

**Economics 136**  
**Financial Markets and Modeling: Futures, Options, and other Derivatives**  
**Course Calendar**  
Spring 2012

Mod	Date	Lecture and Reading Topic	Reading Assignment
1	Jan 18-25 3 lectures	<b>Introduction to derivatives:</b> Introduction to class, brief intro to futures, and forward contracts, settlement, the markets and how they work, quotations and online sources, crude oil futures markets, introduction to risk and risk evaluation, discounting review.	<i>Hull: Ch 1,2</i>
2	Jan 30-Feb 6 3 lectures	<b>Hedging and interest rate theory:</b> Hedging and hedging examples, reasons for hedging, minimum variance hedge ratio, calculating zero rates and forward rates, yield-bearing asset pricing, duration, convexity, term structure of rates.	<i>Hull: Ch 3,4</i> <i>Genius: Ch 1,2,3</i> <i>Reckless: Ch. 1,2</i>
3	Feb 8-15 3 lectures	<b>Arbitrage and forward and futures pricing, stock index, foreign currency, and interest rate futures:</b> Arbitrage and how arbitrage impacts derivatives pricing and pricing limits, carry costs, backwardation, expected future spot prices.	<i>Hull: Ch 5,6</i> <i>Genius: Ch 4,5</i> <i>Reckless: Ch. 3,4</i>
	<b>February 20</b>	<b>First Exam</b>	
4	Feb 22-29 3 lectures	<b>Options and Option Trading Strategies:</b> Puts and calls, hedging, writing covered calls, spreads, straddles, butterflies and other option strategies.	<i>Hull: Ch 8,9,10</i> <i>Genius: Ch 6,7</i> <i>Reckless: Ch. 5,6</i>
5	Mar 5-26 5 lectures	<b>Stochastic Processes and Modeling Options:</b> Weiner process, Ito process, Black Scholes.  (Spring break is during this session)	<i>Hull: Ch 12,13</i> <i>Genius: Ch 8,9,10, ep</i> <i>Reckless: Ch. 7,8,9</i>
	<b>March 28</b>	<b>Second Exam</b>	
7	Apr 2 -9 3 lectures	<b>Volatility and the Greeks:</b> Candlestick, EWMA, GARCH and other volatility models. Estimate and importance of delta, gamma, theta, rho, and delta hedging.	<i>Hull: Ch 17,21</i> <i>Reckless: Ch. 10,11,12</i>
8	Apr 11-16 2 lectures	<b>Review and Discussion of Reading and any final-related projects</b>	<i>Reckless: Ch. 13,14,15</i>
9	Apr 18 - 23 2 lectures	<b>CMOs, Credit Risk, Credit Derivatives and Swaps:</b> Evaluating credit risk and creating credit derivatives from credit risk. The subprime meltdown and other mistakes.	<i>Hull: Ch 22,23</i>
	<b>April 25</b>	<b>In-class Final Exam - Take-home Final Given Out</b>	
	<b>May 2</b> <b>May 9</b>	<b>Seniors: Take-home final due, 5:00 PM P1261.</b> <b>Non-seniors: TH final due, 5:00 PM P1261</b>	