



Urban Design & Planning – Legacy Curriculum For Courses taken **PRIOR** to Autumn 2020

Coursework completed prior to Autumn 2020 may meet the requirements of either the legacy curriculum outlined here, or the updated curriculum contained on the [Program Website](#).

Phase I Courses

The Core Curriculum

The core curriculum defines the intellectual foundation of the program. While the program retains considerable flexibility in defining a research agenda within the broad umbrella of urban and environmental planning and policy, it provides a common foundation for all students to build upon. The following are the core curriculum requirements. Students enter the program with a Masters degree, in fields ranging from planning and public affairs to natural and social sciences. Depending on the academic preparation of the student prior to matriculation, the core requirements can be met within two years. Courses listed below that are aimed principally at masters students will need to be supplemented to address more advanced requirements for doctoral students, until such time as more advanced courses can be offered.

Required Courses

Phase I requirements involve 5 courses, and should be completed during the first year, unless schedule conflicts make this infeasible. Courses from Phase II requirements may also be taken in the first year, to accelerate completion of the curriculum requirements.

Core Sequence

During Phase I of full-time course work in the program, all URBDP Ph.D. students must complete the required seminar sequence in Advanced Research Design (URBDP 591; 4 credits; Fall of first year), Planning Theory (URBDP 592; 4 credits; Winter of first year), and Interdisciplinary Urban Research (URBDP 593; 5 credits; fall of second year). The purpose of this requirement is to provide a common foundation for students to develop and refine their interdisciplinary research agenda under the broad umbrella of urban and environmental planning and policy.

URBDP 591 Advanced Research Design
URBDP 592 Advanced Planning Theory
URBDP 593 Interdisciplinary Urban Research Seminar

Phase I Research Methods

Phase I requirements also include two courses that introduce students to the applicability of quantitative and qualitative methods to doctoral-level research. Students at this level should view these courses as helping them determine what aspects of their likely research topic may be pursued quantitatively, and what aspects may be pursued qualitatively. The courses should introduce to the student what basic or broad range of research methods exists in each of these categories.

Qualitative Research Methods

Phase I requirements also includes the completion of an advanced graduate qualitative research methods class offered either through URBDP or another related social science field.

Choose one of the following, with potential for substitution of alternative courses at an equivalent or more advanced level (see below for possible substitute courses):

URBDP 519 Qualitative Research Planning
GEOG 525 Advanced Qualitative Methods in Geography
HSTRY 598 Methods of Historical Research
HSERV 521 Advanced Qualitative Research Methods in Anthropology and Public Health
POL S 502 Qualitative Research Methods
PUBPOL 525 Qualitative Field Methods and Analysis
SOC WL 581 Qualitative Research Methods and Design
SEFS 504 Research Processes in Forest Resources
SMEA 512 Interviewing Methods & Environmental Topics

Quantitative Research Methods

As part of Phase I requirements, students must pass one course in statistical methods at an advanced graduate level. The appropriate course will depend on student's prior mathematical experience, software knowledge and overall program goals. Students with limited statistical background may need to complete a pre-requisite course beforehand. In these cases, careful planning of course sequences is necessary.

Students should carefully evaluate their mathematical background, statistics software knowledge, and program goals to select the appropriate quantitative coursework.

Choose one of the following, with potential for substitution of alternative courses at an equivalent or more advanced level (see below for possible substitute courses):

BIOST 518 Applied Biostatistics II: Introduction to Regression Analysis. (Winter)

Course provides an introduction to the basic theory and application of regression methods for the statistical analysis of data. The course is designed for graduate students in public health who are already familiar with basic statistical concepts. Course uses STATA statistical software.

Pre-requisite is BIOST 517, Applied Biostatistics I. Winter

CS&SS 503 Advanced Quantitative Political Methodology.

Course focuses on fitting, interpreting, and refining the linear regression model. Agenda includes developing clear and informative graphical representations of regression results, and understanding regression models in matrix form. Course introduces R statistical software. Pre-requisite is CS&SS 501, Advanced Research Design & Analysis, or any prior course on basic social statistics and linear regression. Spring

CS&SS 504 Applied Regression.

Course is suitable for students with a b quantitative background, a previous year of statistics, including regression. Most technically rigorous regression course, requires matrix algebra and the ability to do calculus proofs of regression equations. Course uses R statistical software.

Pre-requisite is STAT 502, Design and Analysis of Experiments. Winter

Note: for students needing a refresher in mathematics, the following options are recommended:

Math Camp Week long workshop, taught in September before fall quarter begins. Register through the Center for Statistical and Social Sciences. No credit.

CS&SS 505 Review of Mathematics for Social Scientists.

This 1 credit course reviews the basic mathematical skills that are a prerequisite for a meaningful understanding of elementary statistics, data analysis, and social science methodology. Spring

For students with no previous exposure to R statistical software, the following course is recommended:

CS&SS 508 Introduction to R

This 1 credit course familiarizes students with the R environment for statistical computing (<http://www.r-project.org>). R is a freely available, multi-platform, and powerful program for analysis and graphics similar to S-PLUS. Covers the basics of organizing, managing, and manipulating social science data; basic applications; introduction to programming; links to other major statistical packages. Winter

Quantitative Research Methods Substitutions

Approved

CEE 584 Analytical Methods in Transportation I
CSSS 526 Structural Equation Models for the Social Sciences
CSSS 503 / Pol S 503 Advanced Quantitative Political Methodology
CSSS 536 Analysis of Categorical and Count Data
CSSS 589 Multivariate Data Analysis for the Social Sciences
PUBPOL 528 Quantitative Analysis 2
SOC 505 Applied Social Statistics
STAT 512 Statistical Inference
SEFS 502 Analytical Techniques for Community Ecology

NOT Approved

PUBPOL 527 Quantitative Analysis 1
URBDP 520 Quantitative Methods in Urban Design and Planning

The Phase I Paper

Objectives

The Phase 1 Paper is a mechanism for early evaluation of students' progress in acquiring skills to conduct research, and their ability to make progress towards their Ph.D. after one year. It will be developed through the sequence of the first year course requirements and supervised by the student's first year advisory committee. It will provide students an opportunity to demonstrate the student's ability to formulate a research question, frame it within the theory, review the literature, develop a research design, and address critical issues of conceptualization and measurement through a review of the literature and/or pilot application.

Paper structure

The paper can take the form of a critical review of literature or a pilot research project on a selected topic. The first option emphasizes the ability of students to position their research question and methods. The latter can be based on either existing or newly acquired data to fit within the time constraints. In both cases the paper needs to consider aspects of both urban planning theory and research methods in urban design and planning. Phase one of the program will culminate with the acceptance of a paper. The paper is to help students in narrowing down their research area and preparing students for their general exam and to help them focus on the literature of interest. The paper is an opportunity for students to review in a critical fashion the key literature on specific subjects or domains that are likely to form the basis of their future research.

Students will identify a research question, synthesize the existing literature, and specify the objectives of the paper. In the first option (literature review papers), students will develop a systematic literature review and summarize the state of knowledge and current gaps in addressing the research question. In the second option (pilot data analysis), students will identify the data and methods that will be used to address the question and discuss the analytical results of the pilot application.

Product

The length of the paper is about 6000 words, excluding references, tables, and figures.

Time line and approval process

Students will submit an abstract for their phase 1 paper to their first year advisor at the end of the first year winter quarter. Students will work with their advisor to develop a plan for completing the paper through the first two weeks of Spring quarter. A first draft of the paper will be presented to the advisor by the end of the spring quarter. Students will revise their paper based on the advisor's comments and submit the final paper by the end of summer.

Evaluation of Phase I

The procedure for evaluation of Phase I work and the decision to advance a student to Phase II will be based on a portfolio of the work completed in required courses in Phase I that includes:

- Phase 1 Paper
- Completion of the first two courses in the Core sequence and methods requirements
- A Prospectus and Plan of Study for Phase II prepared by the student and approved by the student's Advisory Committee that describes the general research area and fields of study the student wishes to pursue and the courses the student intends to take in Phase II, and
- A designation of a Supervisory Committee to mentor the student during Phase II.

Phase II Courses

The Area of Study

Once a student is admitted to Phase II, they form a Supervisory Committee to oversee their progress through the rest of their academic program. The committee must consist of at least three faculty members in the Interdisciplinary Group representing at least two academic departments; one member must be from the Urban Design and Planning Department. Students requiring a committee of a different composition should submit a request to the Steering Committee. The Steering Committee recommends (but does not require) that students have at least four faculty members on their committee and that two of these be from the Urban Design and Planning Department. Students will develop with their supervisory committee a description of their proposed areas of study. These will define areas of scholarship that must demonstrate an interdisciplinary research approach to an application within urban and environmental planning and policy. The description should develop a curriculum proposal approved by the supervisory committee that addresses the following advanced study requirements.

Phase II Curriculum Requirements

Students are required to complete five courses that satisfy broad categories of urban theories and urban design & planning. Many approved courses for each requirement draw on courses outside the URBDP program. Based on their own research program and agenda, students may select courses that align closely within one research cluster or may choose courses across research clusters. These requirements provide opportunities to establish relationships with faculty with whom they may wish to work as dissertation advisor or supervisory committee members. In addition, to complete this phase of the program, students must complete two additional advanced research design and methods courses, as well as a teaching methods seminar (see below: currently under consideration).

Phase II requirements involve 7 (total) courses and a teaching seminar, in addition to advanced courses directly related to the area of study selected by the student. Some of these courses may be taken in the first year.

Urban Processes and Patterns

Students must complete at least three courses that satisfy the urban processes and patterns requirement. This requirement is designed to ensure a deeper understanding of the bio-physical and socio-economic forces that shape urban areas, and to draw on urban theories from multiple disciplines.

Choose three of the following, with potential for substitution of alternative courses (see below for possible substitute courses):

- URBDP 505 Urban Form
- URBDP 552 Real Estate Process
- URBDP 561 Urban Economics
- URBDP 598 Urban Ecology
- URBDP 565 American Urban History
- GEOG 448 Geography of Transportation
- GEOG 477 Advanced Urban Geography
- GEOG 478 Social Justice & the City
- GEOG 479 Diversity & Segregation in Cities

GEOG 578 Research Seminar: Theorizing the City
SOC 490 The Urban Underclass
POL S 481 Big City Politics

Urban Processes and Patterns Substitutions

Approved

CEE 547 Lake and Watershed Management
CEE 581 Travel Demand Forecasting
ECON 500 Microeconomic Analysis 1
ECON 501 Microeconomic Analysis 2
ECON 508 Microeconomic Analysis 3
GEOG 571 Research Seminar: Critical and Normative Ecologies
PUBPOL 547 Water Resource Economics
PUBPOL 597 Role of Scientific Information in Environmental Decisions
PUBPOL 599 Institutional Perspectives on Management
PUBPOL 565 Topics in Urban Affairs
PUBPOL 566 Community and Economic Development
URBDP 498 Methods of Community Engagement
URBDP 554 Real Estate Finance
URBDP 560 Inequality, Governance & Policy in the Metropolitan Region
URBDP 576 Pedestrian Travel, Land Use, & Urban Form
URBDP 598 Transportation & Environment
URBDP 553 Urban Land Economics
SEFS 541 Advanced Landscape Ecology

Not Approved

CEE 591
Freight Transportation
ESC/ESRM 441 Landscape Ecology (formerly approved, now an undergrad class)
URBDP 467 Remote Sensing
URBDP 524 Site Planning: Issues & Techniques
URBDP 500 Survey of Urban Planning

Urban and Environmental Design and Planning

Students must complete at least two courses that satisfy the urban and environmental design and planning requirement. This requirement is designed build a strong foundation in urban and environmental interventions, whether design, planning or policy oriented.

Choose two of the following, with potential for substitution of alternative courses (see below for possible substitute courses):

PUBPOL 513 Public Policy Analysis
PUBPOL 517 Economics for Policy Analysis & Management II
PUBPOL 518 Applied Cost-Benefit Analysis
PUBPOL 564 Housing & Social Policy
URBDP 598 Urban Transportation Planning
URBDP 598 Environmental Planning
POLS 574 Environmental Regulation Policy

SEFS 592 Environmental Policy Processes
ARCH 561 Urban Design Theory

Approved

CEE 482 Wastewater Reuse & Resource Recovery
CEE 589 Transit Systems Planning
ECON 536 Environmental Economics
ENVIR 585 Climate Impacts on the Pacific Northwest
PPM 510 Public Policy Analysis
PUBPOL 560 Inequality, Governance, & Policy in the Metro Region
SMEA 519 Marine Policy Analysis
URBDP 562 Intro. to Neighborhood Planning and Community Development
URBDP 566 Infrastructure Planning and Finance
URBDP 567 Democracy, Citizenship, and Participation in the City
URBDP 598 Urban and Suburban Building Types for Urban Designers and Planners

NOT Approved

URBDP 550 Land use, Growth Management, and Environmental Planning

Advanced Research Design and Methods

All students must complete two additional courses that satisfy the advanced research design and methods requirement. The purpose of this requirement is to help students develop more focused and targeted research designs based on their own research interests, and to build their methodological capacity to implement this research. These courses may be either quantitative or qualitative in nature; however, they must be at an advanced graduate level.

Choose two of the following, with potential for substitution of alternative courses (see below for possible substitute courses):

CS&SS 560 Hierarchical Modeling for the Social Sciences
CS&SS 567 Statistical Analysis of Social Networks
CS&SS 594 Multiway Data Analysis
CS&SS 594 Distributional Methods with Application to the Measurement of Inequality
CS&SS 529* Sample Survey Techniques
CS&SS 544* Event History Analysis for the Social Sciences
CS&SS 566* Causal Modeling
URBDP 522 Urban & Regional Geospatial Analysis
URBDP 525 Evaluation in Urban Planning
GEOG 561 Urban Geographic Information Systems
PUBPOL 526 Program Evaluation
SOC 526 Causal Approach to Theory Building & Data Analysis
SOC 529/CSSS 526 Structural Equation Models for the Social Sciences
COM 511 Content Analysis
COM 513 Fieldwork Research Methods
COM 527 Global Communication Research Methods
ANTH 551 Research Design

*For advanced students, with previous advanced statistical coursework and exposure to R.

Research Design and Methods Substitutions

Approved

CSSS 510 Maximum Likelihood Methods for Social Sciences
CSSS 536 Analysis of Categorical & Count Data
CSSS 564/STAT 564 Bayesian Statistics for the Social Sciences
CSSS 589 Multivariate Data Analysis for the Social Sciences
EDPSY 588 Survey Research Methodology
ENVH 593 Current Topics in Risk Assessment
EPI 511 Introduction to Epidemiology
EPI 538 Nutritional Epidemiology
GEOG 525 Advanced Qualitative Methods in Geography
GEOG 526 Advanced Quantitative Methods in Geography
QERM 514* Analysis of Ecological & Environmental Data 1
QSCI/STAT 480* Sampling Theory for Biologists
SEFS 502 Analytical Techniques for Community Ecology
STAT 512 Statistical Inference
STAT 513 Statistical Inference
*For advanced students, with previous advanced statistical coursework and exposure to R.

NOT Approved

URBDP 467 Remote Sensing
FISH 547 River ecology & Watershed Management
OCEAN 452 / FISH 452 Marine Geospatial Information Science
OCEAN 506 Interdisciplinary Seminar in Oceanography

Teaching Methods

One teaching seminar, and experience as a TA for at least one quarter, before completion of phase III. The following course or a suitable alternative will satisfy this requirement.

Note: this requirement is under consideration, due to the scarcity of teaching methods courses offered. Students are strongly encouraged to teach a class. One can apply to teach an URBDP summer quarter class; the application process takes place in autumn quarter. Please contact the Urban Design & Planning office for further information, 206.543.4190.

GRDSCH 501 TA Preparation: a hybrid course—in person at the TA Conference and online during autumn quarter
GRDSCH 515 Teaching & Learning in Higher Education: Frameworks & Practices
GRDSCH 540 Hybrid Pedagogies: Using Technologies in Teaching
GRDSCH 630 Special Topics in College/University Teaching
GWSS 504 Philosophies and Techniques of Teaching, for Teaching Methods

To keep track of course requirements, you can use this spreadsheet.

General Examination

A critical review of the literature in the area of study must be developed by the student, which integrates interdisciplinary research on the area of study selected by the student, and identifies areas of potential research opportunity that may subsequently form the basis for a dissertation proposal. The review should demonstrate broad familiarity with relevant research in the chosen area, and with the range of theory and methods applied within the reviewed literature. The committee will provide feedback to the student at this stage about areas of additional study that may be required before a suitable dissertation proposal may be developed. Once advanced coursework in the area of study and critical review of the literature are completed, the student and committee schedule a General Examination, in which the Supervisory Committee evaluates the preparedness of the student to advance to doctoral candidate status, and to begin developing a dissertation proposal. It will be designed and evaluated by the student's supervisory committee.

Phase III: Dissertation

Once the student passes the General Examination, he/she is advanced to the level of doctoral candidate, and is expected to build on the critical review of the literature to develop a dissertation proposal. The dissertation proposal should demonstrate the characteristics of interdisciplinarity, relevance to urban and environmental planning and policy, and potential for contribution to scholarship.

Dissertation Proposal

A dissertation proposal should be formally presented to the Reading Committee at a scheduled defense presentation. The Reading Committee must certify that the student is prepared to undertake the proposed research, and that it meets the program requirements for scholarship.

Dissertation Defense

The final step in the Ph.D. program is the formal presentation and defense of the dissertation. This process follows the normal protocol as set by the Graduate School.