This is an introductory graduate level course in probability theory. The aim is to introduce students to the basic concepts such as random variable, distribution, expectation and independence. We will then undertake a detailed study of the classical limit theorems for sums of independent random variables proving the weak and strong laws of large numbers and the central limit theorem. Other topics will be covered as time permits. The basic material for this course is contained in the first four chapters of Durrett’s book. Other useful references are:

2. *Probability and Measure*, by P. Billingsley

**Grading**  Homework and a final exam will be used to determine your grade for the course. You may discuss the homework problems with each other, but you must write up your own solution to hand in.

**Students with Disabilities**  If you believe that you need accommodations for a disability, please contact the Office of Disability Services (ODS), [http://disabilityservices.syr.edu](http://disabilityservices.syr.edu), located in Room 309 of 804 University Avenue, or call (315) 443-4498 for an appointment to discuss your needs and the process for requesting accommodations. ODS is responsible for coordinating disability-related accommodations and will issue students with documented disabilities Accommodation Authorization Letters, as appropriate. Since accommodations may require early planning and generally are not provided retroactively, please contact ODS as soon as possible. You are also welcome to contact me privately to discuss your academic needs although I cannot arrange for disability-related accommodations. Making arrangements with ODS takes time. Do not wait until just before the first test.

**Academic Integrity**  The Syracuse University Academic Integrity Policy holds students accountable for the integrity of the work they submit. Students should be familiar with the Policy and know that it is their responsibility to learn about instructor and general academic expectations with regard to proper citation of sources in written work. The policy also governs the integrity of work submitted in exams and assignments as well as the veracity of signatures on attendance sheets and other verifications of participation in class activities. Serious sanctions can result from academic dishonesty of any sort. For more information and the complete policy, see [http://academicintegrity.syr.edu](http://academicintegrity.syr.edu)
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 religious observance provided they notify their instructors before the end of the second week of classes. For fall 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.

Cell Phones  Cell phones should be turned off and put away during class.