

# URSC - URBAN SCIENCE

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## **URSC 601 Foundations of Research in Urban and Regional Science** **Credits 3. 3 Lecture Hours.**

Introduction to the research process and its application to problems in urban, planning and regional science; presentation of philosophy and logic underlying the scientific method; critical analysis of planning and design literature according to each step of the research process; problem definition, hypothesis development, study design, analysis and interpretation of the findings.

## **URSC 602 Research Methods in Urban and Regional Science** **Credits 3. 3 Lecture Hours.**

Basic empirical research methods used in urban, planning and regional science research: experimental, survey and case study designs; comparisons of various methods; application of techniques in sample selection, data collection and analytical approaches.

**Prerequisite:** URSC 641 or STAT 651 or approval of instructor.

## **URSC 631 Foundations of Planning Thought** **Credits 3. 3 Lecture Hours.**

Examines a series of foundational issues in planning and design theory; includes the definition of planning problems, rationality, modernism and post modernism, the validation of value judgments, relations with future generations, multiculturalism and gender justice in liberal democratic societies.

**Prerequisite:** Doctoral classification or approval of instructor.

## **URSC 632 Structure and Functions of Cities and Regions** **Credits 3. 3 Lecture Hours.**

Surveys the design, financial, natural, physical, political and social parameters that influence the development of cities and regions, including presentation of theories about cities and regions, organization of, planning to shape them, and public and private sector plans for structure and function of cities and regions.

**Prerequisite:** Doctoral classification or approval of instructor.

## **URSC 641 Analytic Methods in Landscape and Urban Research I** **Credits 3. 3 Lecture Hours.**

Explicitly address linking theory, measurement, data set development and data analysis issues critical for conducting research in urban and regional planning and landscape architecture.

**Prerequisites:** Doctoral classification or approval of instructor.

## **URSC 642 Analytic Methods in Landscape and Urban Research II** **Credits 3. 3 Lecture Hours.**

Provides a survey of hands on experiences with advanced techniques and procedures related to conceptual measurement and operational issues, data set development and manipulation and data analysis issues critical for conducting academic research.

**Prerequisites:** STAT 651, CARC 601, URSC 641, or approval of instructor.

## **URSC 645 Urban and Regional Analytics** **Credits 3. 3 Lecture Hours.**

Urban and regional administrative data management; data analysis; programming for replicable, systematic research; project workflow to support project collaboration.

**Prerequisite:** Doctoral classification or approval of instructor.

## **URSC 681 Seminar**

**Credit 1. 1 Lecture Hour.**

Oral communication of current research and selected topics in urban and regional science to include lectures, presentations, interviews and discussions.

**Prerequisite:** Approval of instructor.

## **URSC 682 Seminar**

**Credit 1. 1 Lecture Hour.**

Written communication of current research and selected topics in urban and regional science to include posters, articles, reports and books.

**Prerequisite:** Approval of instructor.

## **URSC 685 Directed Studies**

**Credits 1 to 6. 1 to 6 Other Hours.**

Directed study of selected problems within urban and regional science.

**Prerequisite:** Approval of instructor.

## **URSC 689 Special Topic in...**

**Credits 1 to 4. 1 to 4 Lecture Hours. 0 to 4 Lab Hours.**

Selected topics in and identified area of urban and regional science. May be repeated for credit.

**Prerequisite:** Approval of instructor.

## **URSC 691 Research**

**Credits 1 to 23. 1 to 23 Other Hours.**

Research for dissertation.

**Prerequisite:** Approval of instructor.