



**Oregon State
University**

Course Name: QUANTITATIVE METHODS FOR PUBLIC POLICY ANALYSIS

Course Number: PPOL 522

Credits: 4

Instructor name: Brett Burkhardt

Instructor email: brett.burkhardt@oregonstate.edu

Instructor phone: 541-737-2310

Link to instructor bio or website: <http://liberalarts.oregonstate.edu/spp/sociology/brett-c-burkhardt>

Teaching Assistant name and contact info: n/a

Course Description

From the course catalog: "Covers a variety of techniques for analyzing quantitative data, including linear regression, logistic regression, and other techniques. Emphasis is placed on working with data and software to answer research questions. Prior knowledge of hypothesis testing and descriptive statistics is assumed." **PREREQS:** PPOL 521 [C] and ECON 524 [C].

Communication

I will be logging into the course approximately 2-4 times each week, excluding weekends and holidays. If you have general course-related questions, please post them in the Q&A Discussion Forum so the whole class may benefit from our conversation. For questions of a more personal matter, please contact me via email at brett.burkhardt@oregonstate.edu (preferred), through the Canvas messaging system, or via phone at 541-737-2310. I am also available for video chat (via Zoom) by appointment. I strive to return all course-related questions within 24-48 hours (Monday-Friday) and return graded assignments within 5-7 days of the due date.

Course Credits

This course combines approximately 120 hours of instruction, online activities, and assignments for 4 credits.

Technical Assistance

If you experience computer difficulties, need help downloading a browser or plug-in, assistance logging into the course, or if you experience any errors or problems while in your online course, contact the OSU Help Desk for assistance. You can call (541) 737-3474, email osuhelpdesk@oregonstate.edu or visit the [OSU Computer Helpdesk](#) online.

Learning Resources

Mehmetoglu, Mehmet and Tor Georg Jakobsen. 2017. *Applied Statistics Using Stata: A Guide for the Social Sciences*. Los Angeles: SAGE. [Required text]

Other course materials will be made available online via Canvas.

This course is offered through Oregon State University Extended Campus. For more information, contact:
Web: ecampus.oregonstate.edu Email: ecampus@oregonstate.edu Tel: 800-667-1465

Note to prospective students: Please check with the OSU Bookstore for up-to-date information for the term you enroll ([OSU Bookstore Website](#) or 800-595-0357). If you purchase course materials from other sources, be very careful to obtain the correct ISBN.

Canvas

This course will be delivered via Canvas where you will interact with your classmates and with your instructor. Within the course Canvas site you will access the learning materials, such as the syllabus, class discussions, assignments, projects, and quizzes. To preview how an online course works, visit the [Ecampus Course Demo](#). For technical assistance, please visit [Ecampus Technical Help](#).

Mesurable Student Learning Outcomes

After successful completion of this course, students will be able to:

- Explain regression-based methods of quantitative data analysis.
- Use statistical software to manage and analyze data.
- Design a research project.
- Report results of data analysis.
- Select an appropriate method of analysis for conducting social research.

Bacc Core / Slash Course / WIC

n/a

Evaluation of Student Performance

Homework (8)	24
Final exam	25
Research project	
	Paper 30
	Presentation 7
	Peer review 5
	Posts (3) 9
TOTAL	100

Students will be assessed on several activities. A brief description of these activities follows. Detailed instructions will be provided in Canvas.

Homework

Students will complete and submit 8 homework assignments throughout the quarter. The homework assignments require you to use Stata and interpret relevant results. Homework is due by 9am the following Monday. Homework is graded on a complete/not complete basis; you will earn full points if you submit (in good faith) a fully completed set of responses. I will release an answer key on the following Monday. It is your responsibility to check your responses and ensure you understand the material.

Final exam

Students will complete a comprehensive final exam during finals week. The exam will focus on conceptual issues and interpretation of results; it will not involve the use of Stata.

The exam will be timed. Students may use books or notes to answer the questions. Collaboration is not permitted. Evidence of collaboration may result in failing the course and further academic discipline (see below).

Research project

The research project has four components: (a) a written paper, (b) a recorded presentation, (c) a series of discussion posts, and (d) a peer review. The project involves an original analysis of data using the techniques learned in this class.

Course Content

WEEK	TOPIC	READINGS	LEARNING ACTIVITIES
1	Review OLS, Stata	M&J Chs. 2, 3, 4	Lab exercise; Homework; Discussion; Lectures
2	Functional forms	M&J Chs. 5,6	Lab exercise; Homework; Discussion; Lectures
3	Model specification	M&J Ch. 7; Stock & Watson pp. 266-276	Lab exercise; Homework; Discussion; Lectures
4	Diagnostics	M&J sections 7.1.4 and 7.2.2; Studenmund 2017 Ch. 10; Arceneaux & Huber 2007	Lab exercise; Homework; Discussion; Lectures
5	Logistic regression	M&J Ch. 8	Lab exercise; Homework; Discussion; Lectures
6	Presenting results	Williams 2012; Jann 2007; Long & Freese 2014 (marginal effects)	Lab exercise; Homework; Discussion; Lectures
7	Multilevel models	M&J Ch. 9	Lab exercise; Homework; Discussion; Lectures
8	Peer review	Peer paper(s)	Peer review activity
9	Missing data	Acock 2016 (5e), Ch. 13	Lab exercise; Homework; Discussion; Lectures
10	Presentations		Peer review activity
FINALS			Final Exam

Course Policies

Makeup Exams

Makeup exams will be given only for missed exams excused in advance by the instructor. Excused absences will generally not be given after the absence has occurred, except under very unusual circumstances.

Late submissions

Late submissions will be accepted up to 24 hours beyond the stated due date and time. However, late submissions will earn only 50% of the grade warranted by the work. (For example, if an on-time paper earned a grade of 90%, that same paper submitted late would earn a grade of 45%.) No late submissions

will be accepted after 24 hours unless prior arrangement has been made or truly extraordinary circumstances arise.

Incompletes

Incomplete (I) grades will be granted only in emergency cases (usually only for a death in the family, major illness or injury, or birth of your child). If you are having any difficulty that might prevent you completing the coursework, please don't wait until the end of the term; let me know right away.

Guidelines for a Productive and Effective Online Classroom

Students are expected to conduct themselves in the course (e.g., on discussion boards, email) in compliance with the university's regulations regarding civility. Civility is an essential ingredient for academic discourse. All communications for this course should be conducted constructively, civilly, and respectfully. Differences in beliefs, opinions, and approaches are to be expected. In all you say and do for this course, be professional. Please bring any communications you believe to be in violation of this class policy to the attention of your instructor.

Active interaction with peers and your instructor is essential to success in this online course, paying particular attention to the following:

- Unless indicated otherwise, please complete the readings and view other instructional materials for each week before participating in the discussion board.
- Read your posts carefully before submitting them.
- Be respectful of others and their opinions, valuing diversity in backgrounds, abilities, and experiences.
- Challenging the ideas held by others is an integral aspect of critical thinking and the academic process. Please word your responses carefully, and recognize that others are expected to challenge your ideas. A positive atmosphere of healthy debate is encouraged.

Statement Regarding Students with Disabilities

Accommodations for students with disabilities are determined and approved by Disability Access Services (DAS). If you, as a student, believe you are eligible for accommodations but have not obtained approval please contact DAS immediately at 541-737-4098 or at <http://ds.oregonstate.edu>. DAS notifies students and faculty members of approved academic accommodations and coordinates implementation of those accommodations. While not required, students and faculty members are encouraged to discuss details of the implementation of individual accommodations.

Accessibility of Course Materials

All materials used in this course are accessible. If you require accommodations please contact [Disability Access Services \(DAS\)](#). Canvas, the learning management system through which this course is offered, provides a [vendor statement](#) certifying how the platform is accessible to students with disabilities. Additionally, Stata, the statistical software package used in this course, provides a [vendor statement](#) certifying how the software is accessible to students with disabilities.

Expectations for Student Conduct

Student conduct is governed by the university's policies, as explained in the [Student Conduct Code](#).

Academic Integrity

Students are expected to comply with all regulations pertaining to academic honesty. For further information, visit [Student Conduct and Community Standards](#), or contact the office of Student Conduct and Mediation at 541-737-3656.

OAR 576-015-0020 (2) Academic or Scholarly Dishonesty:

- a) Academic or Scholarly Dishonesty is defined as an act of deception in which a Student seeks to claim credit for the work or effort of another person, or uses unauthorized materials or fabricated information in any academic work or research, either through the Student's own efforts or the efforts of another.
- b) It includes:
 - i) CHEATING - use or attempted use of unauthorized materials, information or study aids, or an act of deceit by which a Student attempts to misrepresent mastery of academic effort or information. This includes but is not limited to unauthorized copying or collaboration on a test or assignment, using prohibited materials and texts, any misuse of an electronic device, or using any deceptive means to gain academic credit.
 - ii) FABRICATION - falsification or invention of any information including but not limited to falsifying research, inventing or exaggerating data, or listing incorrect or fictitious references.
 - iii) ASSISTING - helping another commit an act of academic dishonesty. This includes but is not limited to paying or bribing someone to acquire a test or assignment, changing someone's grades or academic records, taking a test/doing an assignment for someone else by any means, including misuse of an electronic device. It is a violation of Oregon state law to create and offer to sell part or all of an educational assignment to another person (ORS 165.114).
 - iv) TAMPERING - altering or interfering with evaluation instruments or documents.
 - v) PLAGIARISM - representing the words or ideas of another person or presenting someone else's words, ideas, artistry or data as one's own, or using one's own previously submitted work. Plagiarism includes but is not limited to copying another person's work (including unpublished material) without appropriate referencing, presenting someone else's opinions and theories as one's own, or working jointly on a project and then submitting it as one's own.
- c) Academic Dishonesty cases are handled initially by the academic units, following the process outlined in the University's Academic Dishonesty Report Form, and will also be referred to SCCS for action under these rules.

Conduct in this Online Classroom

Students are expected to conduct themselves in the course (e.g., on discussion boards, email postings) in compliance with the [university's regulations regarding civility](#).

Tutoring

[NetTutor](#) is a leading provider of online tutoring and learner support services fully staffed by experienced, trained and monitored tutors. Students connect to live tutors from any computer that has Internet access. NetTutor provides a virtual whiteboard that allows tutors and students to work on problems in a real time environment. They also have an online writing lab where tutors critique and return essays within 24 to 48 hours. Access NetTutor from within your Canvas class by clicking on the Tools button in your course menu.

OSU Student Evaluation of Teaching

Course evaluation results are extremely important and are used to help me improve this course and the learning experience of future students. Results from the 19 multiple choice questions are tabulated anonymously and go directly to instructors and department heads. Student comments on the open-ended

questions are compiled and confidentially forwarded to each instructor, per OSU procedures. The online Student Evaluation of Teaching form will be available toward the end of each term, and you will be sent instructions via ONID by the Office of Academic Programs, Assessment, and Accreditation. You will log in to "Student Online Services" to respond to the online questionnaire. The results on the form are anonymous and are not tabulated until after grades are posted.