,” how research is done and some of the most common tools we use to explore the field’s most burning questions. Students will learn about the functions of qualitative and quantitative methods, as well as how the pieces of the research process fit together to explore challenges and potential solutions by applying human-centered values to the intersections of information, data, and technology.

This course is held in-person and rather than exams, assignments are designed to encourage students to apply course concepts to their own interests. Students will leave this course empowered as citizens to critically evaluate research in terms of process, ethics, and equity.

PRE-REQUISITES FOR THE COURSE

None.

LEARNING OUTCOMES

At the end of this course, students will:

1. *Connect Course Content to the Six Informatics Major Concentrations*
 - Gain familiarity with research topics across Cultural Heritage Informatics, Health Informatics, Human-Centered Data Science, Social Informatics, Social Justice Informatics, and User Experience Design
2. *Connect Course Content to the School of Information's Mission and Values:*
 - Use the iSchool's core values as a framework to analyze ethics & equity across each phase of the research process in an Informatics context
3. *Explore the "How and Why" Behind Informatics Research:*
 - Understand the role of research in Informatics contexts and how it can be designed for social impact
 - Identify research problems and craft related research questions
 - Explore the differences across qualitative and quantitative methodologies and tools (and how to identify which methodology to apply in order to answer a research question)
 - Understand how each phase of the research process informs one another (ex: we choose methods to best answer our research questions, not because we like or know them)
 - Identify (ethics & equity) challenges in Informatics research landscape; apply course concepts to analyze current events
4. *Apply Course Concepts to Their Individual Interests:*
 - Explore research as scholarly entrepreneurship in which they can identify research problems, develop research questions, and design a study to explore topics connected to their interests
 - Communicate the "so what?" around why their proposed research proposal matters (impact)
 - Critically evaluate what it means to "do your own research" in the age of information

How Will You Learn?

LEARNING SUCCESS & ASKING FOR HELP

Your success in this class and overall well-being are important to me. We all learn differently, and everyone struggles sometimes (me included!). You are not, ever, the only one having difficulty! If there are aspects of this course that prevent you from learning or exclude you, please let me know as soon as possible. You can email me, talk to me after class, come to office hours, schedule a 1-1 meeting, whatever you feel most comfortable with! Together we will develop strategies to meet both your needs and the requirements of the course. I also encourage you to reach out to the student resources available through UT and I am happy to connect you with a person or Center if you would like.

TEACHING MODALITY INFORMATION

This course will be held in-person. **This means attendance in the classroom is expected.** That being said, illness and emergencies happen. Please do not come to class sick – just let me know as soon as possible via email and I will work with you.

If you need to miss class, please follow the following steps:

1. Prior to class, email me via Canvas to let me know. **These aren't emails I respond to** (unless you ask a question), but they are emails I save to review when I calculate attendance/participation grades for excused absences.
2. Review the slides for class (posted on Canvas)
3. Ask your team and other classmates to get a summary and notes on any lessons you miss.
4. If you find there are topics that we covered while you were gone that raise questions, please come by during office hours or schedule a meeting to discuss. Email specific questions you have in advance so that we can make the most of our time.

WHAT WILL CLASS LOOK LIKE?

Each week will follow a similar structure:

Mondays: Introduce a Concept

- Group “Tie Together” Recap
- Agenda & Objectives for the Week
- Presentation
 - Videos from Informatics Scholars
 - Tie examples examples to six concentrations
 - Connect content to media & current events
- Individual Reflection, Small Group, Class Discussion

Wednesdays: Apply the Concept

- Interactive examples & class activities
- Working in small groups

COMMUNICATION

The course Canvas site can be found at 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.

COMMUNITY & BELONGING

It is my intent that students from all backgrounds and perspectives be well served by this course, that students' learning needs be addressed, and that the lived experiences and perspectives students bring to this class can be comfortably expressed and be viewed as a resource, strength and benefit to all students. Please come to me at any time with any concerns or suggestions.

NAMES AND PRONOUNS

Class rosters are provided to the instructor with the student's legal name, unless they have added a “chosen name” with the registrar's office, which you can do so here: https://utdirect.utexas.edu/apps/ais/chosen_name/.

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 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 available on the Gender and Sexuality Center's website, www.utgsc.org.

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 the professor if you are comfortable in doing so. This will enable him to provide any resources that he may possess.

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.

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](#) 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

REQUIRED MATERIALS

There are no textbooks for this course. All readings are free and can be found on our course Canvas site (utexas.instructure.com) under the "Assignments" tab. If you encounter any technical difficulties or barriers while doing work for this course, please let me know and I will work with you.

ASSIGNMENTS & GRADING FOR THIS COURSE

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

Assignments	Points Possible	Percent of Total Grade
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1. Introductory Survey	10	1.25%
2. Group Monday Recap	100	12.5%
3. Research Map	300	37.5%
<ul style="list-style-type: none"> • Milestone 1 (100 Points) • Milestone 2 (100 Points) • Milestone 3 (100 Points) 		(12.5% each)
4. Methodology Exploration & Application Assignment	40	5%
5. Ethics Reflection	50	6.25%
6. Team Peer Evaluation	100	12.5%
7. Research Map Visual	100	12.5%
8. Attendance & Participation	100	12.5%

LATE WORK AND MAKING UP MISSED WORK

Please submit assignments on time. If you become ill or experience an emergency, please let me know ASAP. Once the due date for an assignment has passed, it is more difficult to accept / grade late assignments, but I definitely want to know if something is going on so I can work with you to give you the best opportunity to succeed in the class!

ATTENDANCE & PARTICIPATION

Being present is critical to achieving our goals for this course, which is why attendance and participation are graded components of this course. Please plan to attend both class sessions each week.

How is the Attendance and Participation grade (100 points) calculated?

- Attendance: 75 points (2.5 points per class)
- Participation: 25 points (2 points per participation contribution)
 - I understand not everyone feels comfortable participating verbally in class. These 25 participation points can be earned in class, as well as via the Discussion Forum on Canvas.

Points will not be deducted for excused absences. Illness and emergencies happen. Please do not come to class sick – let me know as soon as possible via email and I will work with you.

Absences happen. **If you need to miss class, please follow the following steps:**

- Prior to class, email me via Canvas to let me know. **These aren't emails I respond to** (unless you ask a question), but they are emails I save to review when I calculate attendance/participation grades for excused absences.
- Review the slides for class (posted on Canvas)
- Ask your team and other classmates to get a summary and notes on any lessons you miss.
- If you find there are topics that we covered while you were gone that raise questions, please come by during office hours or schedule a meeting to discuss. Email specific questions you have in advance so that we can make the most of our time.

+/- GRADNG POLICY

+/- grades will be used for the final class grade.

GRADE BREAKS

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

Course Outline

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

<https://utexas.instructure.com>. Please check this site regularly and use it to ask questions about the course schedule.

Changes to the schedule may be made at my discretion and if circumstances require. It is your responsibility to note these changes when announced (although I will do my best to ensure that you receive the changes with as much advanced notice as possible).

Week	Topic	Readings & Assignments
Week 1 (Jan 13 th)	Course Intro: What is Research?	Monday (Jan 13 th): No Class; Read through syllabus Wednesday (Jan 15 th):
Week 2 (Jan 20 th)	What Can Informatics Research Do? Why Do We Care?	Monday (Jan 20 th): No Class Wednesday (Jan 22 nd): Intro Survey Due by 11:59PM CT
Week 3 (Jan 27 th)	Identifying Research Problems & Developing Research Questions	Monday (Jan 27 th): Wednesday (Jan 29 th):
Week 4 (Feb 3 rd)	Assessing the Landscape - What Do We Already Know?	Monday (Feb 3 rd): Wednesday (Feb 5 th):
Week 5 (Feb 10 th)	How To Read A Scientific Paper: Literature Reviews	Monday (Feb 10 th): Wednesday (Feb 12 th): Research Map Milestone 1 Due by 11:59PM CT
Week 6 (Feb 17 th)	Designing a Study (Epistemology and Other Ridiculous Words)	Monday (Feb 17 th): Wednesday (Feb 19 th):
Week 7 (Feb 24 th)	Designing a Study (Epistemology and Other Ridiculous Words)	Monday (Feb 24 th): Wednesday (Feb 26 th):
Week 8 (Mar 3 rd)	Methodology	Monday (Mar 3 rd): Wednesday (Mar 5 th):
Week 9 (Mar 10 th)	Quantitative Methods in Informatics (Data Collection)	Monday (Mar 10 th): Wednesday (Mar 12 th): Research Map Milestone 2 Due By 11:59PM CT
Week 10 (Mar 17 th)	Spring Break	Monday (Mar 17 th): No Class Wednesday (Mar 19 th): No Class
Week 11 (Mar 24 th)	Quantitative Methods in Informatics (Data Analysis)	Monday (Mar 24 th): Wednesday (Mar 26 th):
Week 12 (Mar 31 st)	Qualitative Methods in Informatics (Data Collection)	Monday (Mar 31 st): Wednesday (Apr 2 nd):
Week 13 (Apr 7 th)	Qualitative Methods in Informatics (Data Analysis)	Monday (Apr 7 th): Wednesday (Apr 9 th):
Week 14 (Apr 14 th)	Research Ethics in Informatics	Monday (Apr 14 th): Wednesday (Apr 16 th):
Week 15 (Apr 21 st)	Research Ethics in Informatics	Monday (Apr 21 st):

		Wednesday (Apr 22 nd): Ethics Reflection Due 11:59 PM
Week 16 (Apr 28 th)	So What? Disseminating & Translating Research	Monday (Apr 28 th): Thursday (May 1 st): Final Research Map, Visualization, & Peer Evaluation Due 11:59 PM CT
No Class Days (Apr 29 th & 30 th)		
Final Exams (May 1 st -3 rd ; May 5 th)		

Course Policies and Disclosures

ACADEMIC INTEGRITY EXPECTATIONS

Students who violate University rules on academic dishonesty are subject to disciplinary penalties, including the possibility of failure in the course and/or dismissal from the University. Since such dishonesty harms the individual, all students, and the integrity of the University, policies on academic dishonesty will be strictly enforced. For further information, please visit the Student Conduct and Academic Integrity website at: <http://deanofstudents.utexas.edu/conduct>.

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 School of Information's Information Commons (help@ischool.utexas.edu).

CONTENT WARNING

Our classroom provides an open space for the critical and civil exchange of ideas. Some readings and other content in this course will include topics 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.

SHARING OF COURSE MATERIALS IS PROHIBITED

No materials used in this class, including, but not limited to, lectures, recordings, 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 explicit, written permission of the instructor. Unauthorized sharing of materials promotes cheating. The University is well 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](#) in the Office of the Dean of Students. These reports can result in sanctions, including failure of the course.

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. The use of artificial intelligence tools (such as ChatGPT) in this class may be permitted **on a limited basis**. You will be informed as to the assignments for which AI may be utilized – **please note that AI may be used to get your started on an assignment or generate ideas,**

but your submitted materials must show significant changes and improvements from AI generated results in ways that demonstrate and embed your understanding of course content.

You are encouraged to seek my prior-approval to use AI writing tools on any assignment. In either instance, AI writing tools should be used with caution and proper citation, as the use of AI should be properly attributed. Using AI writing tools without my permission or authorization, or failing to properly cite AI even where permitted, shall constitute a violation of UT Austin's Institutional Rules on academic integrity.

If you are considering the use of AI writing tools but are unsure if you are allowed or the extent to which they may be utilized appropriately, please ask.

RELIGIOUS HOLY DAYS

By [UT Austin policy](#), please let me know of your pending absence as far in advance as possible of the date of observance of a religious holy day. If you miss a class, 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.

LAND ACKNOWLEDGMENT

I would like to acknowledge that we are meeting on the Indigenous lands of Turtle Island, the ancestral name for what now is called North America. Moreover, I would like to acknowledge the Alabama-Coushatta, Caddo, Carrizo/Comecrudo, Coahuiltecan, Comanche, Kickapoo, Lipan Apache, Tonkawa and Ysleta Del Sur 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.

University Resources for Students

SERVICES FOR STUDENTS WITH DISABILITIES (SSD)

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.

COUNSELING AND MENTAL HEALTH CENTER (CMHC)

All of us benefit from support during times of struggle. Know you are not alone. If you or anyone you know is experiencing symptoms of stress, anxiety, depression, academic concerns, loneliness, difficulty sleeping, or any other concern impacting your wellbeing – you are strongly encouraged to connect with CMHC. The Counseling and Mental Health Center provides a wide variety of mental health services to all UT students including crisis services, counseling services with immediate support and well-being resources. Additionally, CARE Counselors are located within the academic schools and colleges. These counselors get to know the concerns that are unique to their college's students. For more information on CMHC, visit <https://cmhc.utexas.edu> or call 512-471-3515.

I urge students who are struggling for any reason and who believe that it might impact their performance in the course to reach out to me if they feel comfortable. This will allow me to provide any resources or accommodations that I 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.

UNIVERSITY HEALTH SERVICES (UHS)

Your physical health and wellness are a priority. University Health Services is an on-campus high-quality medical facility providing care to all UT students. Services offered by UHS include general medicine, urgent care, a 24/7 nurse advice line, women's health, sports medicine, physical therapy, lab and radiology services, COVID-19 testing and vaccinations and much more. For additional information, visit <https://healthyhorns.utexas.edu> or call 512-471-4955.

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 <https://ugs.utexas.edu/slc> or call 512-471-3614 (JES A332)."

STUDENT EMERGENCY SERVICES (SES)

Student Emergency Services in the Office of the Dean of Students helps students and their families during difficult or emergency situations. Assistance includes outreach, advocacy, intervention, support, and referrals to relevant campus and community resources. If you need to be absent from class due to a family emergency, medical or mental health concern, or academic difficulty due to crisis or an emergency situation, you can work with Student Emergency Services. SES will document your situation and notify your professors. Additional information is available at <https://deanofstudents.utexas.edu/emergency/> or by calling 512-471-5017.

Important Safety Information

If you have concerns about the safety or behavior of fellow students, TAs or professors, contact BCCAL (the Behavior Concerns and COVID-19 Advice Line) at <https://safety.utexas.edu/behavior-concerns-advice-line> or by calling 512-232-5050. Confidentiality will be maintained as much as possible, however the university may be required to release some information to appropriate parties.

CLASSROOM SAFETY AND COVID-19

To help preserve our in-person learning environment, the university recommends the following.

- Adhere to university [mask guidance](#). Masks are strongly recommended, but optional, inside university buildings for vaccinated and unvaccinated individuals, except when alone in a private office or single-occupant cubicle.
- [Vaccinations are widely available](#), free and not billed to health insurance. The vaccine will help protect against the transmission of the virus to others and reduce serious symptoms in those who are vaccinated.
- [Proactive Community Testing](#) remains an important part of the university's efforts to protect our community. Tests are fast and free.
- We encourage the use of the [Protect Texas App](#) each day prior to coming to campus.
- If you develop COVID-19 symptoms or feel sick, stay home and contact the [University Health Services' Nurse Advice Line](#) at 512-475-6877. If you need to be absent from class, contact [Student Emergency Services](#) and they will notify your professors. In addition, to help understand what to do if you have been had close contact with someone who tested positive for COVID-19, see this [University Health Services link](#).
- [Behavior Concerns and COVID-19 Advice Line](#) (BCCAL) remains available as the primary tool to address questions or concerns from the university community about COVID-19.
- Students who test positive should contact [BCCAL](#) or self-report (if tested off campus) to [University Health Services](#).
- Visit [Protect Texas Together](#) for more information.

CARRYING OF HANDGUNS ON CAMPUS

Texas' Open Carry law expressly prohibits a licensed to carry (LTC) holder from carrying a handgun openly on the campus of an institution of higher education such as UT Austin. Students in this class should be aware of the following university policies:

- Students in this class who hold a license to carry are asked to [review the university policy regarding campus carry](#).
- Individuals who hold a license to carry are eligible to carry a concealed handgun on campus, including in most outdoor areas, buildings and spaces that are accessible to the public, and in classrooms.
- It is the responsibility of concealed-carry license holders to carry their handguns on or about their person at all times while on campus. Open carry is NOT permitted, meaning that a license holder may not carry a partially or wholly visible handgun on campus premises or on any university driveway, street, sidewalk or walkway, parking lot, parking garage, or other parking area.
- Per my right, I prohibit carrying of handguns in my personal office. Note that this information will also be conveyed to all students verbally during the first week of class. This written notice is intended to reinforce the verbal notification, and is not a “legally effective” means of notification in its own right.

TITLE IX DISCLOSURE

[If this disclosure is included in the syllabus, the [Title IX office has specified the following wording](#).]

Beginning January 1, 2020, Texas Senate Bill 212 requires all employees of Texas universities, including faculty, to 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 report it. 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. 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, 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 sexual misconduct, including the types of sexual misconduct 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.

Faculty members and certain staff members are considered “Responsible Employees” or “Mandatory Reporters,” which means that they are required to report violations of Title IX to the Title IX Coordinator. **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 want to speak with someone for support or remedies without making an official report to the university, email advocate@austin.utexas.edu. For more information about reporting options and resources, visit the [Title IX Office](#) or email titleix@austin.utexas.edu.

CAMPUS SAFETY

The following are recommendations regarding emergency evacuation from the [Office of Campus Safety and Security](#), 512-471-5767,

- Students should sign up for Campus Emergency Text Alerts at the page linked above.
- Occupants of buildings on The University of Texas at Austin campus must 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.
- For more information, please visit [emergency preparedness](#).