



STATS 402 Applied Regression

Thurs, 6:00 - 8:50 PM, PAB 1749

Instructor: Jingyi Jessica Li

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Teaching Assistant: Siavash Jalal

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TA Office Hours: Tue 4:00-6:00 PM, and by appointment

*This syllabus is subject to change. Changes, if any, will be announced in class.

Course Description:

STATS 402 is a graduate course designed for the Masters of Applied Statistics program. This course focuses on concepts and practice of simple and multiple regression analysis, including topics on testing, estimation, confidence interval construction, modeling, and regression diagnostics and plots. Other topics include polynomial regression, collinearity and confounding factor analysis, model selection, and geometry of least squares. Students are expected to use computers extensively to analyze data.

Credit Hours: 4

Recommended Textbooks:

- Applied Linear Regression Models (4th Ed.) by Kutner, Nachtsheim, and Neter

Course Topics:

1. Introduction to simple linear regression
2. Inference in regression analysis
3. Diagnostics and remedial measures
4. Linear algebra review
5. Multiple regression
6. Regression models for quantitative and qualitative predictors
7. Model selection
8. Diagnostics and remedial measures for multiple linear regression
9. Principle component analysis
10. Generalized linear models

Course Grades:

There will be weekly homeworks and a final exam. Homeworks will be assigned on Thursdays every week on the class website and due in one week on Thursday in class. Please write your name and student ID and staple your homeworks. Late homeworks will not be accepted, and make-up final will not be given. The course grade will be based on the calculation:

Homeworks	70%
Final	30%

Course Policies:

Please remember to turn off cell phones. The use of laptop computers will not be permitted in class.

You are expected to adhere to the honor code and code of conduct. If you have a disability that will require academic accommodation, please contact the UCLA Office for Students with Disabilities (OSD).

Academic Integrity:

As a student and member of the University community, you are here to get an education and are, therefore, expected to demonstrate integrity in your academic endeavors. All students must uphold University of California Standards of Student Conduct as administered by the Office of the Dean of Students. Students are subject to disciplinary action for several types of misconduct, including but not limited to: cheating, multiple submissions, plagiarism, prohibited collaboration, facilitating academic dishonesty, or knowingly furnishing false information. You may have assignments or projects in which you work with a partner or with a group. For example, you are welcome, and even encouraged, to work with others to solve homework problems. Even though you are working together, the assignment you submit for a grade must be in your own words, unless you receive specific instructions to the contrary. For more information about academic integrity, please go to <http://www.deanofstudents.ucla.edu/>.

Communication:

Please keep a current e-mail address with my.UCLA.edu in order to receive class announcements and reminders.

Important Dates:

First day of classes: September 22, 2016.

Thanksgiving holiday: November 24, 2016.

Final exam: December 1, 2016.