Department of City & Regional Planning | UNC-Chapel Hill | Fall 2021

PLAN 720: Planning Methods

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Office Hours: Thursdays, 11:30-1:30 pm (EST) (online)

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Office Hours: TBA

Class Sessions: 2:30 pm – 3:45 pm (EST), Monday/Wednesday, Aug. 18-Dec. 1
Woollen Gymnasium, Room 304
There will be no class sessions on Sept. 6 and Nov. 24.

Lab Sessions: Mondays, 10:30 am – 11:30 am (EST) | New East, Room 102
selected weeks only Thursdays, 2:00 pm – 3:00 pm (EST) | New East, Room 102
Fridays, 3:10 pm – 4:10 pm (EST) | New East, Room 102

Recitation: Fridays, 11:00 am – 12:00 pm (EST)
selected weeks only FedEx Global Center, Room 1005

*The exam period for PLAN 720 is 12:00 pm on Dec. 3; however, this course has no exam.

Course Overview
Professional planners frequently are asked to collect, analyze, and communicate data to inform the making of public decisions. Describing the composition of a city’s population, projecting future statewide economic conditions, forecasting future trends if an environmental regulation is adopted, and evaluating the effectiveness of a programmatic intervention targeting an at-risk population—these are just some of the research tasks assigned to professional planners working in the public, private, and nongovernmental sectors.

In truth, the answer to all such questions is, “It depends.” Even under stable conditions, results hinge on the definitional and research design choices made by analysts, the data available, the time constraints, the political environment, and the knowledge and interest of the decisionmakers. Unforeseen developments also may intervene. Population projections can be upended by, say, a global pandemic, while a city’s system of land use regulation may prove inadequate when new technologies facilitate novel business activities like short-term rentals.
Even if a single “right” answer is impossible to discern, professional planners still are expected to offer informed appraisals of the questions asked of them. A systematic research approach rooted in fields like statistics can help planners extract meaning from real world data, describe meaningfully the data, draw credible inferences, test theories, offer conclusions, and share those conclusions in a manner accessible to decisionmakers and the public.

Studies based on quantitative data analyzed with statistical techniques traditionally have been seen as the research “gold standard.” Yet when dealing with applied social and economic research, strictly quantitative approaches can mask just how “messy” and uncertain the data are. If not supplemented by qualitative analysis, such data may yield erroneous conclusions and harmful policies even if every calculation is performed perfectly. Planners therefore need an appreciation of both quantitative and qualitative methods and of how each strand’s strengths can be weaved together to offer deeper insights.

PLAN 720 offers graduate students a survey of different research methods and techniques they are apt to encounter in their careers. This is more challenging than it appears given the variety of approaches, the strengths and limitations of each one, and the diverging interests of the students enrolled in the course. Some students have deep research backgrounds, while others are approaching research methods for the first time. Some students are familiar with one set of techniques (typically, quantitative ones) without ever having been exposed to others. Meanwhile, some students hope to perform research-intensive roles after graduation, while others aspire to roles in which they will serve primarily as consumers and interpreters of research generated by others. And those roles likely will change over the course of a career. There is no realistic way in which one course can satisfy all these stakeholders.

Think of PLAN 720 as a course that provides the first-year cohort with a common language and framework for using research methods to approach complex economic and social subjects. Although much of the course focuses on quantitative techniques, that is because they often are new to our students and commonly are source of unease. And, rightly or wrongly, a grounding in such methods is considered a baseline professional competency. With this foundation, students can acquire deeper skills in concentration classes like PLAN 671.

More specifically, the semester-long goals for PLAN 720 are the following:

- Impart a common language and framework for appreciating research studies
- Foster an appreciation for the strengths and weaknesses of different techniques
- Practice using different foundational research tools and techniques
- Equip students to be discerning consumers of research
- Prepare students to develop and manage an applied research study
- Improve abilities to analyze, interpret, visualize, and communicate data
- Appreciate ethical issues related to research in a community setting.
Course Format
This class has three components. The main course (PLAN 720-001) meets on Mondays and Wednesdays in Woollen Gymnasium #304 and is mandatory. Individual class sessions will combine lectures, class discussions, speakers, and in-class activities. Lectures will be used to organize materials from the readings in a systematic manner and to explore certain topics in more depth. Because the in-class activities and readings complement each other, class attendance is not a substitute for completing the readings (or vice versa). Class sessions, meanwhile, will provide students with opportunities to raise questions, share experiences, and connect the course materials to their interests.

The lab sessions associated with the course (PLAN 720-401, -402, and -403), which will be facilitated by the teaching assistants, are optional, although attendance is strongly encouraged. A list of lab topics will be shared early in the semester. As a reminder, the departmental lab is located in New East #102. During the official course periods, the labs are blocked out for students in PLAN 720. For access at other times, use this booking link. Note that lab sessions will not be held every week of the semester; the dates will be shared and updated in Sakai.

The recitation session associated with the course (PLAN 720-601), which will be facilitated by the teaching assistants, are optional, although attendance is encouraged. The recitation session will meet in the FedEx Global Center #1005. Note the recitation session will not be held every week of the semester; the dates will be shared and updated in Sakai.

As of August, all course sessions are expected to meet in-person. Given the uncertain state of the COVID-19 crisis and shifting university policies, some or all course components may shift online during the term. Any changes will follow university guidelines and be communicated.

Special Note for Fall 2021
While it goes without saying, the Fall 2021 semester once again will differ from “normal” due to the COVID-19 pandemic. University policies and practices are changing regularly, and this requires all of us to be flexible and to adapt together.

At the same time, the health, economic, and social upheavals stemming from the pandemic are affecting all of us in deeply personal ways. I recognize that and want to work with the class to adjust the course and its elements to fit with our changing lives. I am open to modifying things as we go based on your input. If you have a question or suggestion, please let me know.

While you do not “owe” me (or your classmates) any information, I want to be supportive. If you are struggling with something, I will do what I can to help. I know the adjustment to graduate school can be stressful enough before factoring a pandemic, recession, political uncertainty, and social unrest into the equation. Lastly, I request your patience with me. I am just as in the dark as you are about changes in university policies and procedures. I typically learn about them when you do, but I will do whatever I can to adapt.
COVID-19 Community Standard
For this academic year (2021-22), all members of the UNC-Chapel Hill community must adhere to the COVID-19 Community Standards. As of early August, all students must wear face coverings at all times while inside any university building. For PLAN 720, the wearing of face coverings is required during all class, lab, and recitation sessions.

Office Hours and Scheduling
Instructor office hours during the Fall 2021 semester will take place online on Thursdays from 11:30 am to 1:00 pm. Please make an appointment in advance via this booking link. The confirmation will include the applicable Zoom link. Appointments are available in 15-minute slots, and students can book two consecutive slots. Students unable to attend normal office hours should email for an alternate appointment.

Information about the teaching assistants’ availability will be posted separately on Sakai.

Communication
Outside of office hours, the best way to reach the instructor or teaching assistants is through their university email accounts. When emailing a member of the teaching team, please include “PLAN 720” in the subject line. For emails received prior to 6:00 pm, we will aim to reply within one business day. Please do not wait to the last minute to communicate with the teaching team regarding course assignments. And, please contact the instructor as soon as possible if you need any accommodations for medical, personal, family, or religious reasons.

Technology Requirements
A financial/scientific calculator, preferably a stand-alone one, will be important for completing many of the assignments and exercises in the course. While a number of useful statistical computer programs exist—some of which must be purchased (STATA, SPSS) and some of which are open source (R), you will be able to complete all of the coursework using the statistical functions contained in Microsoft Excel. (Many of the lab sessions will focus on Excel.) All UNC students can obtain the most recent versions of Microsoft Excel/Office via this link from ITS.

While technology can help students complete many of the tasks associated with PLAN 720, it also can be a distraction. Please turn off all mobile phones at the start of each class, lab, and recitation session. If you must have access to your phone for a pressing personal reason (e.g., child care, family illness), please set your phone to a silent setting. When using laptops in class, please limit your usage to course-relevant applications like Excel and Sakai.

Disability Accommodations
If you have a verified disability and need academic accommodations, let me know, so we can arrange the appropriate supports with the Office of Accessibility Resources and Services.

Honor Code
Students are bound by the Honor Code and applicable university, school, and departmental
codes of professional and research conduct. Any examinations must be completed individually. For memo assignments and group assignments, students are encouraged to seek advice and suggestions from other class members. This includes exchanging drafts for feedback. However, students must cite all ideas, data, and information that are not their own, including data in tables, charts, graphs, etc. Information on how to properly cite sources is available through the UNC Writing Center, a link to which is enabled on the course Sakai site.

Texts and Readings
The **required texts** for the class are the following:

  * A newer 9th edition of this book was published in 2019, but the differences aren’t material enough to justify the price difference, in my opinion.

The following **supplemental text** will help students develop their skills in conducting statistical analyses with Microsoft Excel.

  * The 3rd edition is available through UNC Libraries via this link and remains serviceable.

All other readings and class materials will be available on the Sakai site under the “Lessons” tab.

**Supplemental Resources: Training and Consulting Services**
PLAN 720 offers students a broad survey of useful research methods. The trade-off is that it is difficult to cover many of those methods in the detail needed to satisfy every student’s specific research interests. Students who wish to learn more about specific methods can enroll for free in the “short courses” offered by the UNC Odum Institute for Research in Social Science. The training schedule for the Fall 2021 semester is available via this link.

The Odum Institute also offers consulting services for student researchers seeking support with such tasks as research design, data management, quantitative research, statistical analysis, survey research, qualitative research, mixed methods research, and data visualization. Students seeking consulting services should check the Odum Institute’s website for instructions.

Also, Duke University’s Social Science Research Institute sponsors *Duke Mod.U*, a YouTube channel consisting of short videos covering various research methods. Some of the videos related to qualitative research are included as supplemental readings in this course, but students also may find some of the videos related to quantitative methods helpful.
Course Assignments
Student grades for the course will be based on five components. Further guidance on each assignment, including submission info, will be provided in class and on the course’s Sakai site.

Class Participation: Students are expected to attend every mandatory class session (Monday/Wednesday) unless there is an uncontrollable medical or family emergency. Students are expected to have completed all of the required readings in advance and to participate in each session. Participation involves more than speaking frequently in class and can occur in any number of forms, both in class and through the sharing of materials via the course’s Sakai site. Additionally, participation in lab and recitation sessions can “plus up” this component.

CITI Program Training: All graduate students at UNC-Chapel Hill must complete the CITI Training Course in order to undertake any research involving human subjects. This online course reviews basic issues of how to interact ethically with human subject. You can access the course online via this link. You will need to login with your ONYEN so as to generate a record of completion. Complete Module #2, which is the “Basic Course for Social and Behavioral Research.” Note that a failure to complete the CITI Program Training will result in an “Incomplete” for the course regardless of performance on the other course assignments.

Individual Problem Sets: On six occasions during the semester, students will be asked to complete problem sets individually so as to demonstrate their growth in executing basic statistical calculations. Students will have a week to complete the problem sets. In those weeks, the recitation sessions will provide students with an opportunity to review prior to submission.

Team Memos: Working in groups of 3-4, students will complete three short memo assignments (approximately 3-5 pages in length) that apply the computational techniques developed in the problem sets to an actual problem in economic and community development. The assumed audience will be decisionmakers like a town manager or elected board. The first memo will focus on problem definition and descriptive analysis, the second on inferential statistics, and the third on regression analysis.

Master Paper Design: At four points during the semester, students will write short memos exploring aspects of a potential individual MP project. (Click here for an overview of the MP project.) The first three deliverables will be between 2-3 pages in length and connect class materials to potential research designs. One paper will focus on research questions and design, one on quantitative data, and one on qualitative data. The final deliverable for the course will be a 5-page prospectus that sets out an initial research framework for an envisioned project.

Assignment Due Dates
The due dates for the assignment are the following:

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Due Date</th>
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<tbody>
<tr>
<td>CITI Program Training</td>
<td>Sept. 1 @ 5:00 pm</td>
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<tr>
<td>Problem Sets</td>
<td>Sept. 27, Oct. 11, Oct. 18, Oct. 25, Nov. 1, &amp; Nov. 8 @ 5 pm</td>
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</tbody>
</table>
Team Memos: Oct. 8, Oct. 22, and Nov. 5 @5 pm
MP Components Sept. 17, Oct. 29, Nov. 19, and Dec. 3 @ 5 pm

Late Submission Policy Assignments
To keep the course on schedule, it is essential that all assignments be submitted on time. Exceptions will be made only in the case of a medical or family emergency. Should an emergency arise, let the instructor know as soon as possible.

Course Grading
Grades at the graduate level offer feedback to students on their performance in a given course. This course will use the standard grading system employed in the Graduate School:

H: High Pass (Clear excellence)
P: Pass (Entirely satisfactory graduate work)
L: Low Pass (Inadequate graduate work)
F: Fail (Failure to perform graduate work)

Below is the contribution of each individual assignment toward the final class grade:

- CITI Training: mandatory / 0 points
- Class Participation: 15 points
- Individual Problem Sets 30 points (5 points per set)
- Team Memo Assignments 30 points (10 points each)
- MP Design 25 points (5 points for #1-3 + 10 points for final) 100 points

Students with a cumulative point total in excess of 95 will receive an “H” for the course, and those with a cumulative point total between 80 and 95 will receive a “P.” A cumulative point total between 60 and 79 equates to an “L,” and any lower total will result in a grade of “F.”

A failure to complete the CITI Program Training will result in a grade of “Incomplete” regardless of performance on other course assignments.

Course Schedule
The course schedule is subject to change based on class progress and scheduling issues (e.g., inclement weather). Check the “Announcements” section on the course’s Sakai site for updates. As a reminder, there will be no class on Sept. 6 and Nov. 24 for university holidays.

Course Readings
The readings associated with each class session are listed below. The readings are divided into two categories. Readings marked as “required” should be read prior to the class. The readings marked as “supplemental” provide additional context and can be read as time allows, either in their entirety or via a “power read.”
Class #1: Introduction to PLAN 720 8/18


**Supplemental:** Moskowitz, Tobias and Jon Wertheim, *Scorecasting: The Hidden Influences behind How Sports Are Played and Games Are Won* (New York: Three Rivers Press, 2008), Chapter: Go for It (pp. 31-58) (available in “Lessons” tab)

Class #2: Thinking about Social Statistics 8/23


**Supplemental:** Skidelsky, Robert, *What’s Wrong with Economics? A Primer for the Perplexed* (New Haven, CT: Yale University Press, 2020), Chapter 1: Why Methodology? (pp. 1-14) (available in “Lessons” tab)

Class #3: Research and Urban Planning 8/25


Class #4: Ethical Considerations in Planning Research 8/30

**Required:** American Institute of Certified Planners, *AICP Code of Ethics and Professional Conduct: 2016 Update* (available in “Lessons” tab)


**Class #5: Research Design I: Formulating Questions and Theories**


**Labor Day: No Class**

**Class #6: Research Design II: Concepts and Data**


**Class #7: Writing for Decisionmakers**


**Supplemental:** Best, Joel, *Stat-Spotting: A Field Guide to Identifying Dubious Data* (New York:
Riverhead, 2021), Chapter H: What Do They Want Us to Think? (pp. 86-99) (available in “Lessons” tab)

Class #8: Descriptive Statistics I: Measures of Central Tendency


Wheelan, Charles, *Naked Statistics: Stripping the Dread from the Data* (New York: Norton, 2013), Chapter 3: Deceptive Description (pp. 36-57) (available in “Lessons” tab)

Class #9: Descriptive Statistics II: Measures of Variability


Class #10: Public Data Sources: A (Very Brief) Overview of the US Census

**Required:** Quinterno, John, *Running the Numbers: A Practical Guide to Regional Economic & Social Analysis* (New York: Routledge, 2014), Chapter 5: Demographics (pp. 101-132) (available in “Lessons” tab)


**Supplemental:** US Census Bureau, *Understanding and Using American Community Survey Data: What All Data Users Need to Know* (Washington, DC: US Department of Commerce, 2018), Chapters 6-11 (pp. 44-69) (available in Sakai “Lessons” tab)
**Class #11: Probability Theory**


**Class #12: Inferential Statistics I: From Samples to Populations**


**Class #13: Inferential Statistics II: Hypothesis Testing with One Sample**


**Class #14: Inferential Statistics III: Hypothesis Testing with Two Samples**


**Supplemental:** None
Class #15: Inferential Statistics IV: Taking a Representative Sample 10/11


Class #16: Analyzing Nominal & Ordinal Data I: Contingency Tables 10/13


Class #17: Analyzing Nominal & Ordinal Data II: Interpreting Contingency Tables 10/18


**Supplemental:** Meier, Kenneth, Jeffrey Brudney, and John Bohte, *Applied Statistics for Nonprofit Administration*, 9th edition (Stamford, CT: CENGAGE Learning, 2015), Chapter 15: Aids for the Interpretation of Contingency Tables (pp. 258-86) (available in “Lessons” tab)


Class #18: Regression Analysis I: An Overview of Linear Regression 10/20


**Class #19: Regression Analysis II: Multiple Regression**  


**Class #20: Regression Analysis III: Interpreting Results**  


**Class #21: Visualizing Data**  


**Supplemental:** Evergreen, Stephanie, *Chart Chooser 3.0* (handout) (available in “Lessons” tab)  
Evergreen, Stephanie, *Qualitative Chart Chooser* (handout) (available in “Lessons” tab)
Class #22: Qualitative Methods: Interviewing


Class #23: Public Engagement: Considerations for Planners


Class #24: Qualitative Methods: Content Analysis


Class #25: Program Evaluation


Class #26: Analyzing Qualitative Data 11/17


Class #27: Survey Research in Brief 11/22


*Thanksgiving Break: No Class* 11/24
Class #28: Mixed Method Research Designs

**Required:** Creswell, John, and Vicki Plano Clark, *Designing and Conducting Mixed Methods Research*, 2nd edition (Thousand Oaks, CA: Sage, 2011), Chapter 1: The Nature of Mixed Methods Research (pp. 1-18), and Chapter 3: Choosing a Mixed Methods Design (pp. 53-106; this section could be “power read”) (available in “Lessons” tab)


Class #29: Course Review

**Required:** none

**Supplemental:** none

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