

URP 5363– Urban Planning Methods I – Fall 2022

Instructor:

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Assistant Professor

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Class time: Tuesdays, 06:00 PM - 08:45 PM (Frio St Building, Room 3.520)

Office Hours: Monday 11 am-noon and Friday 11 am-noon (at my office in Durango Bldg. or zoom: <https://utsa.zoom.us/j/2089383963>), or email me with what you'd like to meet about, suggest 2-3 times that work for you, and a preferred venue (my office or Zoom). Follow up by sending a calendar appointment for 15 or 30 mins.

Blackboard is the official and most up-to-date communication outlet. GitHub will also be used to submit some of your assignments.

DATA MINING...



• SM • JAN 2017 •

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LEARNING GOALS

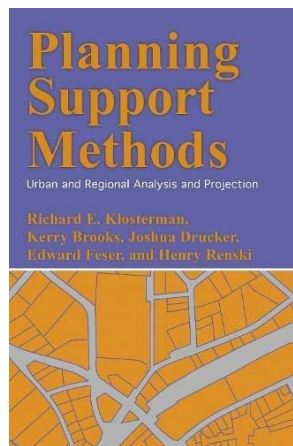
Through this course, I hope you will learn more about the power of data – in how it can be used for meaningful change, and how it can be a product of our imperfectly human world as well. You will hopefully become a more informed consumer and producer of analysis for decision-making in your future work. At the end of the semester, students should be able to:

1. Professionally “tell the story” of a neighborhood, city, or region through available data
2. Exercise fundamental statistical literacy — skills for reading, manipulating, analyzing, and communicating demographic, economic, and spatial information
3. Understand how planners attempt to “see the future” through statistical techniques
4. Create compelling charts, polished tables, and simple maps, while writing professionally and concisely about their analytical findings, without excessive jargon
5. Review analyses with a critical eye for clarity, bias, and accuracy

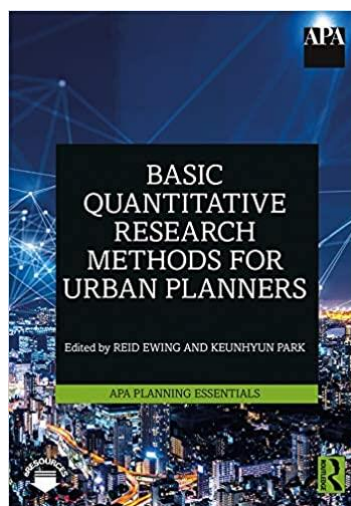
BOOKS

While I will provide lectures that cover the key topics for the course, doing the required readings will ensure you have a deeper understanding of the analyses we do.

- 1. (Required)** Klosterman, R., Brooks, K., Drucker, J., Feser, E., and Renski, H. 2018. *Planning Support Methods: Urban and Regional Analysis and Projection*. Rowman & Littlefield: Lanham.



- 2. (Required)** Ewing, R., & Park, K. (Eds.). (2020). *Basic Quantitative Research Methods for Urban Planners*. Routledge.



3. Additional readings and materials to be posted in Blackboard.

REQUIRED TECHNOLOGY

As a course focusing on methods, you'll need to have a computer equipped with

- MS Word and MS Excel (or equivalents like Google Sheets/Docs)
- R (<https://cloud.r-project.org/>) and RStudio (<https://www.rstudio.com/products/rstudio/download/>)
- A web browser (e.g. Chrome or Firefox) capable of accessing the Blackboard and Github

COURSE FORMAT

This course is 100% in-person format and will be delivered through a combination of Blackboard and GitHub. This is also an asynchronous class, meaning that you will be responsible for completing the work, doing readings, and listening to lectures on your own time and at your own pace.

Each class will have two parts: a lecture and a practical lab part for R. During the lab part, students are encouraged to follow the instructor's pace and run the R scripts provided by the instructor. At the beginning of some lectures, students will be quizzed on the lecture topics about to be covered. Then the faculty will lead the discussion on the lecture topic and introduce the practical laboratory to be developed in the second half of the class. All assignments are due on Monday before the following class.

There is one midterm exam based on methods knowledge.

Students will work on a project after learning different analyses. The final project report will use the American Psychological Association reference style, 7th edition, used by the Journal of the American Planning Association. The publisher has a straightforward guide for referencing this style in-text and reference lists (Taylor & Francis, 2020).

ASSESSMENT / GRADING

Grades will be calculated based on the following weights:

- 15% Pre-lecture Quizzes (Open book, 7 quizzes, submission before the class)
- 25% Midterm Exam (1 Page cheat sheet allowed)
- 35% Assignments (7 @ 5% each)
- 25% Project (Proposal 5% + Presentation 5% + Report @15%)

Grading: Grades for this class will follow this scale:

Total Points	Letter Grade	Total Points	Letter Grade
97 – 100	A+	73 – 76	C
93 – 96	A	70 – 72	C-
90 – 92	A-	67 – 69	D+
87 – 89	B+	63 – 66	D
83 – 86	B	60 – 62	D-
80 – 82	B-	<60	F
77 – 79	C+		

Late work is discouraged. If there is a special circumstance, please communicate with me ahead of time if you know your work will be late (Life happens and I am accommodating, within reason).

Any assignments turned in after the due date/time will be penalized accordingly:

- After the due date, but within the next day (24 hours) = 5% penalty (Max grade of 95%)
- 2nd day = 10% penalty (max grade of 90%)
- Each additional day the assignment is late deducts another 5%, with a maximum deduction of 30% after 5 days late (max grade of 70%)

(A friendly reminder to avoid late work because of mishaps by saving your work frequently).

COURSE SCHEDULE

We are examining the types of data and analysis techniques that planners use to understand a community, and make best decisions for policy based on past, present, and future (projected) conditions. This course is roughly divided into four sections:

1. **Fundamental Quantitative Knowledge:** For the first module of the class, we will explore different types of research and research questions. In addition, students will learn to know how to do a technical writing, learn the statistical fundamentals that could be applied in planning practice, and finally learn how to interpret and visualize the data effectively.
2. **Demographics/Population and Local Economic Analysis:** For the second module of the class, we will discuss typical ways in which planners analyze populations and access population data through the U.S. Census Bureau at varying geographies. We will also examine common ways planners measure racial/ethnic segregation and project future population trends. Next, we will learn how planners examine local economies. We will learn how to access economic datasets and practice techniques for measuring the economic activity within a place, and how it might differ from other geographies.
3. **GIS/Spatial Visualization and Analysis:** Thirdly, planners are primarily concerned with the built environment, and naturally need to make maps. In this section of the course, we will learn how to create different types of spatial analyses to support policy.
4. **Final project.** Finally, students will have final project works to use the methods they have learned in a real-world case study. More details of the project will be sent to the students after the mid-term exam.

This course is designed to give you a basic, functional understanding of these techniques as they apply to urban planning. We could easily spend the entire semester on each of these topics alone, but we will only scratch the surface. You will walk away from this course with an ability to conduct basic analyses and understand the meaning behind these common analysis tools when you see them in policy settings.

Module 1: Fundamental Quantitative Knowledge

Date	Lecture Topics	Lab Session	Readings
1-Aug 23	Course Overview		
2-Aug 30	Types of Research; Research Questions	Intro to R	E&P Ch. 3
3-Sep 06	Technical Writing; Statistical Fundamentals*	Data Visualization 1	E&P Ch. 2+PDF/links provided
4-Sep 13	Interpreting Data Reports; Effective Visualizations	Data Visualization 2	Klosterman Ch. 2

* Quiz question will be released four days before the class and students will submit their answers before the class.

Module 2: Demographic and Economic Analysis

Date	Lecture Topics	Lab Session	Readings
5-Sep 20	Intro to the U.S Census and Data Sources	Census APIs	E&P Ch. 4
6-Sep 27	Measuring Segregation*	Segregation Measurement	E&P Ch. 2
7-Oct 04	Population Projections*	Population Projections	Klosterman Ch. 3, 4, & 5
8-Oct 11	Examining Local Economy; Location Quotient*	Exam Review	Klosterman Ch. 6
9-Oct 18	Midterm Exam: 06: 00 - 08: 00 pm		

* Quiz questions will be released four days before the class and students will submit their answers before the class.

Module 3: Spatial Analysis

Date	Lecture Topics	Lab Session	Readings
10- Oct 25	GIS and Visualization*	Making maps in R	PDF/links provided
11-Nov 01	Spatial Analysis and Modeling*	Spatial Regression Model	PDF/links provided
12-Nov 08	Land Suitability Analysis*	Overlay Analysis	Klosterman Ch. 8

* Quiz questions will be released four days before the class and students will submit their answers before the class.

Module 4: Final Project

Date	Lecture Topics
13-Nov 15	Final project – Proposal discussion (w/ Classmates + Instructor)
14-Nov 22	Final project – Workshop (Q&A for Analysis, Debugging, etc.)
15-Nov 29	Final project presentations

Due dates

Assignment/Project	Due Date
Assignment 1: Data Visualization	Sep 19, 11:59 pm
Assignment 2: Census Data	Sep 26, 11:59 pm
Assignment 3: Segregation Analysis	Oct 03, 11:59 pm
Assignment 4: Population Forecast	Oct 10, 11:59 pm
Assignment 5: Spatial Visualization	Oct 31, 11:59 pm
Assignment 6: Spatial Analysis	Nov 07, 11:59 pm
Assignment 7: Land Suitability Analysis	Nov 14, 11:59 pm
Project Proposal (.doc, .docx, .pdf)	Nov 21, 11:59 pm
Project Presentation (.ppt, .pptx)	Nov 28, 11:59 pm
Project Report (.doc, .docx, .pdf)	Dec 5, 11:59 pm

Assignments are expected to be completed by revising the R code performed in the lab. In other words, students will not write the code from the scratch, but apply the script in their assignments. For the final project, students are expected to identify at least two planning methods from those covered in class to be applied, what data will be required, what would be the potential results of the analysis and its potential policy implications.

COPYRIGHT AND FAIR USE

It is important to understand the issue of intellectual property rights. You may not use the images or thoughts of others for profit or gain without their written permission. The UTSA library has a Copyright Laws and Public Performance Rights (PPR) page.

LOGGING IN TO VIRTUAL DESKTOP (VDI)

UTSA introduced a virtual desktop console, called MyAppsVDI (<https://myappsvdi.utsa.edu>). A virtual desktop allows students to use their own devices (laptops, desktops, tablets, phones, Chromebooks etc.) as an interface. Once you are in the MyAppsVDI website, you will be asked to log in before the programs are streamed to your device.

For more information visit <http://utsa.edu/vdi>. At this website, you can find answers to Frequently Asked Questions like:

- What is a VDI/Virtual Desktop? How does it work?
- Who can access VDIs?
- How do I access VDI?
- May I access the VDI from my tablet or phone?
- Why are other users able to see other VDIs that I may not have access to?

As a CEID registered student, you are entitled to see and use the following VDIs:

- CACP_VDI
- Engineering_VDI
- Student_General

*****Note that once you start working on one of the applications, you will need to save your work on OneDrive or an external drive before logging out. Work will NOT BE SAVED if you log out before saving.*****

*****Users cannot access both the UTSA VPN and MyAppsVDI at the same time.*****

If you have to use the UTSA VPN, please connect to MyAppsVDI first, and then connect to the UTSA VPN.

If you are already using the UTSA VPN, you have to disconnect first. (Some users find it easier to just reboot their computer).

VIDEO RECORDING

As the instructor of this course, I will record meetings and lessons. You are expected to follow appropriate University policies and maintain the security of passwords used to access recorded lectures. Recordings may not be published, reproduced, or shared with those not in the class. If the instructor or a UTSA office plans any other uses for the recordings, consent of the students identifiable in the recordings is required before such use unless an exception is allowed by law. For more information on your privacy and class recordings, review [Student Privacy \(FERPA\) in](#)

[Virtual Classrooms and Other Educational Recordings](#) and the [Guide to Secure Video Conferencing Tools](#).

COMMON SYLLABUS INFORMATION

Counseling Services: Counseling Services provides confidential, professional services by staff psychologists, social workers, counselors and psychiatrists to help meet the personal and developmental needs of currently enrolled students. Services include individual brief therapy for personal and educational concerns, couples/relationship counseling, and group therapy on topics such as college adaptation, relationship concerns, sexual orientation, depression and anxiety. Counseling Services also screens for possible learning disabilities and has limited psychiatric services. Visit Counseling Services at <http://utsa.edu/counsel/> or call (210) 458-4140 (Main Campus) or (210) 458-2930 (Downtown Campus).

Student Code of Conduct and Scholastic Dishonesty: The Student Code of Conduct is Section B of the Appendices in the Student Information Bulletin. Scholastic Dishonesty is listed in the Student Code of Conduct (Sec. B of the Appendices) under Sec.203
<http://catalog.utsa.edu/policies/administrativepoliciesandprocedures/studentcodeofconduct/>

Students with Disabilities: The University of Texas at San Antonio in compliance with the Americans with Disabilities Act and Section 504 of the Rehabilitation Act provides “reasonable accommodations” to students with disabilities. Only those students who have officially registered with Student Disability Services and requested accommodations for this course will be eligible for disability accommodations. Instructors at UTSA must be provided an official notification of accommodation through Student Disability Services. Information regarding diagnostic criteria and policies for obtaining disability-based academic accommodations can be found at www.utsa.edu/disability or by calling Student Disability Services at (210) 458-4157. Accommodations are not retroactive.

Transitory/Minor Medical Issues: In situations where a student experiences a transitory/minor medical condition (e.g. broken limb, acute illness, minor surgery) that impacts their ability to attend classes, access classes or perform tasks within the classroom over a limited period of time, the student should refer to the class attendance policy in their syllabus.

Supplemental Instruction: Supplemental Instruction offers student-led study groups using collaborative learning for historically difficult classes. Supported courses and schedules can be found on the [TRC website](#). You can call the SI office if you have questions or for more information at (210) 458-7251.

Tutoring Services: Tomás Rivera Center (TRC) may assist in building study skills and tutoring in course content. The TRC has several locations at the Main Campus and is also located at the Downtown Campus. For more information, visit the Tutoring Services web page or call (210) 458-4694 on the Main Campus and (210) 458-2838 on the Downtown Campus.

Academic Success Coaching: The Tomas Rivera Center (TRC) Academic Success Coaching Program offers one-on-one study skills assistance through Academic Coaching. Students meet by appointment with a professional to develop more effective study strategies and techniques that can be used across courses. Group workshops are also offered each semester to help students defeat common academic challenges. Find out more information on the TRC Academic Success Coaching website or call (210) 458-4694.

Sexual Harassment and Sexual Misconduct: UTSA is committed to providing an environment free from all forms of discrimination and sexual harassment, including sexual misconduct, sexual assault, domestic violence, dating violence, and stalking. If a student has experienced or experiences any of these incidents, know that UTSA has resources to help.

UTSA faculty have the responsibility to create a learning environment that is safe and free from hostility. State and federal law as well as UTSA's Handbook of Operating Procedures (HOP 9.24) require that instructors must report incidents of sexual harassment and sexual misconduct they learn about to the Title IX Coordinator or a Deputy Title IX Coordinator. This means that if a student tells their instructor about a situation (including classroom discussions, written work and/or one-on-one meetings) involving sexual harassment, sexual assault, dating violence, domestic violence, or stalking, the instructor must report it to the EOS/Title IX Office. Although the faculty member must report the situation, the student will still have options about how their case will be handled, including whether or not they wish to pursue a formal complaint. The university's goal is to make sure students are aware of the range of options available to them and have access to the resources they need.

If a student wishes to speak to someone confidentially, they can contact any of the following on-campus resources, who are not required to report the incident to the EOS/Title IX Office: (1) Counseling Services at 210-458-4140; (2) Student Health Services at 210-458-4142; or (3) PEACE Center at 210-458-4077.

Campus Safety & Emergency Preparedness: UTSA is committed to providing a safe campus environment for students, faculty, staff, and visitors. As members of the community, we encourage you to take the following actions to be better prepared in case of an emergency: **Alerts:** Ensure you are signed up for UTSA Alerts through your ASAP.utsa.edu account. **Emergency Procedures:** Read through the emergency response guide on the UTSA Alerts website (www.alerts.utsa.edu)

Safety App: Download the LiveSafe App on your phone through the Apple store or Google Play; visit the UTSA Alerts website for details. Important Numbers: UTSA Police - Emergency: (210) 458-4911; Non-Emergency: (210) 458-4242 Each one of us play a critical role in making sure ALL ROADRUNNERS are safe, know what to do, and how to stay informed during a campus crisis. Don't be scared, be prepared! #UTSAprepared

Inclusivity Statement: The University of Texas at San Antonio, a Hispanic Serving Institution situated in a global city that has been a crossroads of peoples and cultures for centuries, values diversity and inclusion in all aspects of university life. As an institution expressly founded to advance the education of Mexican Americans and other underserved communities, our university is committed to ending generations of discrimination and inequity. UTSA, a premier public research university, fosters academic excellence through a community of dialogue, discovery and innovation that embraces the uniqueness of each voice. Learn more at <https://www.utsa.edu/inclusiveexcellence>.

Family Educational Rights and Privacy Act (FERPA). FERPA grants students the right to control certain disclosures of their educational records. For a full explanation of your rights and to grant access to FERPA educational records, go to Student Catalog Annual FERPA Letter and One Stop Enrollment – FERPA Proxy Access. Without your consent or authorization of proxy access, UTSA may release Directory Information, such as but not limited to your name, email, phone, place of birth, and photograph, unless you have opted out of the release of Directory

Information. To opt out, go to Restrict Directory Information Form. Mandatory Reporting of Sexual Misconduct and Reporting of Health and Safety Information: If a student discloses an incident of sexual misconduct to any UTSA employee (other than to a designated confidential employee such as mental health counselor or PEACE advocate, a UTSA police officer using a pseudonym form or at a public awareness event), that information is not confidential, and the UTSA employee must report all known information to the UTSA Office of Equal Opportunity Services. Employees may also report any concerns about the health and safety of students or others to other school officials and/or law enforcement. For a complete list of exceptions to FERPA, please see Student Catalog Annual FERPA Letter and HOP 5.01.

The Roadrunner Creed

The University of Texas at San Antonio is a community of scholars, where integrity, excellence, inclusiveness, respect, collaboration, and innovation are fostered. As a Roadrunner, I will:

Uphold the highest standards of academic and personal integrity by practicing and expecting fair and ethical conduct;

Respect and accept individual differences, recognizing the inherent dignity of each person.

Contribute to campus life and the larger community through my active engagement; and

Support the fearless exploration of dreams and ideas in the advancement of ingenuity, creativity, and discovery.



Guided by these principles now and forever, I am a Roadrunner!