# NOHAD A. TOULAN SCHOOL OF URBAN STUDIES & PLANNING PORTLAND STATE UNIVERSITY

# USP 597: Regional Economic Analysis Spring 2021

Profs. Greg Schrock (gschrock@pdx.edu) & Yu Xiao (yxiao@pdx.edu) Time: Thursdays 2:00-3:50pm

(note: most weeks the course lectures will be delivered asynchronously and this time will be reserved for open lab/Q&A; we ask you to reserve this time in case we need to meet synchronously)

# **Credits: 2 graduate hours**

#### **Course Description:**

This course offers students an opportunity to learn about and apply tools for analyzing regional economies. The course will combine lecture, demonstration, and lab to assist students learning about data concepts, applying available regional data tools, and developing regional economic data products.

#### **Objectives:**

This two-credit course builds on MURP core courses, especially Planning Methods II (USP 535), and will complement other courses in the MURP economic development pathway (USP 572, Regional Economic Development, USP 517, Urban Economic Development Policy, and USP 578, Impact Assessment), by providing students skills important to economic development practitioners and researchers. It is also appropriate for students in other degree programs (eg, MUS, MRED, MPP) or graduate certificate programs (eg, Applied Demography) looking for a focused discussion of regional analysis methods and tools.

There are no course prerequisites, although students are strongly encouraged to have completed a basic or applied statistics course, such as USP 535 (Planning Methods I).

Students will choose a regional economy that they will analyze over the course of the quarter. Each week will build on the previous week by providing students additional data sources and tools for adding an additional layer of understanding of the region's economy. They will also build data manipulation and management skills using Excel, and, optionally, Tableau for data visualization.

#### Learning outcomes:

At the completion of the term, students should be able to:

- Locate, analyze, and interpret important sources and concepts of demographic and economic data relevant to regional economies;
- Apply tools of demographic and economic analysis, including population pyramids, location quotients, shift-share analysis, and cluster analysis;
- Understand and apply methodologies for conducting Economic Opportunity Analysis as prescribed by the Oregon Statewide Land Use Program.
- Apply good data management and visualization practices.

#### **Required texts and readings:**

There is no required text. We will provide worksheets and information in class and via D2L. However, there are several good sources of basic information regarding data sources and methods. We recommend the following:

Quinterno, John. 2014. *Running the Numbers: A Practical Guide to Regional Economic and Social Analysis.* Armonk, NY: M.E. Sharpe.

This book is accessible from the PSU library:

https://www-taylorfrancis-com.proxy.lib.pdx.edu/books/running-numbers-practical-guideregional-economic-social-analysis-2014-john-quinterno/10.4324/9781315701042

#### **Assignments:**

- Weekly assignments (60%): Each week from weeks 2-7, students will complete a brief assignment that applies the data tools and concepts to their selected region. Students will be graded on each assignment, worth 10 points each. Each weekly assignment will be due via D2L at 1pm on the following Thursday (ie, week 3 for week 2's assignment). Students will not complete separate assignments for the content of weeks 8-10, but are expected to incorporate <u>at least one</u> of those sources in their final paper.
- **Final Paper and presentation (40%):** Students will produce a final report about their region, based on the data sources from the preceding weeks, plus any other sources they care to use. They will make a brief (approx. 10 minute) presentation based on this report during the final week of the class, with the paper due on Friday, June 11th. There is no final examination.
- Late Submission Policy: Late submissions will be accepted with a 10% (ie, one letter grade) deduction per 24 hour period; this may be reduced or waived based on extenuating circumstances. However, it is strongly recommended that you notify us in advance if you are unable to meet a deadline.

# Grading

Weekly assignments Final Paper and Presentation Total 60 points (10 points \*6) 40 points 100 points

Course grades will be assigned on a criterion-reference scale as follows: A: 93-100% A-: 90-92%

B+: 87-89% B: 83-86% B-: 80-83% (minimum Graduate School passing grade) C+: 77-79% C: 73-76% C-: 70-72% D+: 67-69% D: 63-66% D-: 60-62% F: <60%

# **Course overview**

Week	Торіс	Lead
Week 1 (4/1)	<ul> <li>Introduction to Regional Economic Analysis</li> <li>Overview of course work, policies and learning objectives.</li> <li>Broad overview of data sources (i.e., BLS, Census, BEA, state LMI agencies) and data concepts that are important to doing regional economic analysis.</li> <li>Recommended Reading: Quinterno, chs 1-2, 4, "Introduction" and "Regional Geography," and "Data Sources, Concepts and Calculations"</li> </ul>	Schrock
Week 2 (4/8)	<ul> <li>Demographic Analysis</li> <li>Review basic demographic concepts (introduced in USP 535): natural increase, net migration, race and ethnicity, fertility and mortality, families and households, etc.</li> <li>Apply demographic analysis tools in relation to economic development, such as population pyramids, population projections, and migration analysis.</li> <li><i>Reading: Quinterno, ch. 5, "Demographics"</i></li> </ul>	Xiao
Week 3 (4/15)	<ul> <li>Business &amp; Industry Structure</li> <li>Review data sources for analyzing a region's business and industrial structure, with focus on employment data.</li> <li>Review analytical methods for calculating industrial concentration.</li> <li><i>Reading: Quinterno, ch. 6, "Business Structure"</i></li> </ul>	Schrock
Week 4 (4/22)	<ul> <li>Industrial Change</li> <li>Review shift-share analysis for understanding regional economic change in three components: national growth, industrial mix, and regional shift.</li> <li>Conduct shift-share analysis for a region.</li> <li><i>Reading: TBD</i></li> </ul>	Xiao
Week 5 (4/29)	<ul> <li>Labor Market Analysis, Part 1: Occupations</li> <li>Review data sources for understanding how to characterize the occupational composition of a regional economy, including their education and training and requirements, wages and benefits, and income.</li> <li>Develop profile of regional labor market characteristics.</li> <li><i>Reading: Quinterno, ch. 7, "Labor Markets"</i></li> </ul>	Schrock
Week 6 (5/6)	<ul> <li>Labor Market Analysis, Part 2: Employment Geography</li> <li>Review Longitudinal Employer-Household Dynamics dataset and how it can be used to understand relationships between where people work and where they live, and workforce and employer characteristics.</li> <li>Learn how to use the Census Bureau's OnTheMap tool for visualizing employment data and labor market characteristics.</li> <li><i>Reading: TBD</i></li> </ul>	Xiao
Week 7 (5/13)	Business, Entrepreneurship and Innovation	Schrock

	<ul> <li>Introduce business listing databases as a source of detailed establishment information, and methodological issues with using these sources.</li> <li>Introduce data sources for analyzing regional entrepreneurship and innovation outcomes.</li> <li><i>Reading: TBD</i></li> </ul>	
Week 8 (5/20)	<ul> <li>Input-Output/Cluster Analysis</li> <li>Review industry cluster definitions and why industry clusters are important to regional economic analysis.</li> <li>Review the process for identifying important industry clusters and their components.</li> <li>Develop visualizations of clusters that help to clarify the agglomerative relationships among companies and industries.</li> <li><i>Reading: TBD</i></li> </ul>	Xiao
Week 9 (5/27)	<ul> <li>Workforce Demographic Analysis (using PUMS)</li> <li>Introduce American Community Survey Public Use Microdata Sample (PUMS) as data source for customized tabulations.</li> <li>Review sources for accessing and analyzing ACS PUMS data.</li> <li>Apply PUMS data to analyze workforce demographics by occupation.</li> <li><i>Reading: TBD</i></li> </ul>	Schrock
Week 10 (6/3)	<ul> <li>Employment Land Analysis (Economic Opportunities Analysis)</li> <li>Understand the requirements of Oregon's Statewide Planning Goal 9 and use the data and analyses developed in previous weeks to craft a Goal 9 analysis.</li> <li><i>Reading: TBD</i></li> </ul>	Xiao
Week 11 (6/10)	Final Presentation! Final report due on Friday 6/11 at 11:59 pm	

# **Other Policies**

# Academic Integrity Statement

PSU's Student Code of conduct prohibits "All forms of academic dishonesty, cheating, and fraud, including but not limited to: (a) plagiarism, which includes, but is not limited to, word for word copying, using borrowed words or phrases from original text into new patterns without attribution, or paraphrasing another writer's ideas; (b) The buying and selling of all or any portion of course assignments and research papers; (c) Performing academic assignments (including tests and examinations) for other persons; (d) Unauthorized disclosure and receipt of academic information; and (e) Falsification of research data."

# Access and Inclusion for Students with Disabilities

PSU values diversity and inclusion; My goal is to create a learning environment that is accessible, equitable, inclusive, and welcoming. I am committed to fostering mutual respect and full participation for all students. If any aspects of instruction or course design result in barriers to your

inclusion or learning, please notify me. Additionally, the Disability Resource Center (DRC) provides reasonable accommodations for students who encounter barriers in the learning environment. The DRC works with students who have physical, learning, cognitive, mental health, sensory, and other disabilities.

If you have, or think you may have, a disability that may affect your work in this class and feel you need accommodations, contact the Disability Resource Center to schedule an appointment and initiate a conversation about reasonable accommodations.

If you already have accommodations, please contact me to make sure that I have received your faculty notification letter from the DRC so we can discuss your accommodations.

The DRC is located in 116 Smith Memorial Student Union, Suite 116. You can also contact the DRC at 503-725-4150 or, drc@pdx.edu. Visit the DRC online at https://www.pdx.edu/disability-resource-center.

# **Title IX Reporting Obligations**

Portland State is committed to providing an environment free of all forms of prohibited discrimination and sexual harassment (sexual assault, domestic and dating violence, and gender or sex-based harassment and stalking). If you have experienced any form of gender or sex-based discrimination or sexual harassment, know that help and support are available. Information about PSU's support services on campus, including confidential services and reporting options, can be found on PSU's Sexual Misconduct Prevention and Response website at:

http://<u>www.pdx.edu/sexual-assault/get-help</u> or you may call a confidential IPV Advocate at 503-725-5672 or schedule Online at <u>https://psuwrc.youcanbook.me</u>. You may report any incident of discrimination or discriminatory harassment, including sexual harassment, to:

• PSU's Title IX Coordinator: Julie Caron by calling 503-725-4410, via email at titleixcoordinator@pdx.edu or in person at Richard and Maureen Neuberger Center (RMNC), 1600 SW 4th Ave, Suite 830

• Deputy Title IX Coordinator: Yesenia Gutierrez by calling 503-725-4413, via email at yesenia.gutierrez.gdi@pdx.edu or in person at RMNC, 1600 SW 4th Ave, Suite 830 Please be aware that all PSU faculty members and instructors are required to report information of an incident that may constitute prohibited discrimination, including sexual harassment and sexual violence. This means that if you tell me about a situation of sexual harassment or sexual violence that may have violated university policy or student code of conduct, I have to share the information with my supervisor, the University's Title IX Coordinator or the Office of the Dean of Student Life. However, the Title IX Coordinators will keep the information confidential and refer you to a confidential advocate. For more information about Title IX please complete the required student module *Creating a Safe Campus* in your D2L.

# Submitting work online

For assignments that require uploading files to D2L, it is the student's responsibility to verify that (1) all files are submitted in D2L prior to the deadline and (2) all submitted files are those that the student intends to be graded for the assignment. Submitting the "wrong" file by accident is not acceptable grounds for a deadline extension. Assignment grades will be based on the file submitted prior to the posted deadline. Files submitted in a format that cannot be accessed by the instructor cannot be graded and will therefore receive a 0. Acceptable file formats are MS Office formats (e.g.

Word, Excel, Powerpoint) or PDF files. Individual assignment instructions may contain a required file format.

#### **Technology access**

Proficiency in the use of D2L, PSU email, and other computer tools such as ZOOM or part of google suite is required for this course. This course requires consistent access to functioning computer equipment and Internet access throughout the length of the course. Reliance on a cellular connection may not provide reliable and fast access to online learning resources. Here are some broadband programs that are free or low-cost:

https://www.highspeedinternet.com/resources/are-there-government-programs-to-help-me-get-i nternet-service