FLORIDA ATLANTIC UNIVERSITY™

Graduate Programs—NEW COURSE PROPOSAL[1]

DEPARTMENT	COLLEGE
SCHOOL OF URBAN AND REGIONAL PLANNING	COLLEGE FOR DESIGN AND SOCIAL INQUIRY

RECOMMENDED COURSE IDENTIFICATION (TO OBTAIN A COURSE NUMBER, CONTACT NMALDONADO@FAU.EDU)

PREFIX ___URP___ COURSE NUMBER ___6212___ LAB CODE (L or C) _C_

COMPLETE COURSE TITLE:

STATISTICS FOR URBAN PLANNING

EFFECTIVE DATE
(first term course will be offered)

FALL 2016

CREDITS[2]	TEXTBOOK INFORMATION
3	Kenneth J. Meier, Jeffrey L. Brudney, and John Bohte, *Applied Statistics for Public and Nonprofit Administration*, 8th edition, Boston, MA: Wadsworth, 2012.

GRADING (SELECT ONLY ONE GRADING OPTION): REGULAR __X__ SATISFACTORY/UNSATISFACTORY _____

COURSE DESCRIPTION, NO MORE THAN THREE LINES:

This course provides an introduction to statistics, with emphasis on applications to practical problems relevant to urban planning.

PREREQUISITES*	COREQUISITES*	REGISTRATION CONTROLS (MAJOR, COLLEGE, LEVEL)*

* PREREQUISITES, COREQUISITES AND REGISTRATION CONTROLS WILL BE ENFORCED FOR ALL COURSE SECTIONS.

MINIMUM QUALIFICATIONS NEEDED TO TEACH THIS COURSE:

MEMBER OF THE GRADUATE FACULTY OF FAU AND HAS A TERMINAL DEGREE IN THE SUBJECT AREA (OR A CLOSELY RELATED FIELD).

Faculty contact, email and complete phone number: Steven Bourassa, Director, School of Urban and Regional Planning, sbourassa@fau.edu, (561) 297-4164	Please consult and list departments that might be affected by the new course and attach comments.[3] This course is similar to one taught by the School of Public Administration, but that course does not emphasize applications to urban planning and also has a prerequisite. The submitter is director of both schools.

Approved by:

Department Chair: Steven C Bourassa   Date: 2-9-16

College Curriculum Chair: _____   3/2/16

College Dean: Wesley Hawkins   2-9-16

UGPC Chair: Wm L McDaniel   3-2-16

Graduate College Dean: _____   3-2-16

UFS President: _____

Provost: _____

1. Syllabus must be attached; see guidelines for requirements: www.fau.edu/provost/files/course syllabus.2011.pdf

2. Review Provost Memorandum: **Definition of a Credit Hour** www.fau.edu/provost/files/Definition Credit_Hour_Memo_2012.pdf

3. Consent from affected departments (attach if necessary)

Email this form and syllabus to UGPC@fau.edu one week before the University Graduate Programs Committee meeting.

School of Urban and Regional Planning
College for Design and Social Inquiry
Florida Atlantic University

Syllabus
URP 6212 Statistics for Urban Planning
Spring 2017

Instructor: Dr. Steven Bourassa
Office: SO 284-J
Email: sbourassa@fau.edu
Phone: (561) 297-4164

Credit hours: 3
Class meetings: Time and location TBA
Office hours: Thursdays, 4-6 pm

Course Description

This course provides an introduction to statistics, with emphasis on applications to practical problems relevant to urban planning. The course is required for students in the MURP program. Topics that will be covered include basic research design, descriptive statistics, probability, sampling, hypothesis testing, correlations, significance tests, and linear regression.

Course Objectives

Quantitative data are important in urban planning and urban policy analysis. This course is designed to improve your understanding of quantitative data and your ability to make reasoned judgments using that data. The course will help you to evaluate the strengths and weaknesses of statistical arguments made in support of or in opposition to various policy proposals. Students completing this course will be able to:

- read, comprehend, and interpret the results of a statistical table, chart, or graph;
- generate statistics that describe a population of interest;
- explain the motivation for sampling and the concept of statistical inference;
- understand what statistical significance means (and what it does not mean);
- apply appropriate measures to describe relationships between variables;
- formulate a research question to better understand an urban planning or policy issue;
- test hypotheses concerning the issue and its causes or consequences;
- construct a linear regression model and explain how the outputs may be interpreted; and
- use Excel to perform basic statistical analyses.

Students completing this course will be prepared to enroll in more advanced courses in statistics focusing on regression analysis and other multivariate techniques.

Textbook

Kenneth J. Meier, Jeffrey L. Brudney, and John Bohte, *Applied Statistics for Public and Nonprofit Administration*, 8th edition, Boston, MA: Wadsworth, 2012.

Other Course Materials

Data sets needed to answer the homework questions marked with a computer symbol and any additional materials needed will be posted on Blackboard.

Course Requirements

One class session will be devoted to each topic or set of topics (usually covered by one or two chapters in the textbook). The first half of each session will be a lecture covering the important points from the relevant chapters. Students are expected to read the assigned chapters in advance of each lecture. The second half of each session will be a lab during which students will learn how to answer questions relevant to the session's topic. Homework questions will be assigned at the end of each class. These questions will be drawn from the questions at the end of each chapter. Homework assignments will also be posted on Blackboard. Homework answers must be uploaded to Blackboard by the posted deadlines (no later than midnight two days prior to the next class). Late submissions will not be accepted. The required format for homework assignments will be explained in class. Note that answers to some of the odd-numbered questions are given at the back of the book. Students are strongly encouraged to do more of the questions than just those that are assigned for homework.

In addition to the homework assignments, there will be three quizzes that will respectively cover chapters 1 to 6, 7 to 12, and 13 to 17, and a final exam that will cover the entire semester.

Grading

The final grade for the course will be calculated as follows:

- homework assignments: each of the 10 assignments will count 5% toward the final grade;
- quizzes: each of the three quizzes will count 10% toward the final grade; and
- final exam: this will count 20% toward the final grade.

The assignments, quizzes, and final exam will each be assigned a numerical score (up to 100%) and the scores will be averaged as indicated above. The total number of points possible for this course is 100. The numerical scores will be converted at the end of the semester into a letter grade as follows:

90–100: A	85-89: A–	
80–84: B+	75–79: B	70–74: B–
65–69: C+	60–64: C	55–59: C–
50–54: D	0–49: F	

Class Schedule

Date	Topics, reading assignments, homework due, and quizzes
Week 1	*Topic:* Statistics, measurement, and research design *Required reading (in advance):* Chapters 1, 2, and 3

Week 2	*Topic:* Frequency distributions and measures of central tendency
	Required reading: Chapters 4 and 5
	Homework assignment #1: due midnight two days before class
Week 3	*Topic:* Measures of dispersion
	Required reading: Chapter 6
	Homework assignment #2: due midnight two days before class
Week 4	*Review of Weeks 1-3 and Quiz #1:* Chapters 1 to 6
	Homework assignment #3: due midnight two days before class
Week 5	*Topic:* Introduction to probability and the normal probability distribution
	Required reading: Chapters 7 and 8
Week 6	*Topic:* Binomial probability distribution
	Required reading: Chapter 9
	Homework assignment #4: due midnight two days before class
Week 7	*Topic:* Inference
	Required reading: Chapter 11
	Homework assignment #5: due midnight two days before class
Week 8	*Review of Weeks 5-7 and Quiz #2:* Chapters 7, 8, 9, and 11
	Homework assignment #6: due midnight two days before class
Week 9	*Topic:* Hypothesis testing
	Required reading: Chapter 12
Week 10	*Topic:* Estimating population proportions and testing the difference between two groups
	Required reading: Chapters 13 and 14
	Homework assignment #7: due midnight two days before class

Week 11	*Topic:* Contingency tables
	Required reading: Chapter 15 and 16
	Homework assignment #8: due midnight two days before class
Week 12	*Review of Weeks 9-11 and Quiz #3:* Chapters 12 to 16
	Homework assignment #9: due midnight two days before class
Week 13	*Topic:* Introduction to regression analysis
	Required reading: Chapters 18 and 19
Week 14	*Topic:* Multiple regression and regression output
	Required reading: Chapters 21 and 23
	Homework assignment #10: due midnight two days before class
Finals Period	*Final Exam*

Statement on Academic Dishonesty

Students at Florida Atlantic University are expected to maintain the highest ethical standards. Academic dishonesty is considered a serious breach of these ethical standards, because it interferes with the university mission to provide a high quality education in which no student enjoys an unfair advantage over any other. Academic dishonesty is also destructive of the university community, which is grounded in a system of mutual trust and places high value on personal integrity and individual responsibility. Harsh penalties are associated with academic dishonesty. For more information, see University Regulation 4.001.

Student Accessibility Services

In compliance with the Americans with Disabilities Act (ADA), students who require special accommodation due to a disability to property execute course work must register with the Student Accessibility Services (SAS)—in Boca Raton, SU 133 (561-297-3880); in Davie, LA 131 (954-236-1222); or in Jupiter, SR 110 (561-799-8585)—and follow all SAS procedures (see http://www.fau.edu/sas/ for procedures and forms).

Student Success Resources

If you read the book, take good notes, study for quizzes, and read the assignment instructions closely, you should succeed. If you are having problems reading assignments, or having difficulty with exams or quizzes, or completing computer assignments, see your instructor during office hours or contact your instructor via email. It is imperative that you contact your professor early in the term if you are having problems with this course. Do not wait until the end of the term to seek assistance. If you need

individualized help or tutoring in reading, writing, taking notes, or other academic issues, please see one of the help centers listed below:

UNIVERSITY CENTER FOR EXCELLENCE IN WRITING
http://www.fau.edu/UCEW/WC/

LEARNING COMMUNITY
http://www.fau.edu/class/LearningCommunity/

TUTORING, STUDY HELP, & ACADEMIC SUPPORT
http://www.fau.edu/ctl/TutoringStudyHelpAndAcademicSupportStudentResources.php

CENTER FOR LEARNING AND STUDENT SUCCESS
http://www.fau.edu/CLASS/

CAREER DEVELOPMENT CENTER
http://www.fau.edu/cdc/

STUDENT INVOLVEMENT AND LEADERSHIP
http://www.fau.edu/sil/

If you are having personal problems and need guidance or help, please contact one of the centers listed below:

OFFICE OF HEALTH AND WELLNESS
http://www.fau.edu/wellness/index.php
http://www.fau.edu/wellness/staff.php

COUNSELING CENTER
http://www.fau.edu/counseling/

STUDENT INTERVENTION TEAM
http://www.fau.edu/studentsindistress/index.php
http://www.fau.edu/studentsindistress/aboutus.php
http://www.fau.edu/studentsindistress/SITrole.php

STUDENT CRISIS AWARENESS COMMITTEE
http://www.fau.edu/studentsindistress/SCACROLE.php

Syllabus subject to change!