NORTHWESTERN UNIVERSITY
Kellogg School of Management

Professor Robert Korajczyk — Finance I
Finance 430 — Autumn 2003

Course Syllabus

Course Description

This is a first course in corporate finance which is designed to introduce students to the concepts and techniques necessary to analyze and implement optimal investment decisions by firms.

Text

The textbook for this course is *Principles of Corporate Finance*, 7th edition, by Richard A. Brealey and Stewart C. Myers. If you have a previous edition, feel free to use it. You will also use this text for Finance II (441). There is also a Course Packet.

Prerequisites

The prerequisites for the course are Decision Sciences-434 (probability and statistics) and Accounting 430, **or their equivalents**. Managerial Economics-430 (microeconomics), is recommended. These may be taken concurrently with Finance 430. If you do not have the DECS 434 corequisite, then you are required to (a) complete the Kellogg Online Statistics Essentials (available on the student intranet under online resources) and (b) attend the FINC 430 review sessions that cover a probability and statistics. I will distribute dates for these. You should complete these requirements before the end of the 5th week of the course.

Course Requirements

The course grade will be based on seven problem sets, a midterm exam, a final exam, and class participation. For the problem sets I will assign groups of three to four people. Each of the best five problem sets will count toward 3% (i.e., up to 3 points out of 100) of your course grade (i.e., the two lowest grades will be dropped). The problem set grades correspond to ✓+ = 3, ✓ = 2, ✓- = 1, 0 = 0. Problem sets are due by 5:00 p.m. on the due date. **Late problem sets will not be accepted**. You may submit problem sets via FAX if you are unable to attend class. My FAX number is 847-491-5021. The midterm is optional. The course grade will be determined by the maximum of a 5%/15%/30%/50% weighting on the participation/problem sets/midterm/final and a 5%/15%/80% weighting on the participation/problem sets/final. Because of this feature, taking the midterm can not hurt your grade and I recommend that you take it in the interest of diversification. The **midterm** will be given on **Wednesday November 5, 2003** at 3:00 p.m. in rooms 1246 and G40. The **final** will be given on **Tuesday December 9, 2003** at 12:00 noon in rooms G40 and G45. The exams are open book. You must take the exams at the scheduled times. There will be no class on December 2, 2003. Having the midterm on a Wednesday, instead of during a normal class session, with make up for this class.

The participation component of the grade will be based on your participation in class and on peer evaluation by your group members. Ways to get higher participation grades are: contribute significantly to your group's work on the problem sets, be prepared for class, contribute to the class discussion, ask questions.

Review Sessions and Office Hours

There will be weekly review sessions on **Wednesdays from 3:00 to 5:00 in room 1246**. These will begin on October 1, 2003 and continue through December 3, 2003. There will be no review session on November 5th due to the midterm. In addition to the weekly review sessions, I will conduct a review session before the final exam. This will be on **December 6, 2003**: **9:00 - 11:00 a.m. in room G40**.

My office is room 260 of the Jacobs Center. My **office hours** will be Fridays 3:00 - 4:45. If you are unable to see me at these times, contact me (voice: 847-467-4700, e-mail: r-korajczyk@kellogg.northwestern.edu) for an appointment at a different time.

Tutors

The Student Affairs office coordinates a program through which students may obtain tutoring for Finance 430. If you are interested in the program, see Cathy Gluckman in the student affairs office (467-7327, c-gluckman@kellogg.northwestern.edu).

Honor Code

The first sentence of the Kellogg Honor Code reads: "All students enrolled in a course offered by the Kellogg Graduate School of Management agree to abide by the Kellogg Honor Code." If you are unsure of what this means, read the honor code:

http://www.kellogg.nwu.edu/stu_aff/policies/honorcode.htm

You will be working in groups for the problem sets. Before the problem sets are handed in, you should only discuss the problems **with members of your group**. The solutions you hand in should be the **independent** work of your group.

You should not receive any assistance on the midterm or final exam from anyone and the work on the exam should be solely your own.

If you are in doubt about whether something is acceptable under the honor code, you should not hesitate to ask me.

Classroom Etiquette

Kellogg also has a Code of Classroom Etiquette:

http://www.kellogg.nwu.edu/stu_aff/policies/etiquette.htm

You should be in class and ready to start our discussion at the scheduled time. You may use calculators and computers for the purposes of solving problems or taking notes that are related to class, but **not** for non-class related use (i.e., checking e-mail or surfing the web).

Access to Course Information via the Web

Various types of information will be available on the course Blackboard web page. The course name in Blackboard is 2003Fall 2003FA_FINC_430-0_SEC41_AND_SEC42. For example, I will post a running list of reported typographical errors in the teaching notes (under the Course Information tab). A class roster with e-mail addresses is available (under the Communication tab). I will also post downloadable copies of the problem sets and other files so that you can obtain them electronically if you miss class (under the Course Documents tab). The site is accessible by registered students – you will need to know your NU Net ID and password. If you do not know these call KIS (847-467-2100).

Tips for Studying Finance

a) **Work problems.** In my experience, working problems is an integral part of learning finance. While reading the Teaching Notes, try to solve the related questions in ***Use of Financial Functions in Excel***. The Teaching Notes will point you to the relevant questions. After reading each Teaching Note, try to solve the **Review Questions** at the end of the Teaching Note. These **Review Questions** are directly from past exams. After these, work the related problems from the **past exams** that are given in the case packet. After these, work the **review problems** that I have assigned from **Brealey and Myers** (see the course outline below). Solutions for these are in the case packet. If you still have time, work the **other problems** in Brealey and Myers (the solutions are on reserve in the library). **Attempt to solve each problem on the problem sets on your own before you meet with your group.**

b) **Ask questions.** Ask questions in class (if you have a question about something, you can be assured that someone else has a similar question). Ask questions at the review sessions. Ask questions in my office hours. If you can't make the regularly scheduled office hours, call (847-467-4700) or send me an e-mail and we will arrange for an alternate time.

c) **Do not fall behind**. Keeping up with the material is extremely important. See (b) above.

Miscellaneous

On the second class I will ask you to choose a seat in which you will sit for the entire quarter. You should bring your nameplate to class and have it displayed throughout the quarter. Familiarity with a good spreadsheet (like Excel) is required. There is a handout in the case packet titled *Use of Financial Functions in Excel*. You should work through those problems. Copies of the solutions manual and study guide for *Principles of Corporate Finance* have been put on reserve in the library. **The solutions manual has answers to the end-of-chapter questions**. I have asked the bookstore to order some copies of one optional book. I have asked that the optional book be put on reserve in the library.

> Morris and Morris, *The Wall Street Journal Guide to Understanding Money & Investing*, 1999. If you are new to the area of finance, you might find this a useful optional reference.

There are also some useful books that I have asked be available through the reserve room in the library.

1) V. Sivarama Krishnan, *Study Guide for use with Brealey/Myers*, *Principles of Corporate Finance*, 7th edition. New York: Irwin-McGraw-Hill, 2003.
2) Holden, Craig, *Spreadsheet Modeling in Corporate Finance,* 2002 (ISBN: 0-13-049905-6).
3) Holden, Craig, *Spreadsheet Modeling in Investments Book/CD*, 2001 (ISBN: 0-13-087948-7).
4) *Heard on The Street: Quantitative Questions from Wall Street Job Interviews*. You might find this useful for interviewing for jobs on the Street. I also have a link to the author's web page from my Finance I web page

For some strange reason, many people find it difficult to pronounce my last name. A phonetic spelling is Kōr-ī′-chĭk.

Course Outline

The following is an **approximate** outline of the sequence of topics to be covered in the course. You should read the corresponding material in the text prior to the lecture. TN denotes a teaching note.

Classes	Topic	Readings (Chapter numbers in boldface)	Problem Sets and Brealey/Myers Problems
1 - 2	Goals in managing the firm. The interaction between firm decisions and the capital markets. Asset valuation - known cash flows.	**Chp 1**, **2**, **3**, TN-"Present and Future Value Concepts and Applications", "Use of Financial Functions in Excel"	*Use of Financial Functions in Excel* **Chp 2 PQ:** 2, 4, 5
3 - 4	Asset valuation - known cash flows.	**Chp 3**, TN-"Compounding,...", TN-"Inflation,...",	**Problem Set 1 Due, 10-7.** **Chp 3 PQ:** 1, 2, 4, 7, 8, 10-12, 15, 20, 21, 28
5 - 6	Asset valuation - known cash flows (continued).	**Chp 24.1 -24.4**, TN-"Bonds and the Term Structure...", "A Guide to Investing in U.S. Treasury Strips",	**Problem Set 2 Due, 10-14.**
7 - 8	Asset valuation - Earnings vs. Value.	**Chp 4**, TN-"Stock Valuation"	**Problem Set 3 Due, 10-21.**
9 - 10	Asset valuation - Earnings vs. Value (continued) Alternatives to NPV.	**Chp 5**, TN-"Alternatives to NPV"	**Problem Set 4 Due, 10-28.** **Chp 5 PQ:** 1, 7, 8
11 - 12	Capital budgeting - known cash flows.	**Chp 6**, TN-"Capital Budgeting"	**Chp 6 PQ:** 11-12, 17
13	Midterm: November 5th, 3:00 - 5:00 rooms 1246 and G40		**Midterm**
14 - 15	Risk and return.	**Chp 7**, "Use of Statistical Functions in Excel", TN-"Risk and Return #1"	**Problem Set 5 Due, 11-11.** **Chp 7: Q** 6, 10; **PQ** 10, 12; **C** 1
16 - 17	Risk and return.	**Chp 8**, TN-"Risk and Return #2"	**Chp 8 PQ:** 7
18 - 19	Capital budgeting under uncertainty.	**Chp 9**-1 to **9**-3, TN-"Capital Budgeting and the CAPM/APT"	**Problem Set 6 Due, 11-25.** **Chp 9 PQ:** 9, 13
20	Information and capital markets. Review.	**Chp13**, TN-"Market Efficiency", "Using Capital Structure to Communicate with Investors..."	**Problem Set 7 Due, 12-5.** **Chp 13 PQ:** 3-4, 7
21	Final Exam	**Review Session:** 12-6-03 at 9:00 a.m. in room G40. **Final exam:** 12-9-03 at 12:00 noon in rooms G40 and G45.	**Final Exam**