University of Iowa  
College of Liberal Arts and Sciences  
Department of Statistics and Actuarial Science  
Introduction to Mathematical Statistics II, STAT:3101:2 (22S:131:2)

• **General Information**

  – *Instructor*: Kofi Placid Adragni, 231 SH, 319-335-0820, kofi-adragni@uiowa.edu
  – *Time & Location*: 2:30PM - 3:20PM Mon, Wed, Fri; 2217 SC
  – *Office Hours*: 3:30PM - 4:30PM Mon, Wed, Fri, and by appointment
  – *Prerequisite*: Two semesters of Calculus and STAT:3100 (22S:130).
  – *DEO*: Dale Zimmerman, 241 SH, 335-0712, dale-zimmerman@uiowa.edu

• **Course Objectives**

This course is intended to provide a good understanding of introductory probability and mathematical statistics. This is the second semester of a two semester sequence. The first semester concentrates on probability and the second on the mathematics of statistical inference. The following topics will be covered: *Estimation, testing statistical hypothesis, linear models, multivariate distributions, nonparametric methods*.

The sequence 22S:130-131 is required of undergraduate statistics majors and undergraduate actuarial majors. The prerequisite is one year of calculus. This course will also help to prepare students for the first professional actuarial exam. We will cover most of chapters 6 through 12. Note: A grade of B- or better is a prerequisite for enrolling in ACTS 3080 (22S:180), Mathematics of Finance I.

• **Homework and Quizzes**:

  – Homework assignment with a completion date are posted on the class web page.
  – Assignment will **not** be collected or graded.
  – Fifteen to twenty minutes quizzes will be given on the completion date of the assignment.
  – You are required to read the section du jour before the lecture.
  – The section du jour is posted on the class web page under *class schedule*.

• **Exams**:

  – Exams are closed book but you will be allowed one sheet of paper with formulas or notes on both sides for the midterm and the final exams.
– Remember to bring your own calculator for all tests.
– There will be two in-class midterm exams and one final exam. Exam dates and locations are as follows:
  * Exam 1: Monday, February 14 (Time and Location TBD)
  * Exam 2: Monday, March 21 (Time and Location TBD)
  * Final exam: Date, Time and Location TBA

• **Grading:**
Your final grade will be determined by a weighted average of quizzes and exam scores.

  * Quizzes 25%
  * First Midterm 25%
  * Second Midterm 25%
  * Final Exam 25%

The grades are assigned according to the following breakdown: 90-100 (A); 80-89 (B); 70-79 (C); 60-69 (D); 0-59 (F). The cutoff points may vary depending on the difficulty of the exams. Also, borderline cases may receive a + or -, and grades may be lowered due to attendance.

• **Calculators:** No programmable calculators are allowed on the exams. Actuarial science majors will be served best by buying a financial calculator and/or a scientific calculator that is allowed on the professional exams sponsored by the Casualty Actuarial Society and the Society of Actuaries. The financial calculators are Texas Instruments BA II Plus or the BA II Plus Professional. These calculators are the only ones allowed on CAS/SOA exams that do interest calculations. The scientific calculators are TI-30Xa and the TI-30X II (S – solar, B – battery). If you want to use a calculator other than one of these, get it approved by me well before the first exam.

• **Special Arrangements:** Anyone who has a disability which may require some modification of seating, testing or other class requirements is urged to see me about this as soon as possible for appropriate arrangements to be made.

• **Attendance:** Attendance is mandatory. Students are expected to be on time and attend all classes. Being sick is a legitimate reason to miss class. Excessive absences may result in a lowering of your grade or a failing grade. You are urged to silence your cell phones in class. Text messaging and internet surfing in class may affect your final grade.

• **Friendly Advice:** Main rule – do not fall behind! The material is cumulative. Most of you will need two hours or more of study after each class to successfully learn the course material. Your goal should be to understand rather than to just memorize facts and formulas. Office hours are to help you get your problems sorted out promptly. Study the text carefully before and after lecture. Don’t read the text like a novel. Do the problems and if you get stuck, look for similar worked examples. Work problems by yourself or in small groups. Working exercises is the major way to assess your understanding and to solidify concepts. You cannot learn how to solve problems by merely watching your teacher do them. You must solve problems on your own. When you do not understand, ask questions. Be a participant and not just a spectator.
The College of Liberal Arts and Sciences Policy and Procedures

- Administrative Home of the Course: The College of Liberal Arts and Sciences is the administrative home of this course and governs matters such as the add/drop deadlines, the second-grade-only option, and other related issues. Different colleges may have different policies. Questions may be addressed to 120 Schaeffer Hall, or see the CLAS Student Academic Handbook http://www.clas.uiowa.edu/students/handbook/

- Electronic Communication: University policy specifies that students are responsible for all official correspondences sent to their University of Iowa e-mail address (@uiowa.edu). Faculty and students should use this account for correspondences. (Operations Manual, III.15.2. Scroll down to k.11.)

- Academic Fraud: Plagiarism and any other activities when students present work that is not their own are academic fraud. Academic fraud is a serious matter and is reported to the departmental DEO and to the Associate Dean for Undergraduate Programs and Curriculum. Instructors and DEOs decide on appropriate consequences at the departmental level while the Associate Dean enforces additional consequences at the collegiate level. See the CLAS Academic Fraud section of the Student Academic Handbook.

- CLAS Final Examination Policies: Final exams may be offered only during finals week. No exams of any kind are allowed during the last week of classes. Students should not ask their instructor to reschedule a final exam since the College does not permit rescheduling of a final exam once the semester has begun. Questions should be addressed to the Associate Dean for Undergraduate Programs and Curriculum.

- Making a Suggestion or a Complaint: Students with a suggestion or complaint should first visit the instructor, then the course supervisor, and then the departmental DEO. Complaints must be made within six months of the incident. See the CLAS Student Academic Handbook.

- Accommodations for Disabilities: A student seeking academic accommodations should first register with Student Disability Services and then meet privately with the course instructor to make particular arrangements. See http://www.uiowa.edu/~sds for more information.

- Understanding Sexual Harassment: Sexual harassment subverts the mission of the University and threatens the well-being of students, faculty, and staff. All members of the UI community have a responsibility to uphold this mission and to contribute to a safe environment that enhances learning. Incidents of sexual harassment should be reported immediately. See the UI Comprehensive Guide on Sexual Harassment for assistance, definitions, and the full University policy. http://www.uiowa.edu/~eod/policies/sexual-harassment-guide/index.html

- Reacting Safely to Severe Weather: In severe weather, class members should seek appropriate shelter immediately, leaving the classroom if necessary. The class will continue if possible when the event is over. For more information on Hawk Alert and the siren warning system, visit the Public Safety web site, http://www.uiowa.edu/~pubsfty