

MSCA 625/4/A Seminar In Options And Futures Winter 2010
Thursday 11:45-14:15 MB S2.105

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Course Description

This course addresses exchange-traded as well as over-the-counter derivatives such as futures, options, and swaps. The institutional characteristics of futures markets, such as margin requirements and price limits, which have received much attention from policy-makers worldwide, since the stock market crash of October 1987, are discussed. The use of derivatives in risk management by corporations and financial institutions is examined. Innovations in risk measurement and management such as value at risk and credit risk models are analyzed. Capital adequacy regulations under the Basle accord, regulatory capital arbitrage by banks and the sub-prime mortgage crisis are studied.

Objectives of course and associated pedagogy

One objective of the course is to make the student extremely knowledgeable in the area of derivatives so that he/she can confidently use them in his/her future employment. This objective is met through discussions of related journal articles. Each week, three articles will be presented in detail by three students. The remaining students are expected to participate in the discussion of these articles.

A second objective of the course is to provide the student a practice run at developing an M. Sc. Thesis. This is achieved by requiring that each student develop a research proposal on a topic on derivatives, provide an oral presentation of the proposal in class in one of the last two meetings of the class, as well as provide a written proposal to me. The format of the research proposal should be as follows:

- 1) Statement of the problem to be addressed by the research
- 2) Significance of the research
- 3) Literature review
- 4) Research methodology
 - a) Data to be used
 - b) Analytical methods to be used and hypotheses to be tested
- 5) References

Course Evaluation

Article presentation and write-up	20%
Midterm (take home)	20%
Research proposal presentation and write-up	20%
Final Examination (take home)	20%
Class participation	20%

The midterm and final examination will be based on the journal articles.

Grading Correspondence

A+	=	94-100
A	=	87 - 93
A-	=	80 - 86
B+	=	77 - 79
B	=	73 - 76
B-	=	70 - 72
C	=	60 - 69
F	=	<60

Journal articles

I Futures exchange risk management

1. Brennan, M. J., "A Theory of Price Limits in Futures Markets", *Journal of Financial Economics*, 1986, Vol. 16, No. 2, pp. 213-234.
2. Shanker, L. and N. Balakrishnan, "Optimal Clearing Margin, Capital And Price Limits For Futures Clearinghouses", *Journal of Banking and Finance*, 2005, Vol. 29, Issue 7, 1611-1630.
3. Day, T. E. and C. M. Lewis, "Margin Adequacy and Standards: An Analysis of the Crude Oil Futures Market", *The Journal of Business* 2004, Vol. 77, No. 1, pp.101-135.
4. Kim, K. A. and S. G. Rhee, "Price limit performance: Evidence from the Tokyo stock exchange", *The Journal of Finance*, June 1997, Vol. 52, No. 2, pp. 885-901.
5. Westerhoff, F. "Speculative markets and the effectiveness of price limits", *Journal of Economic Dynamics and Control*, December 2003, Volume 28, Issue 3, Pages 493-508.
6. Dutt, H. R. and L. E. Harris, "Position Limits for Cash-Settled Derivative Contracts", *Journal of Futures Markets* 2005, Vol. 25, No. 10, pp.945-965.

II Optimal derivatives contract design

7. Johnston, E. T. and J. J. McConnell, "Requiem for a market: An Analysis of the rise and fall of a financial futures contract", *The Review of Financial Studies*, Spring 1989, Vol 2,

No. 1, pp. 1-23.

8. Oviedo, R., "Improving The Design Of Treasury Bond Futures Contracts", *Journal of Business*, June 2005, Vol. 72, No. 2, pp. 193-226.
9. Bollen, N. P. B., T. Smith, R. E. Whaley, "Optimal contract design: For whom?", *Journal of Futures Markets*, June 2003, Vol. 23, No. 8, pp. 719-750.
10. Chance, D. M., "A hedging deficiency in Eurodollar futures", *Journal of Futures Markets*, 2006, Vol. 26, No. 2, pp. 189-207.
11. Kawaller, I. G., "A comment on A hedging deficiency in Eurodollar futures", *Journal of Futures Markets*, 2007, Vol. 27, No. 2, pp. 187-193.

III Risk measurement and hedging with derivatives

12. Ahn, D., J. Boudoukh, M. Richardson, and R. F. Whitelaw., "Optimal Risk Management Using Options", *Journal of Finance*, February 1999, Vol. 54, Issue 1, pp. 359-375
13. Moschini, G. and H. Lapan, "The Hedging Role Of Options And Futures Under Joint Price, Basis And Production Risk", *International Economic Review*, November 1995; Vol. 36, No. 4, pp. 1025-1049.
14. Chen, S. S., C. F. Lee and K. Shrestha, "Futures hedge ratios: a review", *The Quarterly Review of Economics and Finance*, Autumn 2003, Vol. 43, Issue 3, pp. 433-465.
15. Hendricks, D., "Evaluation of Value-at-Risk Models Using Historical Data", *Economic Policy Review*, April 1996, Vol. 2, No. 1, April 1996.

IV Corporate risk management

16. Mohan, S., "Market-based Price-risk Management for Coffee Producers", *Development Policy Review*, 2007, Vol. 25, No. 3, pp. 333-354.
17. Zhang, H., "Effect of derivative accounting rules on corporate risk-management behavior", *Journal of Accounting and Economics*, 2009, Vol. 47, Issue 3, pp. 244-264.
18. Tufano, P., "Who manages risk? An empirical examination of risk management practices in the gold mining industry", *Journal of Finance*, September 1996, Vol. 51, No. 4, pp. 1097-1137.
19. Purnanandam, A., "Financial distress and corporate risk management: Theory and evidence", *Journal of Financial Economics*, 2008, Vol. 87, Issue 3, pp. 706-739.
20. Mackay, P. and S. B. Moeller, "The value of corporate risk management", *Journal of Finance*, 2007, Vol. 62, No. 3, pp. 1379-1419.

21. Faulkender, M., “Hedging or Market Timing? Selecting the Interest Rate Exposure of Corporate Debt”, *The Journal of Finance*, 2005, Vol. 60, No. 2, pp. 931-962.

V Financial institution risk management

22. Boyd, J. H. and G. De Nicoló, “The Theory of Bank Risk Taking and Competition Revisited”, *The Journal of Finance*, 2005, Vol. 60, No. 3, pp. 1329-1343.
23. Alexander, G. J. and A. M. Baptista, “Does the Basle Capital Accord reduce bank fragility? An assessment of the value-at-risk approach”, *Journal of Monetary Economics*, October 2006, Vol. 53, Issue 7, pp. 1631-1660
24. Gatev, E. and P. E. Strahan, “Banks' Advantage in Hedging Liquidity Risk: Theory and Evidence from the Commercial Paper Market”, *The Journal of Finance*, 2006, Vol. 61, No. 2, pp. 867-892.
25. Altman, E., A. Resti and A. Sironi, “Default Recovery Rates in Credit Risk Modelling: A Review of the Literature and Empirical Evidence”, *Economic Notes*, 2004, Vol. 33, No. 2, pp. 183-208.

VI Capital adequacy rules, regulatory capital arbitrage and sub-prime crisis

26. Jones, D., “Emerging problems with the Basel Capital Accord: Regulatory capital arbitrage and related issues”, *Journal of Banking & Finance*, January 2000, Vol. 24, Issue 1-2, pp. 35-58.
27. Ackermann, J. “The subprime crisis and its consequences’, *Journal of Financial Stability*, December 2008, Vol. 4, Issue 4, pp. 329-337.

VIII Weather derivatives

28. Beyazit, M. F. and E. Koc, “An analysis of snow options for ski resort establishments”, *Tourism Management*, Article in press.
29. Dorfleitner, G. and M. Wimmer, “The pricing of temperature futures at the Chicago Mercantile Exchange”, *Journal of Banking and Finance*, Article in press, available online December 11, 2009.

IX Derivatives debacles

30. Till, H., “Edhec comments on the Amaranth case: Early lessons from the debacle”, 2006.

I have provided the permanent link for the articles in the following table.

No.	Permanent link
1	http://www.sciencedirect.com/science/article/B6VBX-45MFS8W-1B/2/d3302bc36031b2b1133273fba243617d
2	http://www.sciencedirect.com/science?_ob=ArticleURL&_udi=B6VCY-4F6MDF6-1&_user=1069146&_rdoc=1&_fmt=&_orig=search&_sort=d&view=c&_acct=C000051262&_version=1&_urlVersion=0&_userid=1069146&md5=7ed299a8e10ae3fc8e1daf2894ce0dfe
3	http://www.journals.uchicago.edu/doi/abs/10.1086/379863
4	http://0-www.jstor.org/mercury.concordia.ca/stable/pdfplus/2329504.pdf
5	http://www.sciencedirect.com/science?_ob=MImg&_imagekey=B6V85-47T8F59-1-35&_cdi=5861&_user=1069146&_orig=search&_coverDate=12%2F31%2F2003&_sk=999719996&view=c&wchp=dGLzVzz-zSkWA&md5=bb9f081442991b58683a52b0d76dca4e&ie=/sdarticle.pdf
6	http://www3.interscience.wiley.com/cgi-bin/fulltext/111081206/PDFSTART
7	http://0-rfs.oxfordjournals.org/mercury.concordia.ca/cgi/reprint/2/1/1
8	http://www.journals.uchicago.edu/doi/pdf/10.1086/500677?cookieSet=1
9	http://www3.interscience.wiley.com/cgi-bin/fulltext/104541033/PDFSTART
10	http://www3.interscience.wiley.com/cgi-bin/fulltext/112214536/PDFSTART
11	http://www3.interscience.wiley.com/cgi-bin/fulltext/113509683/PDFSTART
12	http://www3.interscience.wiley.com/cgi-bin/fulltext/119065601/PDFSTART
13	http://www.jstor.org/stable/pdfplus/2527271.pdf
14	http://www.sciencedirect.com/science?_ob=MImg&_imagekey=B6W5X-47X6Y5C-2-1&_cdi=6582&_user=1069146&_orig=na&_coverDate=12%2F31%2F2003&_sk=999569996&view=c&wchp=dGLbVtb-zSkzS&md5=d469f32b0f1514af72f26ce782099af0&ie=/sdarticle.pdf
15	http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1028807
16	http://www3.interscience.wiley.com/cgi-bin/fulltext/117999601/PDFSTART
17	http://www.sciencedirect.com/science?_ob=ArticleURL&_udi=B6V87-4V2HJKN-1&_user=1069146&_rdoc=1&_fmt=&_orig=search&_sort=d&_docanchor=&view=c&_searchStrId=1156467567&_rerunOrigin=scholar.google&_acct=C000051262&_version=1&_urlVersion=0&_userid=1069146&md5=80bfe380648d72fa26b5962e37236a85
18	http://www.jstor.org/stable/pdfplus/2329389.pdf
19	http://www.sciencedirect.com/science?_ob=MImg&_imagekey=B6VBX-4RBYG28-2-9&_cdi=5938&_user=1069146&_orig=search&_coverDate=03%2F31%2F2008&_sk=999129996&view=c&wchp=dGLbVtb-zSkzS&md5=96bc4280772339f5ce8221b365321745&ie=/sdarticle.pdf
20	http://www3.interscience.wiley.com/cgi-bin/fulltext/118483167/PDFSTART
21	http://www3.interscience.wiley.com/cgi-bin/fulltext/118686359/PDFSTART
22	http://www3.interscience.wiley.com/cgi-bin/fulltext/118686372/PDFSTART
23	http://www.sciencedirect.com/science?_ob=MImg&_imagekey=B6VBW-4K1X868-2-KX&_cdi=5937&_user=1069146&_orig=search&_coverDate=10%2F31%2F2006&_sk=999469992&view=c&wchp=dGLbVzW-zSkzV&md5=ea4cf3b3000eed2c42e13a936faf89ff&ie=/sdarticle.pdf
24	http://www3.interscience.wiley.com/cgi-bin/fulltext/118559801/PDFSTART
25	http://www3.interscience.wiley.com/cgi-bin/fulltext/118781284/PDFSTART
26	http://www.sciencedirect.com/science?_ob=MImg&_imagekey=B6VCY-3Y3XP78-3-C&_cdi=5967&_user=1069146&_orig=na&_coverDate=01%2F31%2F2000&_sk=999759998&view=c&wchp=dGLzVtb-zSkzS&md5=06a5e8d1712b97d65abc546ce379b536&ie=/sdarticle.pdf
27	http://www.sciencedirect.com/science?_ob=ArticleURL&_udi=B7CRR-4THSX5H-

	7&_user=1069146&_rdoc=1&_fmt=&_orig=search&_sort=d&_docanchor=&view=c&_searchStrId=1156402452&_rerunOrigin=scholar.google&_acct=C000051262&_version=1&_urlVersion=0&_userid=1069146&md5=94db67140874da86e64cab95eaabe3e8
28	http://www.sciencedirect.com/science?_ob=ArticleURL&_udi=B6V9R-4WY5BBH-2&_user=1069146&_rdoc=1&_fmt=&_orig=search&_sort=d&_docanchor=&view=c&_searchStrId=1156421187&_rerunOrigin=scholar.google&_acct=C000051262&_version=1&_urlVersion=0&_userid=1069146&md5=ecd3ed3a69acec752a976f01488e5782
29	http://0-www.sciencedirect.com/mercury.concordia.ca/science?_ob=ArticleListURL&_method=list&_ArticleListID=1156433984&_sort=r&view=c&_acct=C000051262&_version=1&_urlVersion=0&_userid=1069146&md5=162224a7bd225980fbe999cbac9f2611
30	http://www.premiacap.com/publications/EDHEC_Comments_Amaranth_Case.pdf

ACADEMIC INTEGRITY AND THE ACADEMIC CODE OF CONDUCT

The Code of Conduct (Academic) at Concordia University states that “the integrity of University academic life and of the degrees, diplomas and certificates the University confers is dependent upon the honesty and soundness of the instructor-student learning relationship and, in particular, that of the evaluation process. As such, all students are expected to be honest in all of their academic endeavours and relationships with the University,” (Academic Code of Conduct, art. I) Graduate Calendar, 2009-2010).]

All students enrolled at Concordia are expected to familiarize themselves with the contents of this Code. You are strongly encouraged to read the pertinent section in the 2009-2010 Concordia Graduate Calendar Graduate Calendar, which provides useful information about proper academic conduct.

DISCLAIMER

The instructor reserves the right to change or update this outline, and any other course related materials, as required. The student will be informed in a timely manner through First Class and/or announcements during class.

Course schedule

Date in 2010	Articles discussed
January 7	Introduction to course
January 14	1-3
January 21	4-6
January 28	7-9
February 4	10-12
February 11	13-15 Midterm made available to students
February 18	16-18 Completed midterm to be submitted to me
Midterm break February 22 through February 26	
March 4	19-21
March 11	22-24
March 18	25-27
March 25	28-30
April 1	Presentation of research proposal by students
April 8	Presentation of research proposal by students Written proposal due from all students Final examination made available to students Completed final is to be submitted to me 1 week later in my office

The above is a tentative assignment of the course material to the meetings and may be adjusted over the term, if the pace of addressing the course material, which may vary across different classes for various reasons, makes this necessary.