Instructor: Yuexiao Dong, Ph.D.
Office: 326 Speakman
Telephone: (215) 204-0670
E-mail: ydong@temple.edu
Office hours: Tuesday 2:00 pm-4:00 pm; Friday 10:00 am-12:00 pm. Or by appointment.
Class: Tuesday 5:30 pm-8:00 pm, A605, Alter Hall.


Objective: The course objective is to provide a sound treatment of regression analysis, time series analysis, and forecasting. The emphasis will be on linear models. ARIMA models will be emphasized as a forecasting tool. Some basic theory will be reviewed, but the course will emphasize applications. Calculators will be used on tests and for homework. MINITAB will be used as the statistical software package for this course.

Important dates:
Last day to drop a course: Monday, February 1;
Spring recess: Monday, March 8 to Friday, March 12;
Last day to withdraw: Monday, March 29;
Classes end: Monday, May 3;
Final exam: Tuesday, May 11, 5:45 pm-7:45 pm.
Grade scale: A 90 - 100; A- 86 - 89; B+ 82 - 85; B 78 - 81; B - 74 - 77; C+ 70 - 73; C 66 - 69; C- 62 - 65; D + 59 - 61; D 53 - 58; F Below 53. Undergraduate students will receive 6% extra.

Exams: There will be one mid-term examination worth 20%; 3 quizzes worth a total of 30%; the final will be cumulative and worth 30%. All examinations and quizzes will be closed book. In addition, homework is worth 10% and the class participation is worth 10%. Late homework will not be accepted. Attendance is taken at the beginning of class. Students are responsible for making arrangements to obtain missed class notes from classmates. Undergraduate students have one automatically excused absence. Graduate students have two automatically excused absences. There is a 2% course grade penalty for every absence thereafter.

Students will receive a grade of zero for missed exams or quizzes unless I am notified via email (ydong@temple.edu) within 24 hours and the medical/family emergency can be formally documented to my satisfaction. Make-ups for missed exams are given solely at the discretion of the instructor, and the documentation must be satisfactory to be considered for a make-up. There is absolutely no possibility for retaking exams as this is unfair to all the other students who would not be given the same opportunity. Missing the Final Exam results in automatic course grade of “F”.

Students’ responsibilities: Students are responsible to attend all classes and to keep up with the reading and homework. They have to consider the needs of their fellow students and not talk or walk around in class, except to ask questions and participate in the discussion of the material. No communication equipment is allowed that makes noise and disturbs the class. Material discussed in class will be emphasized on examinations and quizzes. Students need to spend 8 - 10 hours per week of serious study outside the classroom. Excluding exceptionally gifted students, there are no shortcuts to this approach. The best outcome results from steady study and effort. Cramming for quantitative courses typically does not work.

Minitab: This user-friendly package will help with the understanding of statistical problems. Minitab sells the full version 15 to students at $29.99 for 5 months, $49.99 for a year, and $99.99 for ownership. Also, they have provided a one month trial version for free.
Calculators: You will need a basic calculator for homework and in class examinations. It should include basic statistical functions to compute the mean and standard deviation. Such calculators cost less than $20. As there are a great variety of such calculators, it is your responsibility to learn how to use the one you have. Calculators that look like cell phones or computers will not be allowed on examination. The sharing of calculators on examinations will not be allowed.

Blackboard and TUmail: Blackboard enrollment does not indicate you are actually enrolled or "registered" in the course. Students not officially registered will be un-enrolled from the course BlackBoard website. Your instructor will be distributing a great deal of important information via BBOARD, such as grades, scores, and announcements. The use of BlackBoard/TUMAIL is required of all students. Only student email written with TUmail will be read as a security precaution.

Dropping and withdrawl: If you decide to withdraw from this course, you must see your Academic Advisor who will sign the form for you. Instructors are no longer required to sign your withdrawal forms. See online information and/or your advisor for more information. Students are responsible for meeting all Temple deadlines.

Incompletes: Incompletes require approval of Department Chair and the School of Business Dean, and require that the student has completed the majority of the work of the course at a passing level, but whose satisfactorily documented circumstances justify consideration. Incompletes will not be granted to students who miss the Final Exam.

Change of grade: Under no circumstances will a grade be changed by accepting additional work from a student or allowing the student to make-up or retake exams/quizzes/HW after the final examination period or grades are submitted to TU Registrar, in order to raise the overall grade.

Classroom behavior: Cheating and other uncivil classroom behavior will not be tolerated, and will be handled according to Temple Policy. Uncivil behavior includes rudeness, unnecessary talking in class, and any other undesirable behavior. Please report any such behaviors to your instructor as others’ cheating negatively impacts your own grade, and uncivil behavior reduces the quality of the classroom learning environment we all expect and
deserve. Your report of any activity will be kept strictly confidential. Reading newspapers, reading textbooks from other courses, listening to music with earphones/earbuds, and text messaging are all prohibited. If you have other things you would rather be doing, your instructor, and your classmates would rather you did them outside of class.

The ringers on cellular phones, pagers, PDA’s (etc.) should be turned off or switched to "silent" ring so not to disrupt class. Incoming calls are not to be answered during class nor are outgoing calls to be placed while class is in session. Digital phones, PDAs, laptop/notebook/pocket PCs, and other wireless-enabled devices may not be used during exams in lieu of calculators. Text messaging during class is strictly prohibited. Students who fail to follow classroom protocol regarding electronic devices (phones, PDAs, pagers, etc.) will be asked to leave the classroom.

**Students with disabilities:** If you have, or believe you have, a disability that requires accommodations, please contact the Student Disability Office immediately to discuss your situation. They will verify your needs, and when warranted, provide faculty with relevant information. Contact Disability Resources and Services at 215-204-1280 in 100 Ritter Annex.

**Academic rights & responsibilities:** The University has adopted a policy on Student and Faculty Academic Rights and Responsibilities (Policy # 03.70.02). You are encouraged to read the policy in its entirety. The policy has already been posted in the undergraduate and graduate bulletins on line. Other communications to the University community are forthcoming. The new policy indicates that the freedom to teach and freedom to learn are inseparable facets of academic freedom. It can be accessed through the following link: [http://policies.temple.edu/getdoc.asp?policy_no = 03.70.02](http://policies.temple.edu/getdoc.asp?policy_no = 03.70.02).

**Recommended study strategies:**

*Learning Resources: *Attend Instructor office hours; use free tutoring at the Math & Sciences Resources in Curtis Hall; private tutors are also a helpful option. Share class notes with classmates for more detailed and complete notes.

*Rewrite class notes as soon as possible.* This will reinforce your understanding of the material, and identify weaknesses in your understanding.

*Study with classmate(s) and teach/test one another.* Working in groups may lessen students’ anxiety.
Manage your time: Three credit courses require about 10 hours study or more per week during the regular academic semesters. If your work schedule or other obligations prohibits you from devoting sufficient time to your courses, you might consider reducing your course load, work hours, expectations for a grade, or some combination of the three.

Prepare for Class: Do homework exercises before the class in which they are due. Rework them multiple times as needed to reinforce the concepts and as preparation for exams. Only after you can "easily" complete, and interpret an exercise have you mastered that learning unit. If you hesitate and must refer to the text and/or class notes to solve exercises, you are not prepared for the exam.

Prepare for Exams by Self-testing: Self-testing is the key to exam preparation and is the only way to assess exam readiness. Exams test your understanding and ability to apply concepts. Exams are designed to be challenging learning experiences, and leave a well-prepared student feeling positive about his/her performance on the exam.

Tentative course schedule (subject to changes):

Lecture 1 (Jan 19): Review of the normal, t, Chi-Square, and F distributions, expected value, covariance, correlation coefficient, mean, and variance.

Lecture 2 (Jan 26) & Lecture 3 (Feb 2): Introduction to linear regression, least-square estimation, and simple regression model and properties.

Lecture 4 (Feb 9) & Lecture 5 (Feb 16): Continue simple regression, introduction to multiple regression, quiz 1.

Lecture 6 (Feb 23) & Lecture 7 (Mar 2): ANOVA table, dummy variables, multicollinearity, matrix approach to regression, quiz 2.

Lecture 8 (Mar 16): Stepwise and all possible (best subset) regression.

Lecture 9 (Mar 23): Mid-term exam.

Lecture 10 (Mar 30) & Lecture 11 (Apr 6): Introduction to time series, AR model and MA model.

Lecture 12 (Apr 13) & Lecture 13 (Apr 20): ARIMA models and properties, quiz 3.

Lecture 14 (Apr 27) Review.