Instructor: Dr. E.S.W. Shiu  Office: 362 SH  Phone: 335 2580  E-mail: elias-shiu@uiowa.edu  
Office Hours:  2–3:30 PM Tuesday & Thursday, and 1–2 PM Wednesday, or by appointment  
Department: Statistics & Actuarial Science, 241 SH  Phone: 335 2082  
D.E.O.: Dr. Luke Tierney  Phone: 335 0712  E-mail: luke-tierney@uiowa.edu  
Prerequisites:  C+ or better in 22S:181 (ACTS:3180) and 22S:183 (ACTS:4380)  

Recommended textbooks:  
Various journal papers will be distributed later.  

Topics:  
Interest Rate Risk Management, Redington's Theory of Immunization and its Generalization  
Cash Flow Matching (Linear Programming Algorithms)  
Fundamental Theorem of Asset Pricing  
Method of Esscher Transforms and Pricing of Multi-asset Options  
Portfolio Selection and Multi-period Expected Utility Maximization  
Asset Price as Exponential of a Shifted Poisson Process and Self-financing Equation  
Valuation of Interest Sensitive Cashflows  
Applications to Insurance/Annuity Products: SPDAs, Variable Annuities, Equity-Indexed Annuities, Fair Value of Liabilities, Reserving Issues  

Tentatively, the final grade [H.W. 15% + Midterm (Nov 16) 40% + Final 45%] will be assigned as follows:  
C−[59.5, 64); C[64, 68.5); C+[68.5, 73); B−[73, 77.5); B[77.5, 82); B+[82, 86.5); A−[86.5, 91); A[91, 95.5); A+[95.5, 100]
Administrative Home

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 Academic Policies Handbook at http://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, k.11).

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 www.uiowa.edu/~sds/ for more information.

Academic Honesty

All CLAS students have, in essence, agreed to the College's Code of Academic Honesty: "I pledge to do my own academic work and to excel to the best of my abilities, upholding the IOWA Challenge. I promise not to lie about my academic work, to cheat, or to steal the words or ideas of others; nor will I help fellow students to violate the Code of Academic Honesty." Any student committing academic misconduct is reported to the College and placed on disciplinary probation or may be suspended or expelled (CLAS Academic Policies Handbook).

CLAS Final Examination Policies

The final examination schedule for each class is announced around the fifth week of the semester by the Registrar. Final exams are offered only during the official final examination period. No exams of any kind are allowed during the last week of classes. All students should plan on being at the UI through the final examination period. Once the Registrar has announced the dates and times of each final exam, the complete schedule will be published on the Registrar's web site.

Making a Suggestion or a Complaint

Students with a suggestion or complaint should first visit with the instructor (and the course supervisor), and then with the departmental DEO. Complaints must be made within six months of the incident (CLAS Academic Policies Handbook).

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.

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 Department of Public Safety website.