

MAT 222: Probability & Statistics II

M005 — Spring 2017

Instructor Information

Name: Caleb McWhorter
Office: Carnegie 400D
Email: cgmewhor@syr.edu
Office Hours: M 2:05–3:05; T 1:00–2:00
Course Supervisor: Dr. Thomas John

Class Information

Dates: January 18 – May 1
Time: MW 12:45 pm – 2:05 pm
Classroom: Carnegie 120

Office hours will occur Monday after class from 2:05–3:05 and Tuesdays 1:00–2:00. Additional individual meetings to discuss course material or any other concerns can be scheduled by contacting me. You can always feel free to stop by my office at any time to see if I am there. If I am free, I will be more than willing to discuss anything you might have for me.

Course Description

This is the second course in the probability and statistics sequence, MAT 221-222, designed for various academic majors. The primary objectives of the course are to understand basic concepts of statistical inference and to learn commonly used statistical methods of inference. The course will cover concepts of estimation and hypothesis testing, inferences involving two populations, Chi-square tests, regression analysis, and analysis of variance.

Course Materials

- **Required Text:** *Introduction to the Practice of Statistics*, by Moore, McCabe, and Craig, 8th Edition. ISBN: 9781464158933. Book companion site: <http://bcs.whfreeman.com/ips8e>. Chapters 6 through 13 will be covered in this course.
- **Calculator:** You will need a calculator to do the computations that will arise throughout the course. No specific calculator is required, but TI 84 or TI 83 graphing calculator is highly recommended.
- **Statistical Software:** MINITAB (a statistical package) will be introduced in lecture and computer problems to use MINITAB will be assigned. If additional help is needed, please see <https://www.minitab.com/enus/support/videos/> and <https://onlinecourses.science.psu.edu/statprogram/minitab>, as well as many other websites/videos available on the internet.

Grading

The course grade is determined by the following components:

Exam 1	20%
Exam 2	20%
Final Exam	30%
Homework	10%
Quizzes	10 %
Project	10 %

Grade Scale

The grade scale is the standard Mathematics Department grading scale and is as follows:

A	93 - 100	C+	77 - 79
A-	90 - 92	C	73 - 76
B+	87 - 89	C-	70 - 72
B	83 - 86	D	60 - 69
B-	80 - 82	F	0 - 59

Attendance & Participation

You are expected to attend every class and every exam. If you miss a class, it is your responsibility to obtain a copy of the lecture notes for that class from another student. You are also responsible for any announcements about changes to the course schedule, the exam schedule, or the course requirements that were made during that class.

More than two unexcused absences from lectures could result in receiving an F in the course. Furthermore, excessive lateness will also count as an absence. If you are dismissed from lecture due to problems during the lecture, e.g. disruptive behavior or unauthorized cell phone use, then this dismissal will be recorded as an absence.

Homework

Homework will be done online using WeBWorK. To login, go to the link: http://webwork.syr.edu/webwork2/MAT_222_Spring_2017/. Your username is your NetID in lower case letters and your password is initially set to be your 9-digit SUID number. You should change it after logging in for the first time. Also, note that even if you used WeBWorK before for another course, the password is reset to the 9-digit student id number. Additional HW assignments may be announced by the instructor and some of those may be collected.

Exams

All exams will take place during normal class hours. You are expected to be present, seated, and ready to take the exam before the exam is to be given. The first two exams will occur in the first half of lecture. The final exam may take up the entirety of the final lecture. If there is to be a take-home portion for any exam, it will be given out at least 24 hours before any in-class portion. If you must miss an exam, it is imperative that you make the instructor aware before the exam begins. If you cannot be present for an exam, you must make the instructor aware in a timely manner before the exam so that arrangements can be made. Reasons for missing an exam must be documentable and such documentation presented if requested. Each exam case will be handled on

an individual basis. The final exam will be cumulative, mandatory, and is scheduled for the final day of class – August 12, 2016 – during your regular lecture time. The final exam may take the entire lecture block.

Final Project

Data analysis project will be assigned in the middle of the semester and will be due on the last day of classes. The objective of the project is to investigate the problem of your interest using statistical methods learned in the course. You will be required to analyze data using MINITAB, and write a report on your analysis.

Students with Disabilities

Syracuse University values diversity and inclusion; we are committed to a climate of mutual respect and full participation. My goal as your instructor is to create a learning environments that are useable, equitable, inclusive and welcoming. If there are aspects of the instruction or design of this course that result in barriers to your inclusion or accurate assessment or achievement, I invite you to meet with me to discuss additional strategies beyond accommodations that may be helpful to your success.

If you believe that you need accommodations for a disability, please contact the Office of Disability Services (ODS) located at 804 University Avenue, third floor or go to the ODS website at <http://disabilityservices.syr.edu/> and click current students tab to register on-line. You may also call 315.443.4498 to speak to someone regarding specific access needs. ODS is responsible for coordinating disability-related accommodations and will issue 'Accommodation Letters' to students as appropriate. Since accommodations may require early planning and are not provided retroactively, please contact ODS as soon as possible.

Counseling Services

If at any point during the semester, you feel overwhelmed with your class work, feel thoughts of depression/suicide, experience sexual assault/rape, experience problems with substance abuse or relationship abuse, or have any other struggles with physical/mental health, ***please seek help!*** The Counseling Center Services at Syracuse University is a resource offering assistance with any issue you might have - both individually and through group sessions. There is ***never*** any shame in seeking help. If you or someone you know is struggling with any of these issues, speak out! The Counseling Center Services website can be found at <http://counselingcenter.syr.edu/>, is located at 200 Walnut Place, Syracuse NY 13244-4350, and can be contacted at 315.443.4715.

If you or someone you know is having issues with gender or sexual identity issues, the LGBT[QIA]+ Center is there to create a safe space for those with marginalized genders and sexualities or those who might be struggling with these issues. The LGBT[QIA]+ Center website can be found at <http://lgbt.syr.edu/>, is located at 750 Ostrom Avenue, Syracuse, NY 13244-4350, and can be contacted at 315.443.3983. Know that my office is a safe space and should you prefer any gender specific pronoun/name, please be sure to make me aware!

Faith/Tradition Observances Policy

Syracuse University's religious observances policy, found at http://supolicies.syr.edu/emp_ben/religious_observance.htm, recognizes the diversity of faiths represented in the campus community and protects the rights of students, faculty, and staff to observe religious holy days according to their tradition. Under the policy, students should have an opportunity to make up any examination, study, or work requirements that may be missed due to a religious observance provided they notify their instructors no later than the end of the second week of classes for regular session classes and by the submission deadline for flexibility formatted classes. You should discuss with your instructor how any missed work is to be made up in a timely fashion; in particular, discuss the issue with them *before* the absence. Student deadlines are posted in MySlice under Student Services/Enrollment/My Religious Observances/Add a Notification.

Mathematics Help

I am always available for help, either during my office hours or whenever you stop by my office and I am there with time to spare. You may also email me to try to set-up a time to see me. While you may email me with questions, many questions are not effectively answerable in an email and may be deferred till you are in class, to office hours, or to an individual appointment. You can also seek help from any person staffing the Math Clinic, located in Carnegie 102. Hours, location, and staffing information can be found at <http://math.syr.edu/Help.htm>

Problem Resolution

Please inform the instructor of any problems, questions, or concerns that you have with this course. Do not wait to bring issues to the attention of your instructor! Problems not satisfactorily resolved with your instructor should be brought to the attention of the course supervisor without delay. The course supervisor is Professor Thomas John.

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 university 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 written 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.

For this course, the academic integrity aspects especially relate to quizzes/exams, as well as independent work to be done for any labs, projects, and reports. No student is allowed to use *any* electronic device, except for a calculator, during any quiz or exam until the quiz or exam is turned

in. Accessing material beyond what is provided on the formula card, tables, and the basic calculator functionalities during any quiz or exam is a violation of the academic integrity policy. For any project or reports, standard plagiarism policies apply. Please, review the Syracuse University Libraries page on plagiarism: <https://researchguides.library.syr.edu/c.php?g=258089&p=1723661>. Note that the university offers writing assistance to students, see the “Mathematics & Writing Help” section of the syllabus. Additional rules regarding the projects and reports will be given throughout the semester.

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. For more information and the complete policy, see <http://class.syr.edu/academic-integrity/policy/>.

Turnitin

This class will use the plagiarism detection and prevention system Turnitin. You will have the option to submit your papers to Turnitin to check that all sources you use have been properly acknowledged and cited before you submit the paper. The instructor will also submit all papers you write for this class to Turnitin, which compares submitted documents against documents on the Internet and against student papers submitted to Turnitin at Syracuse University and at other colleges and universities. Your knowledge of the subject matter of this course and your writing level and style into account in interpreting the originality report. Keep in mind that all papers you submit for this class will become part of the <https://www.turnitin.com/> reference database solely for the purpose of detecting plagiarism of such papers.

Orange Alert

Orange Alert, Syracuse University’s crisis notification system, uses text messages, phone, and email alerts to provide rapid notification and instructions to members of the University community in the event of a critical incident in progress. Critical incidents could include an individual who is considered armed and dangerous, a hazardous materials incident, an explosion, or any other event in which there is an immediate threat of physical harm or death to campus community members. Orange Alert contact information for students, faculty, and staff is drawn from the MySlice online information system; please keep your contact information current. In the event of an emergency, the phone emergency line from on-campus is 711; the phone emergency line from off-campus is 315.443.2224; the phone emergency line from cell phone providers ATT/Verizon/Nextel is #78. For complete details on emergency procedures, visit: <http://emergencyguide.syr.edu/>.

Cellular Phones

Following the Mathematics Department guidelines, all electronic devices other than perhaps a calculator should be turned off and put away during class. Calculators on cellular phones or other computational devices are not to be used on quizzes, tests, or other class activities unless otherwise instructed. Unless otherwise instructed, using a cellular or other electronic device can result in dismial from lecture.

Email Policy

Syracuse University has established email as a primary vehicle for official communication with students, faculty, and staff. All email communication in this course should be done using your @syr.edu email account. Due to federal laws, such as FERPA, emails coming from a non-SU email may not receive a response. Please, title emails with MAT 222: [Email Issue], where “email issue” is a summary title of the content of the email. This is to help ensure that your email is noticed and responded to.