

UST 405 METHODS OF RESEARCH & EVALUATION

Day & Time: Tuesdays and Thursdays, 1-2:50 p.m.
Location: UR 27 (lecture/discussion) and UR 39 (lab)
Instructor: Dr. Sung-Gheel (Gil) Jang
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Office Hours: Tuesdays and Thursdays, 3 to 4 p.m., or by appointment
Course website: CSU Blackboard (<https://elearning.csuohio.edu/webct/entryPageIns.dowebct>)

Course Description

This course provides an overview of crucial methods of research and evaluation in the public policy, urban planning, and urban studies at large. This course is one of college requirements with UST 404 Urban Data Analysis. The emphasis is on *working knowledge* and *skills* students can use in other coursework and their careers, particularly in analyzing urban planning and policies and building a conceptual framework for looking into varied urban planning and policy issues.

This course consists of two parts: lecture/discussion sessions (Tuesdays) and laboratory sessions (Thursdays). During the lecture/discussion sessions, students must come to class after reading materials assigned prior to each class and participate in varied class activities. During the lab sessions, students will gain working knowledge on the use of computer software for varied urban research. Particularly, Spreadsheet software (MS Excel) will be used to manipulate numerical data and conduct statistical analyses with census data as well as other research data such as ICPSR (Inter-University Consortium for Political and Social Research). ESRI ArcGIS will be introduced for mapping census data.

Course Objectives

At the conclusion of the course, students will be able to meet the following objectives:

- Create a formal statement and proposal of research to address research question(s);
- Gain a practical, working knowledge of a variety of research methods and analytical techniques;
- Identify approaches and techniques for data collection and analysis relevant to urban research;
- Determine what information is relevant to your inquiry and where those data may be found;
- Apply statistical methods and interpret findings;
- Comprehend and critically evaluate the use of quantitative data in reports and media; and
- Effectively communicate findings visually, orally, and in writing

Required textbooks

- Colin Robson (2007). *How to Do a Research Project – A Guide for Undergraduate Students*. Malden, MA: Blackwell Publishing. ISBN 978-1-4051-1490-5 [**ROBSON**]
- Wayne C. Booth, Gregory G. Colomb, and Joseph M. Williams (2008). *The Craft of Research, 3rd Edition*. Chicago, IL: The University of Chicago Press. ISBN 978-0-226-06566-3. [**BCW**]

Recommended web sources

- William M. K. Trochim (2005). The Research Methods Knowledge Base, <URL=<http://www.socialresearchmethods.net/kb/index.php>>

Grading

The course grade will be determined as follows:

10%	Class participation (Attendance; In-class group and/or individual participation)
10%	Lab exercises
20%	Assignments
20%	Midterm exam
20%	Final project
20%	Final exam

Grading scale:

A = 94% or above,	A- = 90%-93.9%,	B+ = 87%-89.9%,	B = 83%-86.9%,
B- = 80%-82.9%,	C+ = 77%-79.9%,	C = 70%-76.9%,	D = 60%-69.9%,
F = 59.9% and below			

Course Schedule
Subject to Change with Notice

Week	Date	Course Topic
1	8/25	Introduction to class
	8/27	Lab: Spreadsheet primer (I) <ul style="list-style-type: none"> • MS Excel basics
2	9/1	Research concepts & foundation <ul style="list-style-type: none"> • scientific inquiry; scientific methods • language of research <u>Reading:</u> <ul style="list-style-type: none"> • William M. K. Trochim and James P. Donnelly (2007). <i>Research Methods Knowledge Base, 3rd edition</i>. Mason, OH: Thomson Publishing – Ch 1. Foundations (pp. 5-23) • Web source: William M. K. Trochim (2005). The Research Methods Knowledge Base, <URL= http://www.socialresearchmethods.net/kb/intres.php>
	9/3	Lab: Spreadsheet primer (II) <ul style="list-style-type: none"> • creating tables and charts in MS Excel
3	9/8	Research process <ul style="list-style-type: none"> • research topics and research questions • hypotheses <u>Reading:</u> <ul style="list-style-type: none"> • BCW Ch 3 & Ch 4 (pp. 35-67) • ROBSON (pp. 47-54)
	9/10	Lab: from data to information (I) <ul style="list-style-type: none"> • exploring census data: data aggregation
4	9/15	Engaging sources <ul style="list-style-type: none"> • from problems to sources • literature search <u>Reading:</u> <ul style="list-style-type: none"> • BCW Ch 5 & Ch 6 (pp. 68-99) • ROBSON (pp. 54-64)
	9/17	Lab: Library search <ul style="list-style-type: none"> • Guest speaker: Diane Kolosionek (Education/Urban Affairs Librarian, Michael Schwartz Library)

5	9/22	Ethics in research <u>Reading:</u> <ul style="list-style-type: none"> Frederick J. Gravetter and Lori-Ann B. Forzano (2003). <i>Research Methods for the Behavioral Sciences</i>. Belmont, CA: Wadsworth Publishing. – Ch 3. Ethics in Research (pp. 58-81)
	9/24	Lab: from data to information (II) <ul style="list-style-type: none"> exploring census data: difference; trends; population pyramids
6	9/29	Approaches to research <u>Reading:</u> <ul style="list-style-type: none"> ROBSON Ch 2 (pp. 18-46)
	10/1	Lab: Mapping data (I) <ul style="list-style-type: none"> mapping census data
7	10/6	Introduction to evaluation research <u>Reading:</u> <ul style="list-style-type: none"> James C. McDavid and Laura R. L. Hawthorn (2006). <i>Program Evaluation & Performance Measurement – An Introduction to Practice</i>. Thousand Oaks, CA: Sage Publications. – Ch 1. (pp. 1-38) Web source: William M. K. Trochim (2005). The Research Methods Knowledge Base, <URL= http://www.socialresearchmethods.net/kb/evaluation.php>
	10/8	Lab: Mapping data (II)
8	10/13	Midterm Exam
	10/15	Final project assigned
9	10/20	Measurement and scales <ul style="list-style-type: none"> measurements methods of collecting data <u>Reading:</u> <ul style="list-style-type: none"> Frederick J. Gravetter and Lori-Ann B. Forzano (2003). <i>Research Methods for the Behavioral Sciences</i>. Belmont, CA: Wadsworth Publishing. – Ch 4. Defining and measuring variables (pp. 83-113) ROBSON Ch 4 (pp. 70-94)
	10/22	Lab: Data-driven learning (I) <ul style="list-style-type: none"> descriptive analysis using MS Excel

10	10/27	Sampling <u>Reading:</u> <ul style="list-style-type: none"> Daniel R. Montello and Paul C. Sutton (2006). <i>An Introduction to Scientific Research Methods in Geography</i>. Thousand Oaks, CA: Sage Publications. -- Ch 8. Sampling (pp. 137-156)
	10/29	Lab: Data-driven learning (II) <ul style="list-style-type: none"> Two sample t-tests using MS Excel
11	11/3	Survey research <u>Reading:</u> <ul style="list-style-type: none"> William M. K. Trochim and James P. Donnelly (2007). <i>Research Methods Knowledge Base, 3rd edition</i>. Mason, OH: Thomson Publishing – Ch 4. Survey research (pp.100-124)
	11/5	Lab: Data-driven learning (III) <ul style="list-style-type: none"> ANOVA using MS Excel
12	11/10	Interpreting findings <u>Reading:</u> <ul style="list-style-type: none"> ROBSON Ch 6 (pp. 115-138)
	11/12	Lab: Data-driven learning (IV) <ul style="list-style-type: none"> correlation, regression analysis using MS Excel
13	11/17	Presenting findings <u>Reading:</u> <ul style="list-style-type: none"> BCW Ch 15 (pp.213-231) Daniel R. Montello and Paul C. Sutton (2006). <i>An Introduction to Scientific Research Methods in Geography</i>. Thousand Oaks, CA: Sage Publications. -- Ch 10. Data display (pp. 185-211)
	11/19	Student project day
14	11/24	Scientific writing <u>Reading:</u> <ul style="list-style-type: none"> ROBSON Ch 7 (pp. 139-152) BCW Ch 12 - Ch 14 (pp. 175-212)
	11/26	<u>No class</u> (Thanksgiving!)
15	12/1	Final Presentation (**Final paper Due**)
	12/3	Final Presentation
16	12/8	Final Exam

Class Policies

- ***You are responsible for changes to this syllabus and the course schedule as announced in class.***
- Lab assignments must be turned in no later than one week from when started. Class assignments will not be accepted after their designated due dates. After the due dates, you will not receive any grades.
- Technical excuses for late submissions will not be accepted. This means that work has to be done several days before a deadline and that proper precautions should be taken to make backups.
- There is **no make-up exam** except for emergent and medical circumstances with official documents. Except in the rare circumstances, students will earn score of zero on missed exams, regardless of circumstance.
- **Student Support:** Students can get help from Tutoring & Academic Success Center (TASC) freely by appointments. See <http://www.csuohio.edu/academic/advising/tutoring> for more information.
- Students should refer to the information from the Office of University Registrar (<http://www.csuohio.edu/enrollment/services/registrar>) regarding administrative procedures related to drop, add, withdrawal, and incompletes.
- Any form of academic misconduct will earn an immediate grade of **F** for the course. In addition, your name will be forwarded to the Academic Misconduct Review Committee, for a hearing concerning your suspension from the University. You should familiarize yourself with the University Policies such as Student Conduct Code and Academic Regulations and Procedures, which can be found at <http://www.csuohio.edu/studentlife>.
- Educational access is the provision of classroom accommodations, auxiliary aids and services to ensure equal educational opportunities for all students regardless of their disability. Any student who feels he or she may need an accommodation based on the impact of a disability should contact the Office of Disability Services at (216) 687-2015. The Office is located in MC 147. Accommodations need to be requested in advance and will not be granted retroactively.