STAT4200/5200: Statistical Methods for Forecasting

TR 4:20-5:45 pm @ KOM 158, Fall 2015

Instructor: Dr. Qiang Wu
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Office Hours: TR 2:30-4:00, W 1:30-4:30, R 9:30-11:30, or by appointment

Course Description:
This course covers regression analysis and an introduction to time series. The first part focuses on linear least square regression for single variable and multiple variables. The topics include estimation, inference, theory, and model validation for regression. The second part covers autoregressive models and forecasting with time series data.

Textbooks:
Introduction to Econometrics, 3rd edition, by J. H. Stock and M. W. Watson.
Contents covered: Chapters 1-8 and 14.

Grading Policy:
- **Homework Assignments: 20%.** Doing homework is critically important for you to understand the materials covered. There are about 10 homework assignments. In case that there are more than 10 assignments, only the best 10 will be evaluated.
- **Projects: 30%**. Several projects on real data analysis will be given. To finish these projects, you may need to use calculator and/or one statistics software or programming language.
- **Mid-term exams: 30%.** There will be two in-class mid-term exams. The dates will be announced in class.
- **Final Exam: 20%.** There will be a comprehensive final exam at **3:30-5:30pm on Thursday, 12/10/2014.**
- **Bonus and modifications:** You may receive bonus points for participation of in-class activities. The total bonus and modification is up to 3%.
- **Graduate Credit:** You'll need to complete some additional assignments and additional questions in exams for receiving graduate level credit.
- **Grade Scale: A**: above 90%; **B**+: 86%-89%; **B**: 80%-85%; **C**+: 76-79%; **C**: 70%-75%; **D**+: 66%-69%; **D**: 60%-65%; **F**: below 60%. (Graduate students receive F if below 70%.)
- Grading policy is subject to change. Changes will be announced in class.

Make-up policy:
In general there will be **NO** make-ups for exams. For special situations, make-up can be arranged if your absence is reasonable and you are able to provide formal supporting document.

Withdrawal Information:

No grade of W will be assigned after the official drop date except in situations involving extreme extenuating circumstances beyond the student's control. In particular, a W will not be granted merely because the student is failing. Students should be aware that missing the official drop date and thereby receiving an F can have ramifications on financial aid.

Any student who currently has Financial Aid (898-2830) or Housing (898-2971) and is dropping below full time or withdrawing completely should contact those offices to understand how their actions will affect their status.

Lottery scholarship:

Do you have a lottery scholarship? To retain the Tennessee Education Lottery Scholarship eligibility, you must earn a cumulative TELS GPA of 2.75 after 24 and 48 attempted hours and a cumulative TELS GPA of 3.0 thereafter. A grade of C, D, F, FA, or I in this class may negatively impact TELS eligibility.

If you drop this class, withdraw, or if you stop attending this class you may lose eligibility for your lottery scholarship, and you will not be able to regain eligibility at a later time.

For additional Lottery rules, please refer to your Lottery Statement of Understanding form (http://www.mtsu.edu/financial-aid/forms/LOTFEV.pdf) or contact your MT One Stop Enrollment Coordinator (http://www.mtsu.edu/one-stop/counselor.php).

Reasonable Accommodation for Students with Disabilities:

Middle Tennessee State University is committed to campus access in accordance with Title II of the Americans with Disabilities Act and Section 504 of the Vocational Rehabilitation Act of 1973. Any student interested in reasonable accommodations can consult the Disability & Access Center (DAC) website www.mtsu.edu/dac and/or contact the DAC for assistance at 615-898-2783 or dacemail@mtsu.edu

Academic Misconduct

Middle Tennessee State University takes a strong stance against academic misconduct. Academic Misconduct includes, but is not limited to, plagiarism, cheating, and fabrication.

(1) **Plagiarism:** The adoption or reproduction of ideas, words, statements, images, or works of another person as one's own without proper attribution. This includes self-plagiarism, which occurs when an author submits material or research from a previous academic exercise to satisfy the requirements of another exercise and uses it without proper citation of its reuse.

(2) **Cheating:** Using or attempting to use unauthorized materials, information, or study aids in any academic exercise. This includes unapproved collaboration, which occurs when a student works with others on an academic exercise without the express permission of the professor. The term academic exercise includes all forms of work submitted for credit or hours.

(3) **Fabrication:** Unauthorized falsification or invention of any information or citation in an academic exercise.

To be clear: going online and taking information without proper citations, copying parts of other student's work, creating information for the purposes of making your paper seem more official, or anything involving taking someone else's thoughts or ideas without proper attribution is **academic misconduct**. If you work together on an assignment when it is not allowed, it is **academic misconduct**. If you have a question about an assignment, please come see me to clarify. Any cases of academic misconduct will be reported to the Office of Academic Affairs for violating the academic honesty requirements in the student handbook. They will also result in failure for the course. Remember – ignorance is NOT a defense.