

CALIFORNIA STATE POLYTECHNIC UNIVERSITY, POMONA

ACADEMIC SENATE

ACADEMIC PROGRAMS COMMITTEE

REPORT TO

THE ACADEMIC SENATE

AP-035-167

Urban & Regional Planning-Infrastructure & Transport Option,  
BS FOR SEMESTERS

Academic Programs Committee

Date: 11/11/2016

Executive Committee  
Received and Forwarded

Date: 11/16/2016

Academic Senate

Date: 11/30/2016  
First Reading

**BACKGROUND:** The Infrastructure and Transportation emphasis is a new option and is designed to produce urban planners who work for cities' infrastructure development and management.

Infrastructure is the basic physical and organizational backbone needed for the operation of a city. This option covers any form of infrastructure that is an important shaper of the built environment, including transportation, drinking water and waste management. This option provides students with advanced level courses for understanding, analyzing, and planning complex systems that keep cities working every day. Students are encouraged to build knowledge about infrastructure from a variety of perspectives, including: planning practice and policy, analytic methods applied to infrastructure planning and operations, relationship between infrastructure and land use, infrastructure providers and their regulation, particular modes of transportation, innovation and equity.

**RESOURCES CONSULTED:**

Deans  
Associate Deans  
Department Chairs  
All Faculty

**DISCUSSION:**

Before reaching the Academic Programs Committee, this program was reviewed by the College Curriculum Committee in the College of ENV as well as the Dean of ENV and the Office of Academic Programs. All concerns raised at those levels were addressed. The Academic Programs Committee then conducted campus-wide consultation, as well as its own review of the program. No concerns were raised.

**RECOMMENDATION:** The Academic Programs Committee recommends approval of the semester program Infrastructure and Transportation Option.

<b>Urban and Regional Planning, B.S. - Infrastructure and Transportation Option: 120 units</b>	
<b>Status</b>	active
<b>Hierarchy Entities</b>	Urban and Regional Planning
<b>Approval Process Name</b>	F. Program - New Option/Minor/Emphasis
<b>Current Step</b>	Office of Academic Programs
<b>Originator</b>	Laura Fujimoto Hernandez
<b>Created</b>	12/07/2015 04:04PM
<b>Launched</b>	12/07/2015 04:10PM
<b>Form</b>	
<b>General Catalog Information</b>	
Department	Urban and Regional Planning
Choose type	Option
Title of the proposed aggregate of courses (e.g. Evolutionary Biology Subplan/Option)	Urban and Regional Planning, B.S. - Infrastructure and Transportation Option: 120 units
Title of the degree major program under which the aggregate of courses will be offered (e.g. Biology, B.S.)	Bachelor of Science In In Urban and Regional Planning
Program total units	120
Description of Option, Minor, or Emphasis	Infrastructure is the basic physical and organizational backbone needed for the operation of a city. This option covers any form of infrastructure that is an important shaper of the built environment, including transportation, drinking water and waste management. This option provides students with advanced level courses for understanding, analyzing, and planning complex systems that keep cities working every day. Students are encouraged to build knowledge about infrastructure from a variety of perspectives, including: planning practice and policy, analytic methods applied to infrastructure planning and operations, relationship between infrastructure and land use, infrastructure providers and their regulation, particular modes of transportation, innovation and equity.
List options or emphases already existing under the degree major program for which the new aggregate of courses is proposed.	None
State the aims of the proposed aggregate of courses.	<p>Detailed objectives and expected learning outcomes for the Infrastructure and Transportation Option</p> <p>Description: Infrastructure is the basic physical and organizational backbone needed for the operation of a city. This option covers any form of infrastructure that is an important shaper of the built environment, including transportation, drinking water and waste management. This option provides students with advanced level courses for understanding, analyzing, and planning complex systems that keep cities working every day. Students are encouraged to build knowledge about infrastructure from a variety of perspectives, including: planning practice and policy, analytic methods applied to infrastructure planning and operations, relationship between infrastructure and land use, infrastructure providers and their regulation, particular modes of transportation, innovation and equity.</p> <p>Goals: The overall goal of the three-course option is to provide a good understanding of sustainable urban infrastructure, which facilitates progress toward sustainable living at the community level. The focus is on understanding complex relationships between physical systems--roads, water, etc.--as well as learning about the cultural and political contexts in which they are embedded.</p> <p>Expected Learning Outcomes:</p> <p>The expected learning outcomes are that students will be able to:</p> <p>Evaluate and use knowledge and understanding of values and institutional contexts for transportation and infrastructure planning.</p> <p>Explore theories and historical trends to evaluate relationships between infrastructure conditions, public service capacity, and development options, and their consequences of social and environmental justice.</p>

	<p>Apply techniques to engage public interest in the process of infrastructure and transportation planning, with attention to equity.                  Discuss and contribute to knowledge about how to, monitor, regulate, plan and pay for urban infrastructure projects or services, through agencies such as federal, state and local governments, NGO's, private sector organizations, and partnerships.                  Senior Project Expectation: students will choose a senior project topic relevant to the option.</p>																																				
<p>List courses by subject area, catalog number, title, and units of credit as well as the total units to be required under the proposed aggregate.</p>	<p>Infrastructure &amp; Transportation Option Core Units                  Infrastructure Finance URP 4390 3                  Public Participation URP 4240 3                  Local Transportation/Lab URP 4880/L 2/1                  Planning for Infrastructure URP 4370 3                  Total Option Core Units 12                  Option Electives:                  Choose a minimum of 3 units with approval of advisor from courses listed below:                  Special Study for UD Students URP 4000 1-3                  Physical Design Laboratory/Lab URP 4030/L 1/2                  Placemaking Seminar (GE D4) URP 4040 3                  Evolution of American Cities and URP 4110 3                  The Planning Movement (GE D4)                  Methods of Engagement; Participation, URP 4200 /A 2/1                  Negotiation, Mediation/Activity                  Planning Advocacy, Community URP 4210/A 2/1                  Organizing and Social Change/Activity                  The Just City (GE D4) URP 4220 3                  Planning for Minority Communities URP 4230 3                  Community Development and Housing/Activity URP 4340/A 2/1                  Field Internship (Supervised) URP 4410 1-2                  Land Use and Urban Design Policy/Activity URP 4510/A 2/1 Environmental Assessment URP 4660 3                  Planning In a Global Economy (GE D4) URP 4750 3                  California Water (GE D4) URP 4820 3                  Urban Design Principles and URP 4850/L 2/1                  Techniques/Lab                  Environmental Policy URP 4870 3                  Climate Change/Activity URP 4910/A 2/1                  Advanced Planning Studio/Lab URP 4980/L 2/1                  Special Topics for UD Students URP 4990 1-3                  Affordable Housing Seminar URP 4330 3                  Land Use Entitlements URP 4380 3                  International Planning URP 4760 3                  Choose a minimum of 6 units from courses listed below:                  Regional Transportation Policy and Planning URP 4350 3                  GIS Applications in Planning Studio/Lab URP 4780/L 1/2                  Development Processes/Activity URP 4830/A 2/1 Neighborhood Development/Activity URP 4840/A 2/1 Transportation Methods and Analysis/Lab URP 4890/L 2/1                  Advanced GIS/Lab URP 4900/L 2/2                  Total Elective Units 9</p>																																				
<p>Justify the need for the proposed aggregate of courses.</p>	<p>Strengthening curricular focus The option will guide students in the selection of URP electives that in aggregate represent a specialization.                  Career Preparation and graduate school: The Infrastructure and Transportation option prepares students for a variety of career and academic paths. Careers include jobs with public agencies, including transportation and transit agencies, utilities and other authorities or special districts handling water, waste, goods movement, etc. Graduates also may find opportunities with related consulting firms and private sector agencies. The option is also good preparation for further specialization in a graduate program.</p>																																				
<p>List courses by subject area, catalog number, title, and units of credit as well as the total</p>	<table border="1"> <thead> <tr> <th colspan="4">Flow chart for URP Core and URP option core courses</th> </tr> <tr> <th colspan="2">Year 1 -- Fall (12 Units)</th> <th colspan="2">Year 1 -- Spring (10 Units)</th> </tr> </thead> <tbody> <tr> <td>URP 1040/L The City in Context -- History Politics, Environment (2-1L)</td> <td>3</td> <td>URP 2020/L Tools and Graphic Communication (1-2A)</td> <td>3</td> </tr> <tr> <td>URP 2010/L Introduction to Urban Design Theory for Planning(1-2L)</td> <td>3</td> <td>URP 3310/L Research Approaches to Planning (2-1L)</td> <td>3</td> </tr> <tr> <td>URP 1050 Social Justice In Planning</td> <td>3</td> <td>URP 1200L Intro to GIS for Planning Lab (1L)</td> <td>1</td> </tr> <tr> <td>Option-required course</td> <td>3</td> <td>Option-required course</td> <td>3</td> </tr> <tr> <th colspan="2">Year 2 -- Fall (14 Units)</th> <th colspan="2">Year 2 -- Spring (13 Units)</th> </tr> <tr> <td>URP 3030/L Urban Design -- Site and Neighborhood (1-2L)</td> <td>3</td> <td>URP 3320/L Demography and Statistics (3-1L)</td> <td>4</td> </tr> <tr> <td>URP 3370/L Urban Systems -- Infrastructure (1-1L)</td> <td>2</td> <td>URP 3350/A Plan Making -- History and Future (2-1A)</td> <td>3</td> </tr> </tbody> </table>	Flow chart for URP Core and URP option core courses				Year 1 -- Fall (12 Units)		Year 1 -- Spring (10 Units)		URP 1040/L The City in Context -- History Politics, Environment (2-1L)	3	URP 2020/L Tools and Graphic Communication (1-2A)	3	URP 2010/L Introduction to Urban Design Theory for Planning(1-2L)	3	URP 3310/L Research Approaches to Planning (2-1L)	3	URP 1050 Social Justice In Planning	3	URP 1200L Intro to GIS for Planning Lab (1L)	1	Option-required course	3	Option-required course	3	Year 2 -- Fall (14 Units)		Year 2 -- Spring (13 Units)		URP 3030/L Urban Design -- Site and Neighborhood (1-2L)	3	URP 3320/L Demography and Statistics (3-1L)	4	URP 3370/L Urban Systems -- Infrastructure (1-1L)	2	URP 3350/A Plan Making -- History and Future (2-1A)	3
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<p>units to be required for the major in which the proposed aggregate of courses is to be included.</p>	<p>URP 3380 Urban Systems - Climate Change &amp; Environment 2</p> <p>URP 3510 Planning and Land Use Law 4</p> <p>Option-required course 3</p> <p>Year 3 -- Fall (12 Units)</p> <p>URP 4600A Community Planning Studio Preparation (1A) 1</p> <p>URP 4500A Ethics Writing for Planning (1A) 1</p> <p>URP 4600A Senior Project Preparation (1A) 1</p> <p>URP 3340/L Policy Analysis Planning (2-1L) 3</p> <p>Option-elective course 3</p> <p>URP elective course 3</p>	<p>URP 3050/A Social Context for Urban Change (2-1A) 3</p> <p>Option-required course 3</p> <p>Year 3 Spring (11 Units)</p> <p>URP 4320/L Community Planning Studio and Lab (2-2L) 4</p> <p>URP 4620 Senior Project 2</p> <p>URP 4630 Professional Practice for Planning 2</p> <p>Option- elective course 3</p>
<p>List new courses to be developed. You will need to submit separate course proposals for each new course.</p>	<p>URP 4390 Infrastructure Finance Financing techniques for local and regional infrastructure. Procedures for defining capital needs and budgeting. Techniques to include exactions, assessment districts, tax districts, bonds, special sales and other taxes, local, state and federal financing. Methods of public/private partnerships for infrastructure financing.</p> <p>URP 4240 Public Participation Course examines important role of public participating in planning process. While planners are trained to take on leadership roles, they often play a key role in facilitating public participation for the public good. Students learn fundamental methods of public participation.</p> <p>URP 4350 Regional Transportation Policy and Planning Understanding factors in land use, travel behavior, politics and finance that shape regional transportation policy choices. Examination of policy issues in regional transportation planning. Planning and evaluation methods in regional transportation policy.</p> <p>URP 4370 Planning for Infrastructure Examination of a broad range of non-transportation infrastructure in comparative urban contexts. Considers public and private sector interests, and social justice aspects. Investigation of the influence of the planning field in infrastructure trends and policies, especially relating to resilience.</p> <p>URP 4390 Infrastructure Finance Financing techniques for local and regional infrastructure. Procedures for defining capital needs and budgeting. Techniques to include exactions, assessment districts, tax districts, bonds, special sales and other taxes, local, state and federal financing. Methods of public/private partnerships for infrastructure financing.</p> <p>URP 4780 GIS Applications in Planning Studio Using Geographic Information Systems (GIS), application of spatial analysis to real world urban planning problems. Focus on how to resolve urban planning problems and to support urban planning decision making use GIS technologies.</p>	
<p>List all present faculty members with rank, appointment status, highest degree earned, date and field of highest degree, and professional experience, who would teach in the proposed aggregate of courses.</p>	<p>Felix R. Barreto Professor. B.A., (1978); M.C.R.P. (1980) and Ph.D. (1986) Rutgers University. Specializations: Planning Methods, Urban Theory, Housing, Urban Economics.</p> <p>Julianna Delgado, AICP Professor. BA, University of California, Berkeley (1971); Master of Arts in Design, University of Paris (1974); Master of Architecture, University of California, Berkeley (1981); PhD in Architecture, University of California, Berkeley(1992). Specializations: Land Use, Design, Planning Studios.</p> <p>Alvaro Huerta Assistant Professor. BA (2003); and MS (2006), University of California, Los Angeles; Ph.D., University of California, Berkeley (2011). Specialization: Community Development.</p> <p>Courtney Knapp Assistant Professor. BA (2003); and MA (2006) Simmons College, Boston; MA, Tufts University, Medford, MA (2008), Ph.D. Cornell (2014). Specialization: Community Development.</p> <p>Dohyung Kim Associate Professor. BS, Kyung-Hee University (1991); MS in URP, University of Wisconsin, Madison (1999); Ph.D., University of Florida (2005). Specializations: GIS, Collaborative Urban Design, Transportation Modeling.</p> <p>Jerry V. Mitchell Professor. BS, University of Illinois (1971); J.D., (1975); Ph.D., University of Michigan (1986). Specializations: Planning Law, Environmental Planning.</p> <p>Gwen H. Urey Professor. BA, Bryn Mawr College (1979); M.U.P., University of Oregon (1983); Ph.D., Cornell (1995). Specializations: Planning Methods, Infrastructure Planning, International Planning.</p> <p>Richard W. Willson, FAICP Professor. Bachelor of Environmental Studies, University of Waterloo, (1978); Master of Planning, University of Southern California, (1983); Ph.D., University of California, Los Angeles, (1991). Specializations: Planning Theory, Transportation Planning, Policy Analysis.</p> <p>Richard J. Zimmer, AICP Full time Lecturer. BA, California State Polytechnic University, Pomona (1973); MPA, University of Southern California (1975). Specializations: Community Development, Politics &amp; Government, Public Finance, Real Estate Development.</p> <p>Affiliated Faculty:                  Herschel Farberow Professor Emeritus. BS, California State Polytechnic University, Pomona (1972); MA, University of California, Los Angeles (1974). Specializations: Design Foundations, Landscape Architecture, Urban Design.                  Ramzi Farhat Lecturer. BA in Architecture, American University of Beirut (1999); Master of Arts</p>	

	<p>In Urban Planning, University of California, Los Angeles (2004); Ph.D. in Policy, Planning, and Development, University of California (2010). Specialization: Urban Design.                  Kipp Kobayashi Lecturer. BFA, University of California, Berkeley (1983); MFA, University of California, Los Angeles (1986). Specializations: Urban Design.                  Hollie M. Lund Lecturer. BA, Western Washington University (1997); Ph.D., Portland State University (2001). Specializations: Neighborhood Design and Planning, Community Development, Transportation Planning, Community and Environmental Psychology.                  Meredith McKenzie Lecturer. BA Bowling Green State (1974); MA Kent State University (1980); JD, Law, Loyola University (1998). Specializations: Environmental Planning, California Water.                  Meenaxi Panakkal Lecturer. Bachelor of Architecture (1987) Academy of Architecture, Bombay, India, MURP, California State Polytechnic University, Pomona (2003). Specializations: Land Use Planning, Urban Design.                  Marta Perlas Lecturer. B.Arc, SciArc, Santa Monica, CA (1987). Specialization: Urban Design.                  Abhishek Tiwari Lecturer. BA (1998) and MPH (2000) University of California, Los Angeles, MA (2007) University of California, Irvine, Ph.D. (2007) University of California, Irvine.                  Specializations: Research Methods, Policy Analysis, Housing.</p>
<p><b>Describe instructional resources (faculty, space, equipment, library volumes, etc.) needed to implement and sustain the proposed aggregate of courses.</b></p>	<p>The courses require at most modest additional instructional resources. Some of the new courses have been offered as URP 499 courses in the past few years. All option electives except URP 435 and URP 4890 will serve as option elective courses for students in another options, as well as for students in the MURP program. Some of the courses may be offered in alternating years. One course, URP 435, may be offered concurrently with the converted graduate version of the course, URP 535. The new GIS course may put pressure on GIS classroom resources, but this is an area of steadily increasing interest from students as well as the profession. It is appropriate to dedicate new resources to GIS instruction.                  In addition, the URP Strategic Plan envisions undergraduate cohorts of 72 students, graduate cohorts of 24 students, and ten tenure line faculty.</p>
<p><b>List all additional resources needed including specific resource, cost, and source of funding.</b></p>	<p>None.</p>
<p><b>Program Type</b></p>	<p>Program</p>
<p><b>Curriculum</b></p>	
<p><b>Steps</b></p>	
<p><b>Files</b></p>	<p>None</p>