BOSTON COLLEGE

Department of Economics

EC 362 Financial Markets Fall 2000 Prof. Christopher Baum T,Th 9:00-10:15 AM Carney 230, 552-3673 (voicemail) email: baum@bc.edu Office Hours: W 3:00-5:00 & by appt. Syllabus available on the Web: http://fmwww.bc.edu/EC/

Required texts: (1) Jarrow and Turnbull, *Derivative Securities*, 2d. ed. 2000.
(2) Daily issues, *Wall Street Journal*; a semester's subscription is highly recommended.

Requirements: grades will be based on:

20% Midterm examination30% Final examination20% Assignments30% Empirical research project

<u>Goals and purposes:</u> This course is designed to familiarize economics majors with the major instruments and institutions of U.S. financial markets, focusing particularly on "derivatives" (futures and options) markets and the underlying "cash" markets for Treasury securities, equities, and foreign exchange. There is no specific assumption of background beyond microeconomic and macroeconomic theory, statistics. and an understanding of the algebra of present value.

The course will require significant individual research of an empirical nature into an aspect of those markets. EC362 should be viewed as complementary (but not a substitute) to EC361 (Monetary Theory and Policy), EC380 (Capital Theory and Finance) and EC395 (Real Estate Finance). Prerequisites include completion of intermediate theory (EC201, 202, or 401, 402), and statistics (EC151). As empirical research is a sizable element of the course, econometrics (EC228, EC328 or EC428) would be helpful but is not required. Many highquality research papers have been written with elementary statistical techniques.

Policy statement: Absolutely no makeup examinations. Assignments – especially the term project – will not be accepted after their announced due dates. It is your responsibility to be familiar with the College's policy on academic integrity and intellectual honesty, especially as it applies to the preparation of research papers.

Empirical Research Project

The term paper will be an empirical research paper, in which you research a topic of interest using data from the financial markets which you gather and manipulate. I will try to provide some suggested topics, and will expect you to discuss your topics with me prior to doing the major work on the paper. This is to be an analytical paper, rather than purely library research, *which must make use of appropriate empirical techniques to study some relevant data on the topic.* I cannot stress strongly enough that papers which do not contain some first-hand analysis of data are *not acceptable*, and will not lead to an acceptable grade in the course. A good model for such a paper can be found in any of the economics or finance journals which publish applied work.

You may use any set of research tools you choose for the paper; many students have used a spreadsheet such as Excel to produce tables, compute statistical results, and produce graphs. We have also acquired a very intuitive, easy-to-use statistical package, Small Stata / StataQuest, for economics statistics ane econometrics courses, which is available on workstations in the SLSC. You may find that this package is more appropriate than Excel or StatView for your work (in particular, Excel is not a very good regression package). However, if you have familiarity with other computer programs, feel free to use them.

Warning: most of the data you might need for a project in this area will have to be collected and input "by hand" from the *Wall Street Journal* or industry yearbooks. This will involve a considerable amount of time and effort; budget your time accordingly. Please note that if you do not have a clear and acceptable proposal for this research project by the date noted below, it is very unlikely that you will meet the deadline for paper completion. That deadline is firm, and papers handed in after that deadline are will be graded subject to a sizable discount for tardiness. Take the proposal deadline seriously! In the past, those students who have not had a well-formed concept at the time of the proposal have had considerable difficulty completing a quality project. The class will meet for 26 lectures and one midterm examination. The final examination will be comprehensive. Tentative topics are given below. You are expected to have prepared for each lecture prior to the class meeting.

TENTATIVE OUTLINE

lectures(dates) Chapter / Topics			
1	5 Sep	1	Introduction
2-3	7-12 Sep	2	Arbitrage, futures/forwards
4-5	14-19 Sep	3	Arbitrage, options
6-7	21-26 Sep	4	Asset price dynamics
8-9	28 Sep-3 Oct	5	Binomial pricing
10-11	5-10 Oct	8	Black-Scholes pricing
12-13	12-17 Oct	9	Extensions of Black-Scholes
14-15	19-24 Oct	10	Replication, risk exposure
	26 Oct		MIDTERM EXAMINATION Ch.1-9
17-18	31 Oct-2 Nov	11	Foreign exchange
	2 Nov		RESEARCH PROJECT PROPOSAL due
19-20	7-9 Nov	12	Stock indices, commodities
21-22	14-16 Nov	13	Interest rate contracts
23-24	21-28 Nov	14	Swaps
25-26	30 Nov-5 Dec	18	Credit risk
27	7 Dec		Review

Research Projects:

Due at the time of the final examination--NO EXCEPTIONS!

Final Examination: Thursday 14 December, 12:30 PM