

Department of Urban Design and Planning

University of Washington

Course Title: **Planning Methods** (UrbDP 510, SLN [21527](#))

4 Credits

Meetings: **Mondays & Wednesdays, 10:30 am-12:20 pm**

Classroom: **Gould 114**

Class website: <https://canvas.uw.edu/courses/1259496>

Lab: **Gould 114 (Bring your own laptop)**

Instructor: **Christine Bae, Ph.D., Associate Professor**

Office Hours: Mon 1:00 – 2:00 PM or by appointment

Office: Gould 410 C

Email: cbae@uw.edu

TA: **Boyang Sa**

Office Hours: Wed 12:30-1:30PM or by appointment

Office: Digital Commons

Email: boyangsa@uw.edu

Purpose

This course is a required core course for students who are pursuing the master's degree in Urban Planning, or the Certificate of Urban Design. The course targets students who do not have a previous degree in urban planning.

There is a wide range of quantitative and qualitative planning methods in our discipline. However, particular attention will be given to planning methods that are quantitative, and useful for planning policy analysis, e.g. demographic, economic and environmental planning.

The primary objectives of this course are as follows:

1. to be familiar with primary and secondary data sources
2. to be familiar with computer-based quantitative methods and their applications
3. to discuss the outcomes and limitations of each method's application
4. to develop a critical perspective of model applications in urban planning

The course consists of lectures, computer lab assignments. There are no prerequisites. However, those who have never used MS Excel, ArcGIS, or need additional help to undertake class assignments, should consult Boyang and Christine by Jan 7 (Mon), 2019.

Overview

This course is comprised of four important topics for urban planning; (1) the economic based model, (2) cohort component population projection, (3) land capacity analysis, and (4) indicators and indices.

Because there are four separate components with assignments, you may feel that the class moves quickly. Your continuous attendance is very important.

The class will be taught in Gould 114. All students should bring your own personal laptops to class as you did in UrbDP 520. The class will use MS Excel, and ArcGIS. Assignment guidelines and help kit are available in MS Excel, and ArcGIS. Students who use Mac should be ready to use those programs. This will allow us to devote more time to the mechanics of each of the methods, and to develop an understanding of the methods through hands-on exercises. The Canvas website will provide the reading materials (PDF files), a set of presentation slides that summarize the material that will be covered in class, the assignments with selective databases, and other supplemental notes. It is expected that you will review materials prior to a topic being addressed in class. Each method will be discussed for approximately two to three weeks. It is highly advised that you save your own worksheet, program, and other related materials from class to class since each day builds on the previous day's work.

Grading

There are two different components that contribute to grading.

1. Computer labs and assignments (90 percent)
2. Class participation (10 percent)

All assignments (there are four; see course schedule) should be submitted via the [Canvas Drop-Box using this link, <https://canvas.uw.edu/courses/1259496/assignments>](#) by 11:59 pm on the due date, keep written answers within the specified length and use the file types and name formats indicated in the assignment instructions. You are expected to submit every assignment on time, and quality counts. The late submission will affect 5% of your assignment scores. If you believe that you will have difficulty in meeting any of the assignment deadlines, please consult Boyang and Christine prior to the deadlines. We encourage active class participation and constructive discussion. There is no final exam.

If you have a disability (physical, learning, or psychological) that makes it difficult for you to carry out the coursework as outlined and/or requires accommodations, such as recruiting note takers, readers, or extended time on assignments, please contact Christine, or Disabled Student Services, within the first week of the quarter. DSS is available at 685-1511, or at <http://depts.washington.edu/uwdrs/>. They will be able to provide you with information and review appropriate arrangements for reasonable accommodation.

Finally, we expect students to uphold university policies on academic integrity. Failure to uphold academic integrity will be dealt with in accordance with university procedures. The UW's policy on academic integrity and plagiarism is located at:

<https://www.washington.edu/cssc/facultystaff/academic-misconduct/>
<http://depts.washington.edu/grading/pdf/AcademicResponsibility.pdf>

Course Schedule **Check Canvas for up-to-date schedule**

Dates	UW Holidays	Topics	Assignment Due
1/7		Indicators (A)	
1/9, 14, 16		MyIndi project introduction Economic Base Analysis (20%)	1/21 (Mon)
	1/21(Mon)	MLK DAY	
1/23, 28, 30 2/4, 6, 11,		Population Projection: Cohort Component Analysis (25%)	Part 1: 2/1 (Fri) Part 2 and 3: 2/15 (Fri)
1/30		EBA Feedback, Indicators (B)	
2/13, 20, 25, 27, 3/4		Land capacity analysis (20%)	3/8 (Fri)
	2/18 (Mon)	PRESIDENT'S DAY	
2/22		CCA Feedback, Indicators (C)	
3/6, 11, 13		Indicators presentation and report (25%)	3/16 (Sat)

510 Class Readings **Check Canvas for up-to-date reading lists**

Jan 7 Indicators (a *See Canvas for more readings)

Global Power City Index 2017, The Mori Memorial Foundation, Available at

<http://mori-m-foundation.or.jp/english/ius2/gpci2/index.shtml>

http://mori-m-foundation.or.jp/pdf/GPCI2018_summary.pdf

2018 Global Cities Index, A.T Kearney, 2018

<https://www.atkearney.com/2018-global-cities-report>

Learning from the East – Insights from China’s Urban Success,

<https://www.atkearney.com/documents/20152/1136372/2018+Global+Cities+Report.pdf/21839da3-223b-8cec-a8d2-408285d4bb7c>

Innes, Judith and David Booher, 2000, Indicator for sustainable communities: A strategy building on complexity theory and distributed intelligence, *Planning Theory and Practice*, 1(2), pp. 173-86.

Florida, Richard, 2002, Bohemia and economic geography, *Journal of Economic Geography*, 2, pp. 55-71.

Jan 9 to 16 Economic Base Analysis (EBA)

Puget Sound Regional Council (2017) *Economic Analysis of the Central Puget Sound Region*.
<https://www.psrc.org/sites/default/files/economicanalysiswithcover.pdf>

- General characteristics of regional economy: pp. 2-33
- General characteristics of household economy: pp. 65-73
- Regional resiliency, health, and opportunity: pp. 74-81

Jan 9 Puget Sound Industry Clusters

Puget Sound Regional Council (2017) *Economic Analysis of the Central Puget Sound Region*.
<https://www.psrc.org/sites/default/files/economicanalysiswithcover.pdf>

- Chapter III. Regional industry clusters and specialization: pp. 34-46

Puget Sound Regional Council (2017) *Amazing Place: Growing Jobs and Opportunity in the Central Puget Sound Region*. <https://www.psrc.org/sites/default/files/amazingplacestrategy.pdf>

- Chapter V. Regional Industry Profiles, pp. 49-69
Appendix xx, xx, xx

Jan 9 EBA: Concept

Bae, C.-H. Christine "EBM for 510 Students"

Klosterman, R. (1990) Chapter 9, *Economic Analysis Technique*, pp. 113-124, in *Community Analysis and Planning Technique*. Oxford, UK: Rowman and Littlefield Publishers (excluding pp. 122-123)

Jan 14 EBA: Lab (Data)

ibid. Chapter 10, Assumption and Location Quotient Approaches, pp. 125-148

Jan 16 EBA : Analysis and Critique

Ibid. Continue reading Chapter 9 & 10

Jan 23 to Feb 11 Cohort Component Analysis (CCA)

Puget Sound Regional Council, 2017, *Economic Analysis of the Central Puget Sound Region*.
<https://www.psrc.org/sites/default/files/economicanalysiswithcover.pdf>

- General characteristics of regional population: pp. 47-64

Jan 23 Population Projections and Planning in WA

Klosterman, Richard E. (1990) "The Cohort Component Technique," Part II in *Community Analysis and Planning Techniques*. Oxford, UK: Rowman & Littlefield Publishers, Inc.

Washington State Office of Financial Management (2018) *Forecast of the State Population: December 2018 Forecast*. https://www.ofm.wa.gov/sites/default/files/public/dataresearch/pop/stfc/stfc_2018.pdf

Puget Sound Regional Council, "Regional Population Trends," August 2, 2018, <https://www.psrc.org/sites/default/files/trend-population-201808.pdf>

_____, "Population grows in fast pace in 2017," July 10, 2017, <https://www.psrc.org/whats-happening/blog/population-grows-fast-pace-2017>, Accessed in Dec 2017

Jan 28 Population Pyramids, CCA Concepts and Framework

Klosterman, Richard E. (1990) Chapter 4: Cohort-Component Technique: An Introduction, pp. 49-64 in *Community Analysis and Planning Techniques*. Oxford, UK: Rowman & Littlefield Publishers, Inc.

Jan 30- CCA Concepts and Framework

ibid. Chapter 5: Mortality Component, pp. 65-77

- **CCA: Life Tables and Surviving Population**

Centers for Disease Controls, National Vital Statistics System, United States Decennial Life Tables 1999-2001: State Life Tables <https://www.cdc.gov/nchs/nvss/mortality/lewk4.htm>

Spreadsheet versions available at

ftp://ftp.cdc.gov/pub/Health_Statistics/NCHS/Publications/NVSR/60_09

Lifetable columns

Jan 30 EBA Feedback and Indicator (b)

Savageau, David, *Places Rated Almanac*. 7th Edition

Feb 4 CCA: Net Migration

Klosterman, Richard E. (1990) Chapter 7: Migrant Component, pp. 89-99 in *Community Analysis and Planning Techniques*. Oxford, UK: Rowman & Littlefield Publishers, Inc.

Washington State Office of Financial Management, "Population Change: Natural Increase and Net Migration," <https://www.ofm.wa.gov/washington-data-research/statewide-data/washington-trends/population-changes/population-change-natural-increase-and-net-migration>

_____, "Growth Management Act population projections for counties: 2010 to 2040," <https://www.ofm.wa.gov/washington-data-research/population-demographics/population-forecasts-and-projections/growth-management-act-county-projections/growth-management-act-population-projections-counties-2010-2040-0>

Feb 6 CCA: New Born Population

Klosterman, Richard E. (1990) Chapter 6: Fertility Component, pp. 81-88 in *Community Analysis and Planning Techniques*. Oxford, UK: Rowman & Littlefield Publishers, Inc.

Washington State Department of Health, "Demographic Tables, 1980-2016"

<https://www.doh.wa.gov/DataandStatisticalReports/HealthStatistics/Birth/BirthTablesbyTopic>

- **Table A7.** Place of Residence, Sex, and Place of Occurrence, and
- **Table A9.** Mother's Age Group by Place of Residence,

Feb 11 CCA: Completion of Female Population Projection and Male Population Projection

Feb 13 to Mar 4 Land Capacity Analysis

Feb 13 LCA: Buildable Land Analysis and Growth Management

Moudon, Anne V. and M. Hubner, 2000, "Current Land Monitoring Practices and Use of GIS: Challenges and Opportunities," Chapter 1, and "Elements of General Framework for Land Supply and Capacity Monitoring," Chapter 2 in *Monitoring Land Supply System with Geographic Information System*. John Wiley and Sons

King County, Washington State, *The King County Buildable Land Report 2014*

<http://www.kingcounty.gov/~media/depts/executive/performance-strategy-budget/regional-planning/buildable-lands-report/king-county-buildable-lands-report-2014.ashx?la=en>

City of Seattle, Department of Planning and Development, 2014, *Seattle 2035: Development Capacity Report*,

https://www.seattle.gov/DPD/cs/groups/pan/@pan/documents/web_informational/p2182731.pdf

City of Seattle Comprehensive Plan <https://www.seattle.gov/opcd/ongoing-initiatives/comprehensive-plan>

Seattle Zoning Classification http://www.ravennabryant.org/wp-content/uploads/2013/05/Seattle-Zones_LatestReleased_DPDP_0202501.pdf

American Planning Association (2001) Land Based Classification Standards (official color codes for land uses) https://planning-org-uploaded-media.s3.amazonaws.com/legacy_resources/lbcs/standards/pdf/InOneFile.pdf

Feb 13, 20, 25, 27, and Mar 4 LCA: Lab

Mar 6 to Mar 13: Indicators: MyINDI Group Presentations

Feb 27: Indicators (c)

Mar 6, 11 and 13: MyINDI Presentations