INFRASTRUCTURE PLANNING AND FINANCE
Urban Design and Planning 466A/566A, Fall Quarter 2020

Class: Monday and Wednesday, 8:30 to 10:20 am (Pacific Time)
Instructor: Prof. Jan Whittington, janwhit@uw.edu
Office hours: By appointment
Canvas: https://canvas.uw.edu/courses/1403210 (See Canvas for Zoom Meeting Information)

This course is focused on infrastructure planning and finance and, more generally, on the relationship between planning and budgeting. The course is divided into three parts.

The course begins with an introduction to infrastructure systems: water and sewer services, solid waste disposal, transportation, and fire services. In this segment of the course, infrastructure planning is distinguished from and related to budgeting and finance. We explore basic concepts, legal frameworks, politics, and processes used in the systems studied, including techniques in infrastructure planning aimed at estimating demand and forecasting effects on land use and climate change.

The second part is focused on local government finance. We study government’s conceptual economic framework, budgeting approaches, and taxes such as property tax, sales tax, and user fees. We examine arguments for and examples of outcome-based, client-oriented programming and budgeting. The features of local finance are introduced and the economic theories with which they are associated, including neoclassical, public goods, club goods, game theory, and transaction costs.

Infrastructure finance is the subject of the final part of the course. We examine the relationship between sources of funds and their uses for infrastructure. Our study includes all common forms of finance, such as pay-as-you-go, user fees, special districts, public and private debt, impact fees, exactions, and tax increment finance. We devote considerable attention to the equity and distributional issues that arise from alternative forms of finance. We study the assessment and prioritization of infrastructure investments in changing economic conditions and under climate change, the development of Capital Improvement Programs (aka Capital Investment Plans), and the implications of alternative forms of project and program delivery, such as public-private partnerships, design-build contracts, and privatization.

Required Texts:

Your experience in this class is important to me. It is the policy and practice of the University of Washington to create inclusive and accessible learning environments consistent with federal and state law. If you have already established accommodations with Disability Resources for Students (DRS), please activate your accommodations via myDRS so we can discuss how they will be implemented in this course. If you have not yet established services through DRS, but have a temporary health condition or permanent disability that requires accommodations (conditions include but not limited to: mental health, attention-related, learning, vision, hearing, physical or health impacts), contact DRS directly to set up an Access Plan. DRS facilitates the interactive process that establishes reasonable accommodations. Contact DRS at disability.uw.edu.
Instructional Objectives

+ Describe the roles of local finance and political organization in urban planning
+ Explain the relationship between public facilities, growth, and local finance, and relate these issues to contemporary urban problems, such as urban sprawl and climate change.
+ Analyze a local infrastructure system.
+ Explain the local finance process, including key concepts, relationships, processes, theories, and approaches in local finance.
+ Address equity, long-range, and distributional issues in infrastructure planning and finance.
+ Analyze local budgets and fiscal issues through concepts and theories, and gain experience in capital improvement programming (aka capital investment planning) and budgeting.
+ Identify and apply the rules of thumb (standards and equations) employed in infrastructure planning and local finance, and analyze the assumptions and values underlying financing techniques.

Course Requirements (perfect grade = 400 points):

- Quizzes based on readings 50
- Participation in class discussions 50
- Systems paper 100
- Group project 100
- Final exam (short essay answers) 100

Academic Standards

Turn assignments in to Canvas on time. Late work is not accepted. Grading will be based on content, organization, and measures of style appropriate to writing at the upper undergraduate or graduate level. Style refers to your method of citing sources, grammar, punctuation, and related issues. I (strongly!) urge you all to refer to the Chicago Manual of Style (17th Edition, University of Chicago Press) as you compose and edit your work. When in doubt, check it out. Papers that do not conform to Chicago Style will be marked down, lose credit for this assignment and impact your grade. See this site: http://guides.lib.uw.edu/research/citations/citation-basics. Please make use of the expertise and resources available to you. Odegaard Library has one of numerous writing centers on campus, available to you free of charge, as shown: http://guides.lib.uw.edu/c.php?g=342041&p=2300216.

The University takes academic integrity very seriously. Behaving with integrity is part of our responsibility to our shared learning community. If you are uncertain about if something is academic misconduct, ask me. I am willing to discuss questions you might have. Acts of academic misconduct may include but are not limited to:

- Cheating (working collaboratively on quizzes/exams and discussion submissions, sharing answers and previewing quizzes/exams)
- Plagiarism (representing the work of others as your own without giving appropriate credit to the original author(s)). This constitutes plagiarism whether it is intentional or unintentional. I advise each of you to read a style manual in order to learn how to avoid it.
- Unauthorized collaboration (working with each other on assignments)

Any student who is uncertain whether his or her use of the work of others constitutes cheating, plagiarism, or unauthorized collaboration should consult the course instructor for guidance before formally submitting the course work. Concerns about these or other behaviors prohibited by the Student Conduct Code will be referred for investigation and adjudication by (include information for specific campus office). For more information: https://www.washington.edu/csse/facultystaff/academic-misconduct/. Students found to have engaged in academic misconduct may receive a zero on the assignment, and cases will be forwarded for the Associate Dean of Academic Affairs.
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<th>Readings</th>
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Dowall and Whittington, Chs 1 and 2 |
Marlowe, Ch 3 – Evaluation and Prioritization of Capital Assets  
Bartle – Chapters 1 and 2, and pages 209-211 |
http://www.ppic.org/main/publication.asp?i=429  
http://library.ite.org/pub/c1cf93c-2354-d714-51f8-d87b39dddbad  
### 19 Oct

**Project Development:**  
Dowall and Whittington, Chs 3, 4, and 10

### 21 Oct

**Local Finance I: Rational Planning, Public Goods Theory**
Bartle, Chs 2 and 3
http://www.econlib.org/library/NPDBooks/Pigou/pgEW.html

**Systems Paper Due**

### 26 Oct

**Local Finance II: Neoclassical Economic Theory, Public Choice, and the Property Tax**
Bartle, Ch 8

http://www.econlib.org/library/Enc/bios/Smith.html

http://www.nybooks.com/articles/archives/2007/feb/15/who-was-milton-friedman/


California Constitution, Article 13A.  
http://law.justia.com/constitution/california/article_13A.html

YouTube. http://www.youtube.com/watch?v=xCueOgnluDg&feature=related

On the Block, “Do you really understand Proposition 13?” SF Gate,  

### 28 Oct

**Local Finance III: Forecasting, Club Goods, and Non-Property Taxes**
Bartle, Chs 9 and 10 (plus excerpt from Aronson and Schwartz, Ch 5)


http://sapiens.revues.org/1639
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<th>Date</th>
<th>Topic</th>
<th>Literature/References</th>
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| 02 Nov| Local Finance IV: Strategic Planning, Budgeting, Transaction Cost Theory | Bartle, Chs 4 and 6 (7 optional)  
Dowall and Whittington, Ch 5  
| 4 Nov | Capital Budgeting, CIPs, and Equity Issues  
Marlowe, Ch 1 and 2  
| 9 Nov | Capital Financing | Bartle, Chs 11 and 12  
Marlowe, Chs 5 and 6  
Dowall and Whittington, Ch 9  
| 11 Nov| Bond Finance  
**Group Project: Second Deliverable Due** | Marlowe, Chs 7 and 8  
Dowall and Whittington, Ch 8  
Whittington on Inflation |
| 16 Nov| User Fees and Special Districts | Excerpt from Aronson and Schwartz, Ch 12  
Dowall and Whittington, Chs 6 and 7  
| 23 Nov| Public-Private Partnerships and Private Project Finance | Marlowe, Ch 4 |


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<tr>
<td>25 Nov</td>
<td>Presentations</td>
<td>Group Project: Third Deliverable Due</td>
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<td>7 Dec</td>
<td>Presentations</td>
<td>Group Project: Fourth Deliverable Due Exam Review</td>
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<td>12-18 Dec</td>
<td>Final Exam</td>
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**Religious Accommodations**
Washington state law requires that UW develop a policy for accommodation of student absences or significant hardship due to reasons of faith or conscience, or for organized religious activities. The UW’s policy, including more information about how to request an accommodation, is available at [Religious Accommodations Policy](https://registrar.washington.edu/staffandfaculty/religious-accommodations-policy/). Accommodations must be requested within the first two weeks of this course using the [Religious Accommodations Request form](https://registrar.washington.edu/students/religious-accommodations-request/).

**Safety**
Call SafeCampus at 206-685-7233 anytime – no matter where you work or study – to anonymously discuss safety and well-being concerns for yourself or others. SafeCampus’s team of caring professionals will provide individualized support, while discussing short- and long-term solutions and connecting you with additional resources when requested.

**International Students**
Faculty members at U.S. universities – including the University of Washington – have the right to academic freedom which includes presenting and exploring topics and content that other governments may consider to be illegal and, therefore, choose to censor. Examples may include topics and content involving religion, gender and sexuality, human rights, democracy and representative government, and historic events.

If, as a UW student, you are living outside of the United States while taking courses remotely, you are subject to the laws of your local jurisdiction. Local authorities may limit your access to course material and take punitive action towards you. Unfortunately, the University of Washington has no authority over the laws in your jurisdictions or how local authorities enforce those laws. If you are taking UW courses outside of the United States, you have reason to exercise caution when enrolling in courses that cover topics and issues censored in your jurisdiction. If you have concerns regarding a course or courses that you have registered for, please contact your academic advisor who will assist you in exploring options.