

SYRACUSE UNIVERSITY, SPRING 2019 SYLLABUS

MAT 750, Statistical Consulting

General Information

Course Meetings: Mon & Wed 8 AM - 9:20 AM in Carnegie 120.

Instructor: Thomas John, Ph.D.

Contact Information: Office: Carnegie 313D, Phone: 315-443-1587, email: thjohn@syr.edu.

Office Hours: Mon & Wed 10:00AM- 11:30AM.

Special Note on the Drop Deadline:

Academic Drop Deadline and the Financial Drop deadline will both occur on Monday, February 4, 2019 (three weeks from the first day of classes). Students may still withdraw from courses after Feb 4th but before the withdraw deadline Tuesday, April 16, 2019; this would place a "WD" grade on their transcripts.

Course Catalogue Description:

Working with real data taken from case studies, published papers, and current projects in the statistical laboratory. Prereq: (MAT 525 OR MAT 652) AND (MAT 654 OR APM 630 OR MAS 766)

Course Overview:

The overall goal will be to introduce statistical analyses topics from the perspective of statistical consulting, the associated implementations via statistical software, and reporting the results to a non-statistician audience.

Text: These three textbooks will serve as the main/key references for statistical methodologies.

- *Introduction to Probability and Statistics Using R*, 3rd Ed, by G. Jay Kerns
 - <https://cran.r-project.org/web/packages/IPSUR/vignettes/IPSUR.pdf>
- *An Introduction to Statistical Learning with Applications in R*,
 - by G. James, D. Witten, T. Hastie, and R. Tibshirani
 - website: <http://www-bcf.usc.edu/~garth/ISL/>
 - First print: <https://www-bcf.usc.edu/~garth/ISL/ISLR%20First%20Printing.pdf>
- *Probability and Mathematical Statistics*, by Prasanna Sahoo
 - www.math.louisville.edu/~pksaho01/teaching/Math662TB-09S.pdf
- Links to additional resources will be announced and provided on the course blackboard page.

Grading:

Your final grade will be based on homework (30%), projects (60%), and class attendance/participation (10%). Final letter grades will be given according to the following scale:

A (93-100); A- (90-92); B+ (87-89); B (83-86); B- (80-82);
C+ (77-79); C (73-76); C- (70-72); D (60-70); F (0-59)

Attendance:

You are expected to attend every class and every exam. If you miss a class, it is your responsibility to obtain and review/study (on your own) copy of the lecture notes for that class. You are also responsible for any announcements about changes to the course schedule/requirements that were made during that class.

Phone, Laptop, Tablet in class policy:

Phones, laptops, tablets, and similar electronics are not allowed to be out during class. **This policy will be strictly enforced in class. Repeated violations of this policy will be recorded.** Students who repeatedly violate this policy will be asked to leave the room and the overall course grade will be affected by such behavior.

Students with Disabilities:

If you believe that you need academic adjustments (accommodations) for a disability, please contact the Office of Disability Services (ODS), visit the ODS website <http://disabilityservices.syr.edu>, located in Room 309 of 804 University Avenue, or call (315) 443-4498 or TDD: (315) 443-1371 for an appointment to discuss your needs and the process for requesting academic adjustments. ODS is responsible for coordinating disability-related academic adjustments and will issue students with documented Disabilities Accommodation Authorization Letters, as appropriate. Since academic adjustments may require early planning and generally are not provided retroactively, please contact ODS as soon as possible. Making arrangements with ODS takes time. Do not wait until just before the first test. Students taking exams at ODS should take them at times which overlap the exam time for the rest of the class.

Religious observances policy:

SU religious observances policy recognizes the diversity of faiths represented among the campus community and protects the rights of students, faculty, and staff to observe religious holidays according to their tradition. Under the policy, students are provided an opportunity to make up any examination, study, or work requirements that may be missed due to are religious observance provided they notify their instructors before the end of the second week of classes. For SPRING and spring semesters, an online notification process is available through MySlice (Student Services > Enrollment > My Religious Observances) from the first day of class until the end of the second week of class.

Related link:

<https://policies.syr.edu/policies/university-governance-ethics-integrity-and-legal-compliance/religious-observances-policy/>.

Academic Integrity:

Syracuse University's Academic Integrity Policy reflects the high value that we, as a university community, place on honesty in academic work. The policy defines our expectations for academic honesty and holds students accountable for the integrity of all work they submit. Students should understand that it is their responsibility to learn about course-specific expectations, as well as about university-wide academic integrity expectations. The policy governs appropriate citation and use of sources, the integrity of work submitted in exams and assignments, and the veracity of signatures on attendance sheets and other verification of participation in class activities. The policy also prohibits students from submitting the same work in more than one class without receiving written authorization in advance from both instructors. Under the policy, students found in violation are subject to grade sanctions determined by the course instructor and non-grade sanctions determined by the School or College where the course is offered as described in the Violation and Sanction Classification Rubric. SU students are required to read an online summary of the University's academic integrity expectations and provide an electronic signature agreeing to abide by them twice a year during pre-term check-in on MySlice.

Specifically for this course, the academic integrity aspects relate to HWs and projects. You may discuss these problems with other students, but each of you is expected to write up your own solutions independently. Also, note that for the projects, standard plagiarism policies apply. Please review and understand the Syracuse University Libraries page related to standard rules of plagiarism (<https://researchguides.library.syr.edu/c.php?g=258089&p=1723661>). Additional rules regarding the independent work to be done for the projects will be specified in lecture.

The Violation and Sanction Classification Rubric establishes recommended guidelines for the determination of grade penalties by faculty and instructors, while also giving them discretion to select the grade penalty they believe most suitable, including course failure, regardless of violation level. Any established violation in this course may result in course failure regardless of violation level.

Related link: <http://class.syr.edu/academic-integrity/policy/>