



Economics

COLLEGE OF LIBERAL ARTS & SCIENCES

ECON 469 Economics of Risk

Course Syllabus

CREDITS: 3 undergraduate hours, or 4 graduate hours.

SEMESTER: Fall 2024.

MEETING TIMES: MW 2:00 pm to 3:20 pm.
147 Armory.

INSTRUCTOR: Prof. Pavlo Dziuba.

EMAIL: pdziuba@illinois.edu.

*Contact me using this official email. Personal email not accepted.
Response time: 24 hours (excl. Sat/Sun).*

OFFICE HOURS: MW 8:30 am – 10:30 am.
MW 4:00 pm – 5:00 pm.
118 David Kinley Hall.

You do not need an appointment during office hours. However, if you have an issue that requires special attention and / or you cannot attend office hours because of the schedule mismatch you may email me to schedule an appointment.

COURSE DESCRIPTION

Exploration of economic decisions under uncertainty. Includes expected utility theory and non-expected utility theory; applications to individual decision problems in investment and insurance; general equilibrium in markets under uncertainty, including problems generated by asymmetric information; measurement of risk; the value of information obtained before a decision.

LEARNING OUTCOMES

Analytical Skills/Problem-Solving: ECON students will effectively visualize, conceptualize, articulate, and solve complex problems in the field of risk assessment, analysis and management or address problems that do not have a clear answer, with available information, through experimentation and observation, using microeconomic and macroeconomic theory, as well as calculus and statistical tools.

Critical Thinking: ECON students will apply economic analysis to everyday problems helping them to understand events associated with decision making under uncertainty,

evaluate specific policy proposals with regard to managing specific risk types, compare arguments with different conclusions to a specific issue or problem, and assess the role played by assumptions in arguments that reach different conclusions to a specific economic or policy problem.

Quantitative Reasoning: ECON students will understand how to apply empirical evidence to economic arguments. Specifically, they may obtain and/or collect relevant data on financial risks and respective uncertainty parameters, develop empirical evidence using appropriate statistical techniques, and interpret the results of such analyses particularly those related to managing investment, interest rate, currency, and other types of risks.

Specialized Knowledge and Practical Application: ECON students will develop deeper analytical, critical, and quantitative skills in specialized areas (economics of risk and uncertainty) by applying economic concepts to real world situations.

Interdisciplinary Knowledge, Diverse Issues, and Global Consciousness: ECON students will broaden their global and disciplinary knowledge, enhancing their understanding of the world around them both within economics and beyond.

Communication and Leadership: ECON students will build skills to work as part of a team and lead others, ensuring they are prepared to navigate diverse audiences and situations.

PREREQUISITES

ECON 302 or equivalent; one of MATH 220 or MATH 221 or equivalent.

COURSE MAIN OBJECTIVES

The main objective of this course is to comprehensively familiarize students with the main features and origins of different types of risks, nature and causes of respective uncertainty factors. Being empirically oriented, the course implies mastering specific models and tools of assessing and measuring different risks, modelling basic skills of managing these risks via developing and introducing respective risk management strategies and implementing specific risk management approaches and techniques. The course is aimed at economics majors of a 400 level.

Upon successful completion of the course students will get the specific **knowledge** of

economic nature of risk and uncertainty, basic provisions of expected utility theory and its empirical implications;

key principles of risk insurance in the framework of investigating pure risk concept, main types of coverages available on the market, benefits and shortcomings of insurance as risk management technique;

core provisions of portfolio paradigm of risk, specifically portfolio theory, capital asset pricing model and arbitrage pricing model, key issues of their practical implementation;

framework of investigating risk of fixed income securities, specifically in terms of assessing their yield-to-maturity, duration and convexity;

principles of derivatives markets functioning, risk pricing of particular derivative

securities;

main linear and nonlinear models of risk on the basis of derivatives, primary provisions and implications of option sensitivities;

other specific risk types and related issues of their assessment and decision making, particularly risk of volatility, value-at-risk approach to risk;

major types of foreign exchange risks such as transaction risk, operational risk and translation risk, core approaches to their estimating, components of managing strategies;

and obtain specific **skills and abilities** such as

explaining economic nature of risk and uncertainty, importance and role of risk management in theory and economic reality;

determining fundamental interrelations between risk and return, their linkage with risk tolerance in terms of expected utility;

identifying main directions of managing risks via insurance, implementing basic elements of risk insurance strategies;

applying specific statistical and probabilistic approaches, tools and techniques to assess the risk level (for given risk types), compute specific certain parameters of risk and uncertainty along with estimating particular quantitative indicators of respective underlying impact factors;

defining specific parameters of risk profile either in terms of individual securities or investment portfolios using provisions of modern portfolio theory as well as capital asset pricing theory and arbitrage pricing model of portfolio choice;

calculating specific parameters of different types of market risk, including interest rate risk, value-at-risk, volatility risk, risk associated with derivative assets like futures and options, developing respective models and strategies of managing these risks;

assessing existing and expected currency exposures in terms of emergence of transaction, operational and accounting foreign exchange rate risk, developing appropriate strategies of managing these risks;

using contemporary software to carry out calculations implied by the course: at the minimum required level Microsoft Excel is the course main computational tool, however students willing and able to use more advanced software products / languages are welcome to do that (totally optional).

LEARNING RESOURCES

Textbook: There is no assigned textbook for this course. The material will be delivered during the lectures, slides with respective note-making boxes will be provided for students in advance.

However, students may find it helpful to use the texts below (totally optional) when they fall behind or when they want to catch up on understanding of some specific parts of material or topics.

Jorion, Ph. (2011). *Financial Risk Manager Handbook Plus Test Bank* (6th ed.). John Wiley & Sons, Inc.

Available online via the UIUC library (valid NetID required):

<https://learning.oreilly.com/library/view/financial-risk-manager/9781118017913/?ar=>

Hull, J. (2023). *Risk management and Financial Institutions* (6th ed.). John Wiley & Sons, Inc.

Previous 5th edition available online via the UIUC library (valid NetID required):

<https://web.s.ebscohost.com/ehost/detail/detail?vid=0&sid=f67af4a4-f4b4-407d-8e63-42dfe9d04e66%40redis&bdata=JnNpdGU9ZWhvc3QtbGl2ZSZZY29wZT1zaXRI#AN=1733295&db=nlebk>

Additional readings:

Supplementary readings to the course (if necessary) will be provided via the course learning platform. I very much welcome the reading of The Wall Street Journal, The Economist and / or other relevant sources. Although such reading will not be graded, I will periodically post some useful references to the mentioned editions related to the course issues.

Learning management system:

<https://canvas.illinois.edu>

Canvas is the course official learning platform. All materials, assignments, quizzes, readings, lecture slides, updates, announcements etc. will be posted and / or distributed via the course Canvas site. If there is a time-sensitive update it will be posted on Canvas, and you will be notified via your university official e-mail as well.

It's your responsibility to learn how to use Canvas properly, in particular – how to submit your answers, doing quizzes etc.

Lecture slides will be provided with respective note-making boxes for students' convenience. They will be available not later than 6 pm the day before the lecture.

Calculator:

Since the course requires some basic calculus and problems will be included in the exam assignments students are required to have scientific calculators with them during midterm and final exams. Other computational devices (laptops, cell phones etc.) are not allowed. Everybody must bring their own calculator. There are no calculators provided and students cannot share with someone. However, during regular classes along with basic calculator students may use any computational devices they consider relevant.

COMMUNICATION POLICY

Students must use their official university e-mail (NetID@illinois.edu) to communicate on any issue regarding the course. Students are responsible for checking their official university mailbox as well as the course Canvas site regularly to ensure they are aware of the course issues and updates. When e-mailing students must put the course rubric and number (ECON 469) in the subject line.

IMPORTANT DATES

Below is the summary of the course important dates and deadlines:

Activity	Due Date	Day	Venue
Problem bundle 1	Sep 4	Wednesday	147 Armory
Problem bundle 2	Sep 16	Monday	147 Armory
Problem bundle 3	Sep 23	Monday	147 Armory
Problem bundle 4	Sep 30	Monday	147 Armory
Midterm exam 1	Oct 7	Monday	147 Armory
Problem bundle 5	Oct 2	Wednesday	147 Armory
Problem bundle 6	Oct 16	Wednesday	147 Armory
Problem bundle 7	Nov 11	Monday	147 Armory
Midterm exam 2	Oct 21	Monday	147 Armory
Problem bundle 8	Nov 18	Monday	147 Armory
Problem bundle 9	Dec 4	Wednesday	147 Armory
Midterm exam 3	Dec 2	Monday	147 Armory
Problem bundle 10	Dec 11	Wednesday	147 Armory
Weekly quizzes	Every Sunday	Sundays	Online – Canvas
Final exam	TBD	TBD	TBD

STUDENT ASSESSMENT AND GRADING

Points in the course will be distributed as follows:

Midterm exam (lowest score)	– 5 %
Midterm exam (middle score)	– 10 %
Midterm exam (highest score)	– 15 %

3 midterm exams	– 30 %
Final exam	– 25 %
Quizzes	– 20 %
Problem bundles	– 25 %

EXTRA credit	– 5 %
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The final grade is calculated as a percentage of these points. The overall grade for the class will be scored out of 100 points. To define your grade, you should sum up all your points in the course scored so far, divide the number you got by the maximum possible number of points, multiply by 100 and then finally round the number to the nearest integer using regular mathematical rule. For example, 96.4 is rounded to 96 (A). A grade of 89.5 would be rounded to 90 (A-). Grades can be whole numbers only and cannot be fractional numbers. Rounding of student's scores is done only once – for the final grade only. All interim scores will be recorded and summed up with one fractional digit (where appropriate). For example, assuming the two midterm exams scores to be respectively 15.4 and 18.2, the final grade will be calculated as follows $15.4 + 18.2 = 33.6 \approx 34$ (not as $15.4 \approx 15 + 18.2 \approx 18 = 33$).

The following cutoffs will be used for the letter grades:

A+	97 – 100	B+	87 – 89	C+	77 – 79	D+	67 – 69	F	0 – 59
A	93 – 96	B	83 – 86	C	73 – 76	D	63 – 66		
A-	90 – 92	B-	80 – 82	C-	70 – 72	D-	60 – 62		

I usually do not apply curving. However, I reserve the right to curve the very final grades (for boosting the class only) in case of some very extraordinary general grades distribution.

Midterm exam policy

All three midterm exams will be taken in-person during the regularly scheduled lecture time (see the dates below). There are no conflict midterm exams in this course. There is no make-up for midterm exams missed for any reason. If midterm exam is missed its weight will be shifted to the final exam according to the following approach:

1 missed midterm exam	–	30 % weight of final exam.
2 missed midterm exams	–	40 % weight of final exam.
3 missed midterm exams	–	55 % weight of final exam.

If all three midterm exams are missed, I reserve the right to request justification of student's absence and give zero grade for unjustified misses.

Midterm exams duration is 80 minutes each. If a student is present in the exam room and the exams have been distributed, they are considered to be taking the exam. In this case the grades will not be redistributed to the final exam even in case of leaving the exam early.

Midterm exams are non-cumulative. Each covers only designated part of the course and does not include material of previous parts.

Final exam policy

Students must take the final exam. The final exam is comprehensive. It includes all material studied in the semester. The duration of the final exam is 3 hours. It will be scheduled following the UIUC requirements published below:

<https://registrar.illinois.edu/faculty-staff/final-exam-scheduling/>

The general University policy on final examinations can be found here:

<https://studentcode.illinois.edu/article3/part2/3-201/>

Bear in mind, that absence from a final examination is reported as a final grade of 'absent' (ABS) in the course and counts as a failure. If a student is absent from a final examination, and it's clear that taking that examination could not have resulted in a passing grade for the course, a grade of F may be given instead of ABS.

General exam policy

All exams are closed book exams and no outside materials (like notes, textbooks, cell phones, laptops, other devices connected to the Internet) are permitted in the exam room. Exam assignment forms and scratch paper (if necessary) will be provided. Breaking the above requirement will be considered as a violation of the Academic Integrity policy of the University (see below) and will be subject to disciplinary action. Students are only allowed to have a pencil and calculator with them in the exam room.

There is no bathroom break during the exam. If a student walks out of the classroom during the exam before it ends for any reason it will be treated as if they have turned in their exam. However, that part of the exam which will be carried out by a student by the time they leave will be considered, checked, and graded.

All exams are a combination of multiple-choice questions and problems to be solved. Normally such questions and problems are similar to those in quizzes and problem bundles.

Students must have their student IDs during exams. In order to complete the exam form students will have to put in their Name, UIN and Net ID. If any of these are missing, a student will be penalized, and the exam score will be dropped.

By taking an exam students consent to be video and audio recorded while in the examination room.

Assignment policy

Students will have to submit 10 problem bundles accounting altogether for 25 % of the overall grades. The bundles include typical problems in the field of risk assessment, analysis, and management of a computational and analytical nature. These bundles are to be submitted only in class and in person on the due date. Problem bundles will not be accepted after the lecture when I leave the classroom.

Assignments will be available online on the course Canvas site. Each new Problem bundle will be posted on the site the next day after the due date for the previous bundle expires. For example, the due date for Problem bundle 1 is September 4 (see below). Therefore, Problem bundle 2 assignment will be posted on the course Canvas site on September 5. The first problem bundle assignment will be posted soon after the instruction begins.

Problem bundles are out of 3 points each and will be graded using the following approach:

- 3 – problems are solved completely. At least 90 % of the answers are correct or on the right track.
- 2 – problems are solved almost completely. At least 50 % of the answers are correct or on the right track.
- 1 – problems are solved incompletely. More than half of problems are not solved, contain missing parts or are on the wrong track.
- 0 – no or late submission.

Problem bundles due dates:

Bundle	Due Date	Day	Venue
Bundle 1	Sep 4	Wednesday	In class – 147 Armory
Bundle 2	Sep 16	Monday	In class – 147 Armory
Bundle 3	Sep 23	Monday	In class – 147 Armory
Bundle 4	Sep 30	Monday	In class – 147 Armory
Bundle 5	Oct 2	Wednesday	In class – 147 Armory
Bundle 6	Oct 16	Wednesday	In class – 147 Armory
Bundle 7	Nov 11	Monday	In class – 147 Armory
Bundle 8	Nov 18	Monday	In class – 147 Armory
Bundle 9	Dec 4	Wednesday	In class – 147 Armory
Bundle 10	Dec 11	Wednesday	In class – 147 Armory

Students are encouraged to work in teams with their classmates on problem bundles as well as during their preparation for exams. However, they should submit their own solutions. Remember, I cannot grade assignments that I cannot read. Thus, all assignments must be legible. Students are free to choose the form of submitting their problem bundles: it can be either computer typed and printed afterwards or handwritten. If a student is not sure about their handwriting accuracy, they are strongly recommended to type.

Quiz policy

Students will have to submit 15 weekly online quizzes. Each quiz consists of multiple-choice questions and altogether they account for 20 % of the overall course grade. Each quiz is expected to cover the material learned during the week thus students are strongly recommended to do them right after the last class of the week to figure out what material they do not understand or understand poorly. This will enable them to catch up in advance and get well prepared for midterm and final exams, since the quizzes contain questions that can be regarded as a representative sample of those included in exams.

Quizzes can be found on the course Canvas site. They are open for four days each week: Thursday, Friday, Saturday, and Sunday. The deadline is every Sunday until 11:59 pm.

Although students have four days to do the quizzes at their convenience, they are recommended to take them on Thursday because of the above-mentioned considerations. Students will have five attempts for each quiz and a time limit of 30 minutes for each attempt. Only one of the five attempts with the highest score will be counted. The total result for quizzes will be computed as the simple average among 15 quizzes with the lowest score quiz being dropped. Thus only 14 results will be considered.

There is no make-up for quizzes: on the one hand four suggested days is normally enough to take it and on the other hand 80 % (grades without quizzes) is enough to get the full credit for the semester.

Extra credit policy

Extra credit grades come from class participation which may include a wide variety of activities like answering controversial questions, debating on issues considered, arguing some points, essay writing, analytical assignments and even asking well-aimed accurate questions during the class. The overall extra credit grades can account for no more than 5 % of the maximum possible course grade.

The idea behind this is that I strongly encourage dialogue since it is essential to your understanding of material and to your final success in the course. Even asking simple questions may often help you to identify what you understand well and what you do not understand. On the other hand, this will enable me to determine crucial areas to be paid more time to.

Grading and re-grading policy

All assignments and exams are graded within a week and the results are posted on Canvas respectively. Problem bundles and midterm exams are returned to students in class that is in a week after the due date. If students do not collect their Problem bundles or midterm exams in class, it becomes their responsibility to pick them up in my office (if they need them).

All requests for re-grading must be submitted no later than one week after the assignment or exam is returned. The request must be in writing, and it must provide a detailed summary of why the student believes the grade received was incorrect. In the case of re-grading the whole exam (other assignment) will be regraded consequently resulting in either possible increase of grades or their decrease. Hence, I recommend that students apply for re-grading only based on the well-considered and weighted approach, when they are really sure the grades were incorrect.

Extensions policy

There are no extensions or extra assignments in this class. The policies apply equally to all students.

GENERATIVE AI POLICY

Generative AI tools, including openAI ChatGPT, Google Bard, Microsoft Copilot/Bing Chat, and the like are generally not permitted in this class. This uppermost refers to activities that imply grading, like quizzes, problem bundles, midterm exams, and final exam. Use of these tools will be considered academic dishonesty and violation of academic integrity.

Any work written, developed, created, or inspired by artificial intelligence is considered plagiarism and will not be tolerated. While these new developments will find their place in our workforces and personal lives, this kind of technology does not belong as we are learning. The use of AI robs us all of the opportunity to learn from our experiences and from each other, to learn to synthesize and analyze sources and concepts, and to contribute our ideas in authentic ways.

However, use of generative AI tools may be regarded as exceptions and are allowed for the following and / or similar activities:

- drafting an outline to organize students' thoughts and ideas;
- searching information and data they need;
- improving students' research questions;
- brainstorming and refining their ideas;
- shortening student's own text (where appropriate);
- proofreading student's own text grammar, spelling and style;
- testing and practicing students' knowledge of course topics.

When using generative AI, students are recommended to keep a journal documenting prompts, AI responses, and the usage. Students may use the APA style guide to cite generative AI. Remember, a generative AI conversation in and of itself is not a valid source for facts. Students should always work to find, verify and cite the original source of ideas, rather than citing the AI directly.

When using online services, including generative AI platforms, students must realize that companies may store, share, or sell their data. They should be wary of sharing private personal information and learn to develop safe online habits.

ACADEMIC ASSISTANCE

Students are encouraged to utilize the many resources we have throughout campus to assist with academics. I recommend that students seek them out starting early in the semester, not just in times of academic need, in order to develop good study habits and submit work which represents their full academic potential. Many resources are found on the Economics Website including details about the Economics Tutoring Center, Academic Advising, and other academic support options:

<https://economics.illinois.edu/academics/undergraduate-program/academic-student-support>

ACADEMIC INTEGRITY

According to the Student Code, 'It is the responsibility of each student to refrain from infractions of academic integrity, from conduct that may lead to suspicion of such infractions, and from conduct that aids others in such infractions.' Please know that it is my responsibility as an instructor to uphold the academic integrity policy of the University, which can be found here:

<https://studentcode.illinois.edu/article1/part4/1-401>

Academic dishonesty may result in a failing grade. Every student is expected to review and abide by the Academic Integrity Policies. It is their responsibility to read this policy to avoid any misunderstanding. Do not hesitate to ask the instructor(s) if you are ever in doubt about what constitutes plagiarism, cheating, or any other breach of academic integrity. Read the full Student Code at <https://studentcode.illinois.edu>

STUDENTS WITH DISABILITIES

To obtain disability-related academic adjustments and/or auxiliary aids, students with disabilities must contact the course instructor and the Disability Resources and Educational Services (DRES) as soon as possible. To contact DRES you may visit 1207 S. Oak St., Champaign, call 333-4603 (V/TTY), or e-mail a message to disability@illinois.edu. DRES Website: www.disability.illinois.edu

COMMUNITY OF CARE

As members of the Illinois community, we each have a responsibility to express care and concern for one another. If you come across a classmate whose behavior concerns you, whether in regards to their well-being or yours, we encourage you to refer this behavior to the Student Assistance Center (217-333-0050 or <http://odos.illinois.edu/community-of-care/referral>). Based on your report, the staff in the Student Assistance Center reaches out to students to make sure they have the support they need to be healthy and safe. Further, we understand the impact that struggles with mental health can have on your experience at Illinois. Significant stress, strained relationships, anxiety, excessive worry, alcohol/drug problems, a loss of motivation, or problems with eating and/or sleeping can all interfere with optimal academic performance. We encourage all students to reach out to talk with someone, and we want to make sure you are aware that you can access mental health support at the Counseling Center (<https://counselingcenter.illinois.edu>) or McKinley Health Center (<https://mckinley.illinois.edu>).

For mental health emergencies, you can call 911 or walk into the Counseling Center, no appointment needed.

DISRUPTIVE BEHAVIOR

Behavior that persistently or grossly interferes with classroom activities is considered disruptive behavior and may be subject to disciplinary action. Such behavior inhibits other students' ability to learn and an instructor's ability to teach. A student responsible for disruptive behavior may be required to leave class pending discussion and resolution

of the problem and may be reported to the Office for Student Conflict Resolution for disciplinary action.

EMERGENCY RESPONSE RECOMMENDATIONS

Emergency response recommendations can be found at the following website:

<http://police.illinois.edu/emergency-preparedness>

I encourage you to review this website and the campus building floor plans website within the first 10 days of class.

<https://police.illinois.edu/em/building-emergency-action-plans>

RELIGIOUS OBSERVANCES

The Religious Observance Accommodation Request form is available at

<https://odos.illinois.edu/community-of-care/resources/students/religious-observances>

Submit the form to the instructor and to the Office of the Dean of Students (helpdean@illinois.edu) **by the end of the second week of the course**; in the case of exams or assignments scheduled after this period, students should submit the form to the instructor and to the Office of the Dean of Students as soon as possible.

FAMILY EDUCATIONAL RIGHTS AND PRIVACY ACT (FERPA)

Any student who has suppressed their directory information pursuant to Family Educational Rights and Privacy Act (FERPA) should self-identify to the instructor to ensure protection of the privacy of their attendance in this course. See <http://registrar.illinois.edu/ferpa> for more information on FERPA. Student information and records will not be released to anyone other than the student unless the student has provided written approval or as required by law.

SEXUAL MISCONDUCT REPORTING OBLIGATION

The University of Illinois is committed to combating sexual misconduct. Faculty and staff members are required to report any instances of sexual misconduct to the University's Title IX and Disability Office. In turn, an individual with the Title IX and Disability Office will provide information about rights and options, including accommodations, support services, the campus disciplinary process, and law enforcement options. A list of the designated University employees who, as counselors, confidential advisors, and medical professionals, do not have this reporting responsibility and can maintain confidentiality, can be found here: <http://www.wecare.illinois.edu/resources/students/#confidential>

Other information about resources and reporting is available here:

<http://wecare.illinois.edu>

STUDENT SUPPORT

The Counseling Center is committed to providing a range of services intended to help students develop improved coping skills in order to address emotional, interpersonal, and academic concerns. Please visit their website to find valuable resources and services: <https://counselingcenter.illinois.edu>

Counseling Center Information

217-333-3704

Location: Room 206, Student Services Building (610 East John Street, Champaign IL)

McKinley Mental Health Information

217-333-2705

Location: 3rd Floor McKinley Health Center (1109 South Lincoln, Urbana, IL)

Emergency Dean

The Emergency Dean may be reached at (217) 333-0050 and supports students who are experiencing an emergency situation after 5 pm, in which an immediate University response is needed, and which cannot wait until the next business day. The Emergency Dean is not a substitute for trained emergency personnel such as 911, Police or Fire. If you are experiencing a life-threatening emergency, call 911. Please review the Emergency Dean procedures: <http://odos.illinois.edu/emergency>

ACADEMIC DATES AND DEADLINES

Students should make note of important academic deadlines for making changes to their courses (add, drop, credit/no-credit, grade replacement, etc.).

<https://registrar.illinois.edu/academic-calendars>

Please check with the Department of Economics regarding specific procedures and policies.

** I reserve the right to make amendments to this syllabus with prior notice and posting of relevant changes on the course Canvas site.*

*** I apologize for any inaccuracies, discrepancies and mishaps that may appear on the course Canvas site or in any course materials. Please report to me anything unusual you will come across.*

GOOD LUCK WITH ECON 469!

COURSE SCHEDULE (SUBJECT TO CHANGE WITH ADVANCE NOTICE)

Week	Class #	Date	Topic
Module 1: Introduction to the Economics of Risk			
1	1	Aug 26	Economic Nature of Risk and Risk Management
	2	Aug 28	Fundamentals of Probability and Statistics: Revision
2		Sep 2	<i>Labor Day – No classes</i>
	3	Sep 4	Expected Utility Theory
3	4	Sep 9	Pure Risk Concept and Insurance
Module 2: Portfolio Concept of Risk			
3	5	Sep 11	Modern Portfolio Theory of Investment Choice
4	6	Sep 16	Modern Portfolio Theory of Investment Choice
	7	Sep 18	Systematic Risk and Capital Asset Pricing Model
5	8	Sep 23	Systematic Risk and Capital Asset Pricing Model
	9	Sep 25	Arbitrage Model of Risk Pricing
6	10	Sep 30	Arbitrage Model of Risk Pricing
Module 3: Interest Rate Risk			
6	11	Oct 2	Interest Income and Cash Flows Discounting
7	12	Oct 7	MIDTERM EXAM 1 (MODULES 1 & 2)
	13	Oct 9	Risk of Duration and Convexity
8	14	Oct 14	Managing Interest Rate Risk
Module 4: Derivatives and Derivative Based Risk Models			
8	15	Oct 16	Futures and Forward Contracts
9	16	Oct 21	MIDTERM EXAM 2 (MODULE 3)
	17	Oct 23	Futures Valuation and Linear Risk Hedging
10	18	Oct 28	Options and Option Markets
	19	Oct 30	Nonlinear Options Valuation
11	20	Nov 4	Binomial Model of Option Pricing
	21	Nov 6	Black & Scholes Model of Option Valuation
12	22	Nov 11	Black & Scholes Model: Deriving Option Sensitivities (Greeks)
	23	Nov 13	Option Risk Management Strategies
13	24	Nov 18	Option Risk Management Strategies
Module 5: Other Risk Types and Specific Risk Management Issues			
13	25	Nov 20	VAR Risk Model
14		Nov 25	<i>Fall Break – No classes</i>
		Nov 27	<i>Fall Break – No classes</i>
15	26	Dec 2	MIDTERM EXAM 3 (MODULE 4)
	27	Dec 4	Foreign Exchange Risk
16	28	Dec 9	Foreign Exchange Risk
	29	Dec 11	Volatility and Risk
	30	TBD	FINAL EXAM