

URBPLAN 721: Applied Planning Methods Syllabus

Fall 2019—3.0 Credits

Thursday, 1:30 to 4:10 p.m., AUP Room 183 and Lab Room 194

Course Instructor: Virginia Carlson, Ph.D., MUPP (vcarlson@uwm.edu)

Carlson Office Hours: Thursday, 10:00 a.m. to 12:00 pm, AUP Room 223

Phone 414.708.4398 (text OK and preferred)

Availability: Generally, radio silence from Saturday - Monday

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Office Hours: Tuesday from 3-5 in Workroom (AUP208)

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Course Background

As a professional planner, you will be an important participant in decision-making processes. Decisions are often complicated and controversial. While many factors contribute to these decisions, including political forces, data are almost always part of the argument. As a planner, people will look to you to understand, collect, analyze, and present data that can help inform decisions. You often will be asked to defend your choice of data and to defend your analysis.

You are entering a professional field that uses public data, at the beginning global revolution in data development and privacy concerns. The dimensions of the revolution and implications for the field of planning and policy will be a theme running through this course.

This graduate-level course will help you learn about data and methods that are used in the planning field, to use them correctly and logically in a professional context, and present them well. The course will not only cover the data and methods themselves, but also pay close attention to technical expertise in data exploration and visualization (primarily through Excel); professional writing standards; and the logic of arguments and persuasive speech and writing.

Texts, Readings

Required

- ***Internet, Phone, Mail, and Mixed-Mode Surveys: The Tailored Design Method 4th Edition.*** by Don A. Dillman, Jolene D. Smyth, Leah Melani Christian, Wiley, 2014
- ***Storytelling with Data: A Data Visualization Guide for Business Professionals.*** By Cole Nussbaumer Knaflic, 2015
- **Excel tutorials:** <https://www.contextures.com/>
- Supplemental readings as announced and available on the Canvas site or internet links.

Recommended

- **Student writing will be expected to adhere to the writing and grammar style given by these guides:**
 1. ***The Chicago Manual of Style***. University of Chicago Press. (Latest edition is 2017)
Online link to some of the material <https://www.chicagomanualofstyle.org/home.html> - both the “Teachers” link and the “Student” link are helpful; especially see <https://www.chicagomanualofstyle.org/book/ed17/frontmatter/toc.html> (section on grammar and usage)
 2. ***The Chicago Guide to Writing About Numbers***. University of Chicago Press. (Latest edition is 2015)
 3. **Two web sites are useful writing quick guides**
 - Lau, C. “Writing Tips for Planners,” UrbDeZine Los Angeles, <http://losangeles.urbdezine.com/2015/09/08/writing-tips-planners/>, September 8, 2015.
 - Plain English Campaign. “How to Write in Plain English,” <http://www.plainenglish.co.uk/files/howto.pdf>, 2016.
- You may also need to refresh **your knowledge of logic and common fallacies** found in writing and argumentation. My favorite book for this is **Asking the Right Questions: A Guide to Critical Thinking** by M. Neil Browne and Stuart M. Keeley. I’ve put the 9th edition on your recommended list, other editions (some are much more expensive) are available. Assignments will sometimes ask you to make an argument – be sure you’re aware of common logical mistakes.
- Finally, we will work with data using **Excel** and this course assumes you know the basics of summing, counting, and creating basic formulas including how to anchor a cell. Excel tutorials abound on YouTube. This might do for you if you need it: <https://www.youtube.com/watch?v=rwbhoOCgEAE>

A different topic will be covered each class session. The readings listed under each session below are required readings that should be done before you get to class. Some of the readings will come from the required text, and others will be posted under “Content” on the class Canvas website. All students are expected to read all the assigned readings BEFORE class and to actively participate in discussions.

In order to provide a productive learning environment for everyone, it is important for all students to engage in class. This includes showing up for class and asking questions and participating in discussions. In the interest of promoting a productive learning environment for all, please:

- Arrive on time and stay for the duration of class.
- Turn off or mute cell phones, mobile devices, and alarms for the duration of class.
- Turn off laptops unless instructed otherwise and refrain from accessing the internet on any other device during class.

Behaviors that detract from class learning will be penalized in the class participation grade. A sign-in sheet will usually be circulated at the beginning of class. Class participation may also include several in-class exercises throughout the semester.

Conduct and Ethics

Much of this class is about gathering data. Cite your sources. If you get information from a printed, online, video or another source, cite it. If you cite a reference word for word, put those words in quotes. Even if from an internet article. Don’t use someone else’s work as if it was your own without citing it. Citing sources, even if it takes extra time, enhances your professional credibility.

Students are expected to follow the Guide for Students at http://uwm.edu/deanofstudents/conduct/conduct_procedures/academic-misconduct/

Please closely review the definition of plagiarism. According to this source, “Plagiarism includes: 1) Directly quoting the words of others without using quotation marks or indented format to identify them; or, 2) Using sources of information (published or unpublished) without identifying them; or, 3) Paraphrasing materials or ideas of others without identifying the sources.” **This includes material from the internet.** Directions for correctly citing work may be included in assignments; otherwise

Plagiarism is a serious infraction. Any work that includes plagiarized material will be given a failing grade (sanction “B” in the flowchart linked below). No exceptions. I encourage you to review this flowchart. https://uwm.edu/academicaffairs/wp-content/uploads/sites/32/2015/02/misconduct_flowchart.pdf

Other Course Policies

This course adheres to campus policies regarding students with disabilities, religious observances, active military service, incompletes, discriminatory conduct, academic misconduct, complaints about the course, grade appeals, and firearms. For details about these policies, see <https://uwm.edu/secu/syllabus-links> and click on “syllabus links.” Alternative address for the pdf version: [PDF of Syllabus Links](#)

Assignments

The course assignments are designed to help you practice understanding, collecting, analyzing, and presenting planning-related data. ***Your assignments should be written to a professional standard and writing quality will be considered in your grades.*** Communicating your ideas clearly and effectively through writing is essential for your career, so it is important for this class.

For this course, it is appropriate (and encouraged) to discuss and work together on some assignments. For group assignments, only one assignment needs to be submitted for the group, but each person should be able to explain and understand all responses. In addition, group members will evaluate other members’ contributions to the group. All assignments should be uploaded to the course Canvas site by **9:00 a.m. on the due dates listed**. If you have any problems with the Canvas site, you can e-mail your assignment to vcarlson@uwm.edu. The assignments are described below.

Assignments are due by 9:00 a.m. on the dates as given in the assignment. Each calendar day late will result in loss of one grade (i.e., an “A” assignment will be given a “B”). A paper received at 9:01 a.m. on the due date is considered one day late.

Grading

The class has four modules and assignments are given for each module.

- The first is an introduction to data. Why we need data for planning, policy and public administration. How the “data landscape” has changed with the advent of the internet and data technology in terms of data availability, data stewardship, and good analysis.
- Second is a section on gathering primary data, including surveys and field research. What can you do to ensure quality primary data? Also, knowing how surveys are done will help you be critical about the information you consume.
- Third is a section on secondary data—data gathered by someone else. Some of these sources have historically been very standard for planning and policymaking, others not used as often.
- Fourth deals with financial analysis techniques specific to planning and policy.

Points are earned with the following components:

- 1. Class participation (15). (Ongoing).** Each student starts with 15 points in their class participation grade. One point is deducted for every unexcused class absence (please notify your TA as soon as you know a conflict/emergency has arisen and in order to garner an excused absence). Other deductions: as noted above, behaviors that detract from class learning will be penalized in the class participation grade. A sign-in sheet will usually be circulated at the beginning of class.
- 2. Numbers in the News. (5).** Identify and critique a news article that uses planning-related data.
- 3. Online Survey (10).** You'll use Qualtrics, an online app, to design and field a questionnaire.
- 4. Data Manipulation in-class Quiz (5).** As with the "Fed Stats" quiz mentioned below, the number of pages assigned for September 26 is quite large. This quiz will guide your reading on presenting data, although we will be referring to Nussbamer's book throughout the semester.
- 5. Fed Stats in-class Quiz (5).** There are lots of moving parts to the Federal Statistical System, which is the main source of demographic data used by planners. This quiz is formulated to guide your reading, aka, "what is most important" because of the large number of pages assigned for the day (October 3).
- 6. Profile of Milwaukee Neighborhood (25).** As we discover demographic data sources, you'll be expected to use these sources to build a story about a Milwaukee neighborhood.
- 7. Economic Profile (10).** A basic analysis of an economy using standard methods.
- 8. Final (25).** Not comprehensive. Will consist of questions on Benefit/Cost and Retail Markets.

A special note on **writing**. Part of the grade for most assignments will be for the written portion. Please pay attention to tone, style, understandability, organization, etc. Use the recommended resources given above for online and off-line help; also take advantage of the UWM Writing Center. I will be using the attached writing rubric to evaluate your writing. If your assignment doesn't meet the majority of the criteria in the "acceptable" column, your grade will be penalized. Specifics will be given with each assignment.

Total points will correspond with the following letter grades:

98 and above = A+
93 to 97.9 = A
91 to 92.9 = A-
88 to 90.9 = B+
83 to 87.9 = B
81 to 82.9 = B-
78 to 80.9 = C+
73 to 77.9 = C
(and so on)

Class Schedule

Module I – Introduction to Data

Class 1. September 5 – What is Data and Where Does it Come From? Also: Writing.

Data as approximation of “reality”
Public vs. private sources
Data/tech soup

Readings

- 1.1. Ford, K. “Planning in the Political Context.” Chapter 11 in *The Planner’s Use of Information*, edited by H. Dandekar. Second Edition, Chicago: Planners Press, 2003, pages 341-373.
- 1.2. Sonia Wright. *Quantitative Methods and Statistics: A Guide to Social Research*. Sage 1979; page 41 on “operationalization”
- 1.3. Robert M. Groves. “Three Eras of Survey Research.” *Public Opinion Quarterly* 75 no 5 (2011), pages 861-871.
- 1.4. Cavan Capps and Tommy Wright. “Toward a Vision: Official Statistics and Big Data.” *Amstat News* 434 (August 2013), pages 9-13.
- 1.5. Hammon, M. “Data-Driven: Leveraging the Potential of Big Data for Planning,” *Planning*, Volume 81, Number 4, pp. 23-29, April 2015.

Guest: Margaret Mika, Director, The Writing Center

In-class assignment: Excel skill quiz (not graded)

Assignment due this week:

Assignment given out this week: **Numbers in the News** (5 points)

Module II – Primary Data Collection

Class 2. September 12 – Dimensions of Designed Primary Data Collection

Sampling concepts (target population, probability sampling, response rate, biases)
Nominal Data and Classifications
Types of error
Statistics basics (sample size, confidence level)
Intro to Qualtrics

Readings

- 2.1 Geoffrey C. Bowker and Susan Leigh Star, “Introduction.” Pages 1-32 from *Sorting Things Out: Classification and its Consequences*. MIT Press, 2000.
- 2.2. **Dillman** et. al. Chapters 1, 2, 3 (skim 2)
- 2.3. Robert Niles’ website for data journalists:
<http://www.robertniles.com/stats/margin.shtml>
<http://www.robertniles.com/stats/dataonly.shtml>

Guest:

In-class assignment:

Assignment due this week:

Assignment given out this week: **Online Survey** (10 points)

Class 3. September 19 – Designing and Fielding Questions and Questionnaires

Readings

- 3.1. **Dillman** et. al. Chapters 4, 5, 6, 7, 9 (Familiarize yourself with the content contained in the “Guidelines” section of each chapter.)
- 3.2. Sam Lloyd. “The 10 Commandments for Writing Outstanding Survey Questions.” Jan 28, 2013. Retrieved from <https://www.qualtrics.com/blog/good-survey-questions/> on July 15, 2018

Guest:

In-class assignment:

Assignment due this week:

Assignment given out this week:

Class 4. September 26 – Data Manipulation and Presentation

Readings

- 4.1. **Nussbamer**, chapters: all
- 4.2. Pivot Tables in Excel: <https://www.contextures.com/CreatePivotTable.html>

Guest:

In-class assignment: **Data Manipulation in-class Quiz** (5 points).

Assignment due this week: **Online Survey** (10 points)

Assignment given out this week:

Module III – Secondary Data

Class 5. October 3 Introduction to Federal Statistical System

History of

Scope of data collection

Geographies

Same data, different sources

Readings

- 5.1. Statistical programs of the United States Government <https://www.whitehouse.gov/wp-content/uploads/2018/05/statistical-programs-2018.pdf> (focus on the programs described on pages 1-8, 10-16, and 20-26)
- 5.2. Connie Citro. *Principles and Practices for a Federal Statistical Agency*. National Academies Press, Sixth edition. Read pages 7-32; 41-54; 49-100 on <https://www.nap.edu/read/24810/>
- 5.4 Why is the Census Bureau Still Asking A Citizenship Question on Forms?
<https://www.npr.org/2019/08/09/743296249/why-is-the-census-bureau-still-asking-a-citizenship-question-on-forms>
- 5.4. Margo Anderson interview on the Decennial Census citizenship question:
<https://www.npr.org/2018/05/17/612082682/lawmakers-prepare-to-question-justice-department-on-census-citizenship-question>

5.5 Introduction to Census Geographies

https://factfinder.census.gov/help/en/tutorials/introduction_to_geographies_tutorial.htm (must enable **Flash Player** to view this tutorial)

Guest: Margo Anderson, historian of the United States Census. Distinguished Professor Emerita of History, UWM

In-class assignment: Fed Stats in-class Quiz (5 points)

Assignment due this week:

Assignment given out this week:

Class 6. October 10 – Demographic Data: Census and American Community Survey

Introduction to American Factfinder

Race and other classifications

Population pyramids

Readings

- 6.1. US Department of Commerce, US Census Bureau. *A Compass for Understanding and Using American Community Survey Data: What General Data Users Need to Know*, Available online, <https://www.census.gov/content/dam/Census/library/publications/2008/acs/ACSGeneralHandbook.pdf>, October 2008. (Skip portions on Margin of Error)
- 6.2 AFF Directions – Canvas Handout
- 6.3 Luke T. Rogers. “America’s Age Profile Told through Population Pyramids.” June 23, 2016. Census Blog, retrieved August 10, 2019 from <https://www.census.gov/newsroom/blogs/random-samplings/2016/06/americas-age-profile-told-through-population-pyramids.html>
- 6.3 Darron Gedge's Geography Channel “How to Read a Population Pyramid” YouTube video, published April 15 2015; retrieved August 10, 2019 <https://www.youtube.com/watch?v=Cx7KFyasW6A> It’s a bit slow going, but still a good simple explanation

Guest:

In-class assignment:

Assignment due this week:

Assignment given out this week: Profile of Milwaukee Neighborhood (25 points)

Class 7. October 17 – Demographic Data: Analyzing Population and Income

Cohort-component analysis

Population projections

Income

Gini coefficient

Readings

- 7.1. Southeastern Wisconsin Regional Planning Commission (SEWRPC). *The Population of Southeastern Wisconsin*, Technical Report No. 11, Fifth Edition, Available online, <http://www.sewrpc.org/SEWRPCFiles/Publications/TechRep/tr-011-5th-ed-population-se-wisc.pdf>, 2013. (Skim pp. 1-16, 27-43, 45-61, 82) (pp. 45-61 includes the cohort-component method)
- 7.2 Measure Evaluation. “The Cohort Component Population Projection Method.” Online at <https://www.measureevaluation.org/resources/training/online-courses-and-resources/non->

[certificate-courses-and-mini-tutorials/population-analysis-for-planners/lesson-8/lesson-8-the-cohort-component-population-projection-method](#)

Guest:

In-class assignment:

Assignment due this week:

Assignment given out this week:

Class 8. October 24 - Demographic Data: Analyzing Work

Work

Job vs. Employment

Commuting, Place of Work vs. Place of Residence: On the Map

Presenting Jobs and Income data (indexing)

Readings

- 8.1. David Leonhardt. "Out of a Job and No Longer Looking." New York Times, September 29, 2002. (Skim to ascertain what characterizes person who are "unemployed" from those "not in labor force.")
- 8.2. http://www.bls.gov/cps/cps_htgm.htm (Skim links to understand where unemployment data come from, according to the BLS, and more on the definition of unemployed.)
- 8.3. <https://bizfluent.com/how-5339534-calculate-index-numbers.html>
- 8.4. Southeastern Wisconsin Regional Planning Commission (SEWRPC). *The Economy of Southeastern Wisconsin*, Technical Report No. 10, Fifth Edition, Available online, <http://www.sewrpc.org/SEWRPCFiles/Publications/TechRep/tr-010-5th-ed-economy-se-wisc.pdf>, 2013. (Skim Chapter 2)

Guest:

In-class assignment:

Assignment due this week:

Assignment given out this week: **Economic Profile** (10 points)

Class 9. October 31 – Economic Data: Business Patterns, Economic Census, Bureau of Labor Statistics

NAICS

Location Quotient

Shift Share

Readings:

- 9.1. https://www.census.gov/eos/www/naics/2017NAICS/2017_NAICS_Manual.pdf (Read pages 1-24 to understand NAICS and how it is structured).
- 9.2. <https://www.census.gov/programs-surveys/economic-census/about/faq.html> (Choose the top couple of links to get a sense of what the Economic Census is.)
- 9.3. <https://www.bls.gov/web/empsit/cesprog.htm> (Choose the top couple of links to get a sense of what the Current Establishment Survey is.)

- 9.4. LMI Training Institute. Location Quotient Webinar. Powerpoint presentation September 14, 2012.
- 9.5. Source unknown. *Shift Share Analysis*.
- 9.6. Virginia Carlson lecture on economic base.
- 9.7. Brian Reilly et. al. A Competitive Industries Analysis of the Mercer Region in Central NJ (Pages 15 – 19 on competitive analysis). (No date; circa 2012).

Guest:

In-class assignment:

Assignment due this week:

Assignment given out this week:

Module IV –Financial Decision-Making

Class 10. November 7– Values over Time

Adjusting for inflation

Discounting/Present Value

Indexing

Seasonal Adjustment

Readings:

- 10.1. <https://www.maa.org/press/periodicals/loci/joma/the-consumer-price-index-and-inflation-adjust-numbers-for-inflation>
- 10.2. <https://www.accountingformanagement.org/present-value-of-a-single-payment-in-future/>
- 10.3. <https://www.accountingformanagement.org/present-value-of-an-annuity/>

Guest:

In-class assignment:

Assignment due this week: Economic Profile (10 points)

Assignment given out this week:

Class 11. November 14- Benefit/Cost Analysis

Readings:

11.1. Excerpt from: Bendavid-Val, chapter 17

<https://www.fastcompany.com/3046345/how-copenhagen-became-a-cycling-paradise-by-considering-the-full-cost-of-cars>

Guest:

In-class assignment:

Assignment due this week:

Assignment given out this week:

Class 12. - November 21 – Presentations – Draft presentations of Milwaukee Neighborhood

Readings:

Guest: Cynthia Short, Co-Founder and Chief Experience Officer, Lexico

In-class assignment:

Assignment due this week:

Assignment given out this week:

Class 13. – December 5 - Retail Trade Areas

Economic Census

Note: there are more “sophisticated” ways of performing market analysis with existing GIS tools, but here I take you back to basics.

Readings

13.1. Retail Market Analysis. Center for Urban Economic Development, 1994.

13.2. Arthur O’Sullivan. Essentials of Urban Economics. Chapter 4: Market Areas and the New Urban Hierarchy. (Skim to get a sense of the geographic scale at which different retail and service sectors work.)

13.3. Michael Corkery. New York Times September 3, 2018. *Hard Lessons (Thanks, Amazon) Breathe New Life into Retail Stores*

<https://www.nytimes.com/2018/09/03/business/retail-walmart-amazon-economy.html>

Guest:

In-class assignment:

Assignment due this week:

Assignment given out this week:

14. – December 12 – Final Presentations

Guest:

In-class assignment:

Assignment due this week: **Profile of Milwaukee Neighborhood** (25 points)

Assignment given out this week:

Final Exam (25 points) Due Thursday December 19th at 1:30

		GRADING RUBRIC FOR WRITING		
Content		Fabulous	Acceptable	Needs Work
<i>The paper...</i>	Addresses the topic or question			
	Accurately presents assigned authors' viewpoints			
	Presents clear argument or story			
	Provides sufficient textual evidence to support the argument			
	Is professional in tone			
Structure				
<i>The introduction...</i>	Is present in the paper			
	Includes a clearly stated thesis			
	Indicates how the paper is organized			
<i>The body...</i>	Contains a complete discussion and support			
	Refrains from personal opinion			
	Refrains from common logical fallacies			
<i>Each paragraph...</i>	Includes a topic sentence			
	Develops ONE main idea			
	Paragraph sentences relate to and support topic sentence			
	Has a transition sentence linking it to the next paragraph			
<i>The conclusion...</i>	Recaps the thesis statement and the essay's main points			
	Presents a closing statement of the writer's position			
Organization and Development				
<i>The entire composition ...</i>	Is logically organized			
	Has a solid argument with supporting evidence			
<i>Main points ...</i>	Are relevant to the thesis statement			
	Are discussed without too much repetition			
	Effectively integrates data into the context of the discussion			
Style				
	Is concise and precise			
	Is free of misspellings			
	Is free of grammatical mistakes			
	Lacks incomplete sentences			
	Uses correct punctuation			
	Includes subject/verb agreement			
	Numbers are used and referred to correctly			
	Is free of jargon, cliches, and hyperbole			
	Cites references correctly			
	Is free of pronouns without antecedents			
Presentaton and Graphics				
	Assignment follows template given in assignment directions (e.g., "memo" style)			
	Visuals do not have clutter			
	Avoids pie charts			
	Visuals contain correct use of preattentive attributes			
	Visual choice is appropriate for type of information			
	PPT slides contain horizontal logic			
	Visuals contain vertical logic			
	Source of data is given			
	Is free of jargon, cliches, and hyperbole			