

# Summer 2025 Course Syllabus - Research Design in the Social and Policy Sciences



<b>Course</b>	EPPS 2301.0u1
<b>Course Title</b>	Research Design in the Social and Policy Sciences
<b>Instructor</b>	Kelvin Chun-Man Chan
<b>Term</b>	Summer 2025
<b>Meetings</b>	Monday & Wednesday, 10:00am - 12:00pm, GR 3.606

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## Instructor's Contact Information

<b>Office Location</b>	GR 3.318
<b>Email Address</b>	kelvinchunman.chan@utdallas.edu
<b>Office Hours</b>	Monday & Wednesday, 12:00pm- 1:00pm (by appointment only) For all UTD emails, please include "[EPPS 2301]" and
<b>Other Information</b>	your full name in the subject line in any email you send to me or to a Teaching Assistant.

## General Course Information

<b>Pre-requisites, Co-requisites, &amp; other restrictions</b>	None required. All majors are welcome to take this course and no prior knowledge of course content is required.  This core course introduces students to research designed to understand social, economic, and political phenomena. This course will teach students core concepts that define social and policy research, including: (a) the purpose of social science and policy research; (b) ethical and political challenges of conducting social science and policy research; (c) the role of paradigm, theory, and prior evidence in conducting research, (e) operationalization and measurement of simple and complex constructs, (d) probabilistic and non-probabilistic sampling, (e) empirical quantitative and qualitative research methodologies, (f) data collection and analytic methods, and (g) interpretation and communication of research results. Students completing this course will develop a foundational understanding of how to conduct systematic inquiry in the social and policy sciences.
<b>Course Description</b>	

Upon successful completion of this course, students will be able to:

**Learning Outcomes**

- 1) Develop interest and curiosity in systemic social and policy science inquiry
- 2) Define key concepts in research ethics, particularly research with human subjects, as they apply to research design, conduct, and reporting.
- 3) Compare and understand the application of paradigmatic and theoretical frameworks for social and policy science research.
- 4) Identify quantitative and qualitative research designs, methods, and their components, and evaluate the strengths and weaknesses of each one.
- 5) Evaluate the coherence of logic, evidence, and methods of different types of research studies.
- 6) Communicate research findings to different audiences

**Required Texts & Materials**

Trochim, William M., James P. Donnelly, and Kanika Arora (2016) *Research Methods: The Essential Knowledge Base*. 2nd Edition. Boston, MA: Cengage Learning, ISBN: 978-1-133- 95477-4.

Babbie Earl R. (2021) *The Practice of Social Research*. 15<sup>th</sup> Edition. Wadsworth Publishing.

**Suggested Texts, Readings, & Materials**

Please note that on certain class topics, I will assign readings that do not come from the course textbook. These readings will be accessible on eLearning or through the library at no cost to you. In addition, I will share digital media (e.g. YouTube videos and podcasts) to supplement textbook reading materials. Weekly readings (comprising sections of Trochim et al. and additional extra materials/readings that will be uploaded on eLearning) should be engaged with before class.

## Assignments & Academic Calendar

Week	Date	Topic
1	6/2	<b>Course Introduction</b>
	6/4	<b>The Research Enterprise</b> <u>Read before class:</u> Trochim et. al: Chapters 1.1-1.2 <u>Watch before class:</u> "Truth Decay" - Jennifer Kavanaugh & Michael Rich, RAND Corporation <a href="https://www.rand.org/pubs/presentations/PT165.html">https://www.rand.org/pubs/presentations/PT165.html</a> "Social Experiments to Fight Poverty" - Esther Duflo, MIT <a href="https://www.ted.com/talks/esther_duflo_social_experiments_to_fight_poverty?language=en">https://www.ted.com/talks/esther_duflo_social_experiments_to_fight_poverty?language=en</a>
2	6/9	<b>How to Think Like a Researcher</b> <u>Read before class:</u> Trochim et. al. 1.3-1.5
	6/11	<b>Social Science Paradigms</b> <u>Read before class</u> Babbie - Chapter 2, pgs. 31-42 <u>Watch before class</u> Social Science Paradigms: Positivism and Interpretivism <a href="https://methods.sagepub.com/video/social-science-research-paradigms-positivism-and-interpretivism">https://methods.sagepub.com/video/social-science-research-paradigms-positivism-and-interpretivism</a> <b>Quiz #1</b>
3	6/16	<b>Theories: Purpose, characteristics, and examples</b> <u>Read before class:</u> Bhattacharjee A. "Chapter 4. Theories in Scientific Research". Social Science Research: Principles, Methods and Practices <a href="https://scholarcommons.usf.edu/cgi/viewcontent.cgi?article=1002&amp;context=oa_textbooks">https://scholarcommons.usf.edu/cgi/viewcontent.cgi?article=1002&amp;context=oa_textbooks</a> <u>Listen before class</u> "Theory vs. Reality: Why our economic behavior isn't always rational" Hidden Brain <a href="https://www.npr.org/2020/05/28/864335677/theory-vs-reality-why-our-economic-behavior-isnt-always-rational">https://www.npr.org/2020/05/28/864335677/theory-vs-reality-why-our-economic-behavior-isnt-always-rational</a>
	6/18	<b>Taking Stock of Prior Evidence: The Literature Review</b> <u>Read before class:</u> The Literature Review: A Foundation for High Quality Medical Education Research <a href="https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4936839/pdf/i1949-8357-8-3-297.pdf">https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4936839/pdf/i1949-8357-8-3-297.pdf</a> Ten Simple Rules for Writing a Literature Review <a href="https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3715443/">https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3715443/</a> <b>Quiz #2</b>
4	6/23	<b>Ethics and Politics of Social Science Research</b> <u>Read before class:</u> Trochim, et. al - Chapter 2
	6/25	<b>Sampling</b> <u>Read before class:</u> Trochim, et. al - Chapter 4 <b>Quiz #3</b>
5	6/30	<b>Measurement and Operationalization</b> <u>Read before class:</u> Trochim et. - Chapter 5 "Social Intelligence and the Biology of Leadership" Harvard Business School <a href="https://hbr.org/2008/09/social-intelligence-and-the-biology-of-leadership">https://hbr.org/2008/09/social-intelligence-and-the-biology-of-leadership</a>

	7/2	<b>Scales, Indices, and Tests</b> <u>Read before class:</u> Trochim et. al - Chapter 6 "Assessing College Readiness Using Multiple Measures: Is It Better for Students?" Center for the Analysis of Postsecondary Readiness <a href="https://postsecondaryreadiness.org/multiple-measures-better-for-students/">https://postsecondaryreadiness.org/multiple-measures-better-for-students/</a> <b>Quiz #4</b>
6	7/7	<b>How to Develop a Resume</b> University Career Center presentation
	7/9	<b>MID TERM REVIEW</b>
7	7/14	<b>MID TERM EXAM</b>
	7/16	<b>Introduction to Quantitative Research Design: Internal Validity, and Its Threats</b> <u>Read before class:</u> Trochim et. al. Chapter 8.1-8.4
8	7/21	<b>Experimental Research Design</b> <u>Read before class:</u> Trochim, et al. Chapter 9 <u>Optional Reading:</u> Murnane & Willet - Chapter 4
	7/23	<b>Quasi-Experimental Designs</b> <u>Read before class:</u> Trochim et. al - Chapter 10 <u>Watch before class:</u> "Does when you die depend on where you live?" - Econimate <a href="https://www.youtube.com/watch?v=YjU6Aedj_tM&amp;list=PLMR7YToRbJla5pNAAgrnII6Bg6OYYQJxR">https://www.youtube.com/watch?v=YjU6Aedj_tM&amp;list=PLMR7YToRbJla5pNAAgrnII6Bg6OYYQJxR</a> <u>Optional Reading:</u> Murnane & Willet - Chapter 8 <b>Quiz #5</b>
9	7/28	<b>Descriptive Quantitative Data Analysis</b> <u>Read before class:</u> Trochim et. al - Chapter 11
	7/30	<b>Inferential Quantitative Data Analysis</b> <u>Read before class:</u> Trochim 12.1-12.5 <b>Quiz #6</b>
10	8/4	<b>Introduction to Qualitative Research Designs</b> <u>Read before class:</u> Trochim, et. al. - Chapter 3.1-3.3 Babbie et. al - Chapter 11 pg. 332-344 "Evidence of a Toxic Environment for Women in Economics" - NY Times - Upshot <a href="https://www.nytimes.com/2017/08/18/upshot/evidence-of-a-toxic-environment-for-women-in-economics.html">https://www.nytimes.com/2017/08/18/upshot/evidence-of-a-toxic-environment-for-women-in-economics.html</a>
	8/6	<b>Qualitative Data Collection and Analytic Methods</b> <u>Read before class:</u> National Science Foundation: "An overview of quantitative and qualitative data collection methods" <a href="https://www.nsf.gov/pubs/2002/nsf02057/nsf02057_4.pdf">https://www.nsf.gov/pubs/2002/nsf02057/nsf02057_4.pdf</a> Trochim: Chapter 10, pg. 320-332 Schutt (2018). Investigating the Social World <a href="https://www.sagepub.com/sites/default/files/upm-binaries/43454_10.pdf">https://www.sagepub.com/sites/default/files/upm-binaries/43454_10.pdf</a> <b>Quiz #7</b> <b>Research Design Analyses Due</b>
11	8/11	<b>FINAL EXAM</b>
	8/13	<b>Review Session</b>

## **Grading Policy**

- 1) Attendance and Participation: 15%
- 2) Quizzes: 15%
- 3) Midterm Exam: 15%
- 4) Final Exam: 25%
- 5) Research Design Analyses: 20%
- 6) Resume: 10%

### **Attendance and Participation:**

You will be awarded 5 percentage points for attendance and 10 for participation. Participation involves contributing to class discussions meaningfully and purposefully, asking relevant questions, and giving interesting comments. Thus, actively engaging with the class and your fellow students influences your grade. As per my attendance policy (below), you are allowed to miss up to 2 classes, no questions asked. I will take attendance during the first 5 minutes of class.

### **Quizzes:**

Students will have the opportunity to complete *reading quizzes* during the Wednesday classes. Quizzes will be based on the assigned reading and materials, and are designed to ensure proper engagement with the week's topics (both lectures). This is to ensure that you are reading through the required materials beforehand. All quizzes will be posted to eLearning during the classes. For all quizzes, students are permitted to use notes/textbooks/lectures. **However, students are not allowed to use the internet during the quizzes.**

### **Midterm Exam:**

The midterm exam will be administered during class. It will consist of multiple-choice, True/False, and open-ended questions. Exam worth 15 percentage points.

### **Final Exam:**

Just like for your midterm, the final exam will be administered during class. It will consist of multiple-choice, True/False, and open-ended questions. Exam worth 25 percentage points.

### **Research Design Analysis:**

This assignment will require you to identify, distill, and summarize the key components of an empirical research article. These components include: 1) the motivation behind the research study, 2) the research question(s), 3) the theoretical framework – if used, 4) review of previous research, 5) the research design and methods, 6) the main results, and 7) the conclusions and their implications for policy and practice. I will upload the article and instructions to eLearning at least one week before the assignment is due to give you enough time to ask questions. Please note that you will not be able to choose the article you wish to analyze.

### **Resume Building Assignment:**

The purpose of this assignment is to give you the opportunity to begin archiving your academic and professional experiences in the form of a resume. To receive a grade for this assignment, you will need to submit two documents: 1) a marked-up draft that has been reviewed by staff from the University Career Center (you should meet with a career advisor and provide proof of your attendance. An email or screenshot should suffice); 2) a final draft of your resume. The assignment will be worth 10 percentage points.

## Grading Scale:

A+ 97% - 100%	A 93% - 96%	A- 90% - 92%
B+ 87% - 89%	B 83% - 86%	B- 80% - 82%
C+ 77% - 79%	C 73% - 76%	C- 70% - 72%
D+ 67% - 69%	D 63% - 66%	D- 60% - 62%

## Course & Instructor Policies

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### Attendance, Punctuality & Participation

Consistent attendance and active participation are crucial for your success in this course and will factor into your final grade assessment. Attendance is defined as being present for the entirety of the class session, and it will be checked during the first 5 minutes of class. If you are late, just come forward and notify me after class. Leaving the class early or coming late (more than 15 minutes) could be considered an absence.

Participation will be evaluated based on the frequency and quality of contributions to class discussions. Each student is permitted two absences from class without needing to provide an explanation or inform the instructor.

### Make-Up Exams

These will only be considered for instances of an emergency (e.g., documented death of immediate relative or student hospitalization), you have an official UTD-sponsored event that conflicts with the exam date, and I am contacted via email before 8am on the day the exam (unless some documented event of force majeure prevents you to timely communicate the absence). UTD- related absences or religious holiday conflicts should be communicated to the instructor as soon as they are known, but preferably two weeks prior to exam day so we can make arrangements for the exam retake day and time. Documentation for all excused absences may be required.

### Late Submissions

Assignments are expected to be submitted on the designated due date and in the specified format. Late submissions will incur a deduction of points from the assignment grade (expressed as total percentage points: 10% within 1 hour, 20% within 12 hours, 40% within 24 hours, 100% more than 24 hours).

### Email Use

UT Dallas recognizes the value and efficiency of communication between faculty/staff and students through electronic mail. At the same time, email raises some issues concerning security and the identity of each individual in an email exchange. All official student email correspondence will be sent only to a student's UT Dallas email address and UT Dallas will only consider email requests originating from an official UT Dallas student email account. This allows the University to maintain a high degree of confidence in the identity of each individual corresponding via email and the security of the transmitted information. UT Dallas furnishes each student with a free email account that is to be used in all communication with university personnel. The Office of Information Technology provides a method for students to have their UT Dallas mail forwarded to other email accounts.

Whenever you contact me by email, you can expect an answer within 2 business days of your submission. If something urgent comes up, please add the URGENT tag in the email's subject.

### **Academic Ethics**

Every member of the UTD community is expected to maintain the highest standards of academic integrity. UTD may initiate disciplinary proceedings against a student accused of scholastic dishonesty.

Scholastic dishonesty includes, but is not limited to, statements, acts, or omissions related to applications for enrollment or the award of a degree, and/or the submission as one's own work material that is not one's own. Scholastic dishonesty may involve, but is not limited to, one or more of the following acts: cheating, plagiarism, collusion, use of annotated texts or teacher's editions, use of information about exams posted on the Internet or electronic medium, and/or falsifying academic records. While specific examples are listed below, this is not an exhaustive list and scholastic dishonesty may encompass other conduct, including any conduct through electronic or computerized means:

- Plagiarism is the use of an author's words or ideas as if they were one's own without giving credit to the source, including, but not limited to: failure to acknowledge a direct quotation.
- Cheating is the willful giving or receiving of information in an unauthorized manner during an examination; collaborating with another student during an examination without authority; using, buying, selling, soliciting, stealing, or otherwise obtaining course assignments and/or examination questions in advance; copying computer or Internet files; using someone else's work for assignments as if it were one's own; or any other dishonest means of attempting to fulfill the requirements of a course.
- Collusion is intentionally or unintentionally aiding or attempting to aid another in an act of scholastic dishonesty, including but not limited to, failing to secure academic work; providing a paper or project to another student; providing an inappropriate level of assistance; communicating answers to a classmate about an examination or any other course assignment; removing tests or answer sheets from a test site; and allowing a classmate to copy answers.

### **Class Materials**

The instructor may provide class materials that will be made available to all students registered for this class as they are intended to supplement the classroom experience. These materials may be downloaded during the course; however, these materials are for registered students' use only.

Classroom materials may not be reproduced or shared with those not in class or uploaded to other online environments except to implement an approved Office of Student Accessibility accommodation. Failure to comply with these University requirements is a violation of the Student Code of Conduct.

### **Generative AI**

The use of generative AI tools (such as ChatGPT, MS Copilot, etc.) to create content for assignments, quizzes, exams, analyses, or any other coursework is prohibited. This includes, but is not limited to, using AI to generate text, code, solutions, or any form of academic content that is submitted for evaluation.

Students are expected to complete all assignments independently and demonstrate their own understanding of the material. The use of generative AI in violation of this policy will be considered academic dishonesty and could result in disciplinary action.

### **Re-grading**

If you think your grade should be changed due to error, submit your work and a brief written explanation of your argument to me via email. Following re-evaluation, your grade may go up or down.

### **Comet Creed**

“As a Comet, I pledge honesty, integrity, and service in all that I do.”

### **Technology Requirements**

Each student is required to have access to a device that will allow for them to engage with course materials, whether this be a phone, laptop, or tablet. Since the text is available in digital format and quizzes will be on Blackboard, I encourage you to bring a laptop or tablet to class. I understand how difficult it is to avoid using cellphones or scrolling online while in class. Out of respect to your peers/classmates and myself, I ask that you avoid this as much as possible, as well as silence your devices when entering class. If I observe that technology use is a distraction, I will point it out.

### **Free Speech and Intellectual Diversity**

No individual is the same and all of you come from different backgrounds and hold different positions on a wide array of topics. It is okay to have different opinions and as your instructor, I encourage you to respect and be open to different perspectives, as well as feel comfortable with sharing your own personal point of view. UTD Policy Statement on Speech Expression and Assembly: <https://policy.utdallas.edu/utdsp5001>.

### **OSA Accommodations**

Americans with Disabilities Act Statement: the University of Texas at Dallas will adhere to all applicable federal, state and local laws, regulations and guidelines with respect to providing reasonable accommodations as required to afford equal educational opportunity. It is the student's responsibility to contact the OSA office, located in AD 2.224 or call at 972.883.2098 to arrange for appropriate accommodations. If you are a student with OSA Accommodations that you will be using for the rest of the course, please reach out to me via e-mail as soon as possible so that I can make sure that I am meeting your needs.

### **Academic Integrity**

Academic dishonesty of any kind (including, but not limited to, plagiarism, sharing, copying, or cheating on exams and assignments) will not be tolerated. In accordance with UTD's Office of Community Standards and Conduct, misconduct may result in a failing grade for the course, suspension, or in some cases, expulsion. For more information, see: <http://www.utdallas.edu/conduct/integrity/>.

### **Mental Health Services and Student Support Resources**

I recognize the fact that students may experience anxiety and mental health challenges brought upon by life circumstances. As UTD students, you have mental health services available to you by telephone and on campus. Student Counseling Center



Phone: 972-883-2575; location: Student Services Building SSB 4.600. Moreover, UTD provides numerous resources for students in need:

[The Center for Students in Recovery](#) helps students seeking recovery from substance and alcohol use, eating disorders, and other addictions and compulsive behaviors. They also help students affected by these issues or individuals exploring the impact of addictions or compulsive behaviors within their lives. Their mission is to provide a safe, supportive community to enable students to thrive both socially and academically while living in recovery. They are located in SSB 4.500, on the fourth floor of the Student Services Building. They can be contacted by calling 972-883-7320 or they can be reached by emailing them at [recovery@utdallas.edu](mailto:recovery@utdallas.edu).

[The Comet Cupboard](#) is a UT Dallas food pantry initiative dedicated to helping students in need. The Comet Cupboard is located in MC 1.604, on the first floor of the McDermott Library, and can be contacted by calling 972-883-6613 or emailing [cupboard@utdallas.edu](mailto:cupboard@utdallas.edu).

[Comet Cents](#) provides financial literacy to students with the peer-to-peer model. This money management center provides one-on-one appointments and workshops throughout the semester. Comet Cents works to help students improve their financial situation with topics such budgeting, credit card debit, investing and other personal finance areas.

[Intercultural Programs](#) provides a host of transition programs for international students and intercultural competency trainings for all students. They are located in SSB 3.6, on the third floor of the Student Services Building. Their phone number is 972-883-4528.

[The Student Counseling Center](#) offers confidential services to students either for individual appointments or as part of groups. Initial appointments must be made in person in the Student Counseling Center, which is located in SSB 4.600, on the fourth floor of the Student Services Building. Their main number is 972-883-2575 and the 24/7 Crisis Hotline is 972-883-8255 (972- UTD-TALK).

[The Student Health Center](#) (SHC) provides primary and preventative medical care to currently enrolled students who have paid medical fees and are attending classes. Currently enrolled students can obtain a wide variety of services, such as physicals, diagnosis and treatment of acute illnesses and injuries, general medical problems, gynecological problems, treatment of stabilized chronic illnesses, allergy injections, limited immunizations, x-rays, and ultrasound.

SHC staff of licensed medical providers is committed to keeping the UT Dallas community healthy and believes that health and wellness information complement the academic success of students.

SHC is located on the fourth floor of the Student Services Building, SSB 4.700 and they can be reached by telephone, 972-883-2747, fax, 877-769-7514, or by email, [healtcen@utdallas.edu](mailto:healtcen@utdallas.edu).

[The Graduation Help Desk](#) is a one-stop resource within the Office of Undergraduate Education designed to help undergraduate students overcome obstacles to a timely graduation. The Graduation Help Desk supports undergraduate students, faculty and staff to develop solutions to complex academic and non-academic issues. This resource is equipped to promote all undergraduate students' success by helping them at any point

during their academic careers from their arrival at UT Dallas until their graduation. Contact the Graduation Help Desk at [graduationhelpdesk@utdallas.edu](mailto:graduationhelpdesk@utdallas.edu).

[The Student Success Center](#) (SSC) offers assistance to students in the areas of writing, mathematics, communication, multiple science fields, study skills, and other academic disciplines. These services are available through individual appointments, small group appointments, drop-in labs, workshops, and weekly reviews. All undergraduate students enrolled at UT Dallas are eligible to participate in these services. Not all courses will be supported by all services.

Please check the website at the beginning of each semester to find out which courses are supported by which services

In addition, students are expected to:

- know that this syllabus, including the course schedule, is subject to change at the discretion of the instructor;
- read additional related policy material at <http://go.utdallas.edu/syllabus-policies>.

*The descriptions and timelines contained in this syllabus are subject to change at the discretion of the Instructor.*