ACTS: 6480-6580 Spring - 2017

Course policies are governed by the **C**ollege of **L**iberal **A**rts and **S**ciences. Please visit the url, `http://www.clas.uiowa.edu/students/academic_handbook/` in order to get familiar with the following;

i. University policies regarding student rights and responsibilities
ii. University policies regarding academic misconduct

Also, see the appendix to this handout.

Please visit `http://www.stat.uiowa.edu/courses/tutors.shtml` for a list of independent tutors.

Instructor:

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Classes: 8:30am - 10:20am MWF - 1022 LIB
Office Hours: 1:00pm to 2:00pm MWF or by appointment
Website: ICON at the url `http://icon.uiowa.edu`

Department:

Statistics and Actuarial Science, 241 SH, 335-0712.
Chair - Prof. Joe Lang, joseph-lang@uiowa.edu., 335-0712

Goal of this Course:
The goal of this course to gain a conceptual understanding and practical facility with the statistical/probabilistic techniques that form the syllabus for the SOA exam Construction and Evaluation of Actuarial Models. The learnining outcome of this exam states: `The candidate is expected to be familiar with survival, severity, frequency and aggregate models, and use statistical methods to estimate parameters of such models given sample data. The candidate is further expected to identify steps in the modeling process, understand the underlying assumptions implicit in each family of models, recognize which assumptions are applicable in a given business application, and appropriately adjust the models for impact of insurance coverage modifications..`

Life Contingencies I

Recommended Reading:

Klugman, S. A., Panjer, H.H. and Willmot, G.E. (2012), Loss Models: From Data to Decisions, (Fourth Edition) New York: John Wiley and Sons. This is an official text of the SOA for the material that we shall cover in this course.

Syllabus:

The syllabus will be described using the text. The list of sections below forms a core of the syllabus with digressions at some points along the course, time permitting.

Contents of this course Chapters 3-8, 10-13, 15, 20; Chapter 9, Sections 9.1-9.7 (excluding 9.6.1), Sections 9.8.1-9.8.2; Chapters 14, Sections 14.1-14.4 and 14.6; Chapter 16 excluding 16.4.2.

Evaluation System:

Homework: 20%

Assignments will be given to you by Monday of every week there is an assignment. They have to be returned by the beginning of Monday's class of the following week.

Groupwork: 20%

There will be be groupwork that would be needed to be done in a timely manner. These will be an important part of this format.

Exams and Calculators

Only official SOA/CAS calculators will be allowed. Please look at their website for the latest regulations.

Mid-terms and the final will be closed-book. One may find the past SOA Exam C problems useful in preparing for them.

i. Mid-Term 1 - Friday, the 24th of February - 20%
ii. Mid-Term 2 - Friday, the 7th of April - 20%
iii. Final - TBA by the registrar's office - 20%

Grading

Undergraduate and graduate students will be treated as two separate groups when it comes to assigning final grades.

College of Liberal Arts & Sciences: Policies and Procedures

- **Administrative Home of the Course**

  The administrative home of this course is the College of Liberal Arts and Sciences, which governs academic matters relating to the course such as the add/drop deadlines, the second-grade-only option, issues concerning academic fraud or academic probation, and how credits are applied for various graduation requirements. Different colleges might have different policies. If you have questions about these or other CLAS policies, visit your academic advisor or 120 Schaeffer Hall and speak with the staff. The CLAS Academic Handbook also contains important CLAS academic policies:
  www.clas.uiowa.edu/students/academic_handbook/index.shtml

- **Academic Fraud**

  Plagiarism and any other activities that result in a student presenting work that is not his or her own are academic fraud. Academic fraud is reported to the departmental DEO and then to the Associate Dean for Academic Programs and Services in the College of Liberal Arts and Sciences who deals with academic fraud according to these guidelines:
  www.clas.uiowa.edu/students/academic_handbook/ix.shtml

- **Making a Suggestion or a Complaint**

  Students have the right to make suggestions or complaints and should first visit with the instructor, then with the course supervisor if appropriate, and next with the departmental DEO. All complaints must be made within six months of the incident.
  www.clas.uiowa.edu/students/academic_handbook/ix.shtml#5

- **Accommodations for Disabilities**

  A student seeking academic accommodations first must register with Student Disability Services and then meet with an SDS counselor who determines eligibility for services. A student approved for accommodations should meet privately with the course instructor to arrange particular accommodations.
  www.uiowa.edu/~sds/

- **Understanding Sexual Harassment**

  Sexual harassment subverts the mission of the University and threatens the well-being of students, faculty, and staff. Visit www.sexualharassment.uiowa.edu/ for definitions, assistance, and the full policy.

- **Reacting Safely to Severe Weather**

  The University of Iowa Operations Manual section 16.14 outlines appropriate responses to a tornado (i) or to a similar crisis. If a tornado or other severe weather is indicated by the UI outdoor warning system, members of the class should seek shelter in rooms and corridors in the innermost part of a building at the lowest level, staying clear of windows, corridors with windows, or large free-standing expanses such as auditoriums and cafeterias. The class will resume, if possible, after the UI outdoor warning system announces that the severe weather threat has ended.

- **Student Classroom Behavior**

  The ability to learn is lessened when students engage in inappropriate classroom behavior, distracting others; such behaviors are a violation of the Code of Student Life. When disruptive activity occurs, a University instructor has the authority to determine classroom seating patterns and to request that a student exit the classroom, laboratory, or other area used for instruction immediately for the remainder of the period. One-day suspensions are reported to appropriate departmental, collegiate, and Student Services personnel (Office of the Vice President for Student Services and Dean of Students). University Examination Policies

- **Missed Exam Policy**

  University policy requires that students be permitted to make up examinations missed because of illness, mandatory religious obligations, certain University activities, or unavoidable circumstances. Excused absence forms are required and are available on the Registrar web site.
  www.registrar.uiowa.edu/forms/absence.pdf

- **Final Examinations**

  An undergraduate student who has two final examinations scheduled for the same period or more than three examinations scheduled for the same day may file a request for a change of schedule before the published deadline at the Registrar's Service Center, 17 Calvin Hall, 8-4 M-F, (384-4300).