

Syllabus - FIN 410 - Investment Theory & Applications - Spring, 2009

Line #: 67335; Meets in Summerfield 407, M W, 9:30 – 10:45am
Instructor: Professor Koch Office: 226C Summerfield; Phone: 864-7503.
email: pkoch@ku.edu Office Hrs: Mon & Wed, 8:30 - 9:30am & 12:15 - 1:00pm.

Prerequisite: FIN 310 - Financial Management, or equivalent.

Text: Modern Portfolio Theory and Investment Analysis, Elton & Gruber, 7th Edition, 2007.

Course Documents: <http://courseware.ku.edu> or [ftp://ftp.business.ku.edu/home/pkoch/FIN 410](ftp://ftp.business.ku.edu/home/pkoch/FIN_410) .

Withdrawal Policy: You may withdraw with a “W” prior to the midterm if passing ($\geq D$).

Course Objectives: This course covers the theory and practice of investment analysis.

The theory shows how financial economists think about uncertainty, risk, return, and the behavior of securities markets.

The goal is to understand and apply this theory to assess risk and return, to value securities, and to thereby aid investment decisions in the real world.

The focus is on the topics of market efficiency, theory of uncertainty, portfolio theory, risk assessment, valuation, & the functioning of capital markets in a global environment.

Through the development of theoretical models, you will understand the practical techniques used by the professional investor and portfolio manager to analyze alternative risky investments.

You will apply these methods to value securities of various types, with emphasis on common stocks, bonds, futures, and options.

Course Grading: The class will be divided into **groups** of five students each. Every **group** will be responsible for two term projects, and two 2-page analyst reports on a pair of competing companies during the semester. 20% of your individual grade will depend on your **group**'s performance on its two term projects and its two analyst reports. The other 80% of your grade will be determined by your individual performance on: (i) quizzes, (ii) a midterm exam, (iii) a final exam, (iv) your trading account, and class participation. Your lowest quiz score will automatically be thrown out. You will be assigned a \$1,000,000 account to trade securities during the semester. You will have an **option** to replace five more (lowest) quiz scores, with a score based on your trading performance during the semester. Exam conflicts must be resolved prior to the exam. No late group projects will be accepted. All groups will present the first project in class, time permitting. Grading weights are provided below.

Class Structure: The lectures will focus on the theory and practice of investment management. The list of topics to be covered appears below, along with assigned reading and chapter problems for each topic. Twice during the semester, we will analyze a pair of competing companies. These companies will be the subjects of a 2-page analyst report by every group. This report will summarize the financial condition of these firms and discuss the firms' business, competition, and prospects for future performance. These reports should conclude with a target stock price (P^*) and expected return (k^*) for each firm if bought at its current market price, along with a buy/sell recommendation, a list of reasons to buy, and another list of reasons not to buy. This assignment will be due through email, by noon on the day *before* the class session when it is to be discussed.

Homework: Chapter problems are assigned for each topic, to help understand the material and prepare for exams. Solutions will be provided. Selected problems will be discussed in class when time permits.

Class Participation: If, at the end of the term, you are at the margin between two grades, your contribution to class discussion will determine whether you receive the higher or lower grade. Be prepared to discuss the material and problems assigned weekly, and the companies analyzed. Note that it is the quality and not simply the frequency of participation that is important.

Explanation of Group Term Projects I and II, for FIN 410 - Investment Mgt:

Choose a firm your group will analyze. Group Projects I and II involve research to assess the prospects for investing in this firm. These two Group Projects are discussed below. By the third week of the term, you must clear your group's choice of firm with me, to avoid duplication.

You will obtain data on the daily closing price of your company's stock, and on the daily closing value of the market (e.g., for a U.S. firm, the S&P 500 index). You should also gather as much information as you can on the firm's past and current performance. Your objective in organizing this information is to provide a basis for evaluating: (i) the quality of company management; (ii) the macro environment (including the nature of competition, the firm's market share, market demand, and any upcoming events that might influence the company's performance), (iii) projections of future earnings, (iv) the firm's capital structure, and (v) the firm's weighted average cost-of-capital (see your Financial Management text). Based on this information, you will assess the firm's prospects for future performance (i.e., earnings, dividends, expected return, and risk).

You will need to evaluate the company's past annual reports, 10Q's, 10K's, and other financial information. The Bloomberg terminal and the web are wonderful sources of such information. Two valuable web sites are provided below. Other potential sources of information include reports prepared by professional analysts. For example, see reports provided by S&P, Moody's, Value Line, and various brokerage and investment banking houses. You are also encouraged to contact firms directly for information about their current environment and performance. These sources of information should be reviewed when possible, but they do not constitute a substitute for your own analysis. Information on past stock prices for individual stocks is available on the Web, in the Wall Street Journal, or on the Compustat and CRSP tapes. Use any information you can obtain, but cite your sources.

In **Term Project I** (maximum, 2 pages), your group will use this information in a valuation model to determine the theoretical fair market value of this company's stock (P^*), and the expected return (k^*) for this stock if bought at its current market price. ***On the top of the first page of Project I you should summarize the firm's current financial condition (size, risk, accounting performance, and market performance). For this summary, use "group.project.template1 or 2," provided on blackboard.*** Then describe the firm's business, its risk, and its past, current, and expected future performance. Then provide your valuation model (e.g., following E&G, Chapter 18). This analysis should lead to a target price (P^*), expected return if bought at its current price (k^*), and ultimately a buy/sell recommendation. Conclude with a list of reasons to buy the company's stock, and another list of reasons to not buy the stock. The quality of your paper (and thus your grade on Project I) will be determined by: (i) the quality and amount of relevant information you obtain, summarize, and incorporate in your valuation model; (ii) how the information is used in your model; (iii) whether any new and original insight is offered; and (iv) the clarity of exposition.

Term Project II (also limited to maximum of 2 pages) is a smaller project, in which you apply statistical tools commonly used in the investment industry to analyze certain aspects of risk and return for a firm. In Project II, you will use the daily data on your company's stock price and the market (e.g., the S&P 500 index) to estimate a single-index market model (E&G, Chapter 7). Your presentation should include and briefly discuss: (i) the firm's historical beta, (ii) all other relevant estimates for the single-index model, and (iii) a plot of the actual observations on your stock's daily return against the daily return on the market (R_{it} , R_{mt}), along with the estimated market model line (the fitted line).

Sources of firm information:

1. quick summaries, including stock charts and financials:
<http://finance.yahoo.com>
2. detailed financial information (10Q's, 10K's, annual reports, ...),
<http://www.sec.gov/edaux/formlynx.htm>, <http://www.sec.gov/edgar/searchedgar/webusers.htm>

FIN 410 - Investment Theory & Applications - List of Topics: Spring, 2009

<u>Lecture</u>	<u>Topic</u>	<u>Assignment: Problems</u>
Jan. 21, 26, 28	Background Information, Introduction	E&G - Ch. 2, 3
Feb. 2, 4	Efficient Markets	E&G - Ch.17: 3-6, 8, 9.
Feb. 9, 11	Utility Analysis: Certainty Utility Analysis: Uncertainty	E&G - Ch. 1: 3-6, 9-12. E&G - Ch. 10: 1-11.
Feb. 16, 18	The Investment Opportunity Set	E&G - Ch. 4: 1, 3, 4.
Feb. 23, 25	Efficient Portfolios	E&G - Ch. 5: 1, 4-6.
Mar. 2, 4	Valuation of Stocks & Stock Portfolios	E&G - Ch. 18: 1-11.
Mar. 9	Midterm Exam	E&G - Ch. 1-5, 10, 17, 18.
Mar. 11	Earnings Estimation	E&G - Ch. 19: 1-5.
Mar. 16, 18	Spring Break	
Mar. 23, 25	Single-Index Model (pp. 130-143 & 149-154)	E&G - Ch. 7: 1, 2, 5, 6.
Mar. 30, Apr. 1	Multi-Index Model	E&G - Ch. 8: 4-7.
Apr. 6, 8	Equilibrium - CAPM	E&G - Ch. 13: 1-5, 7-9.
Apr. 13, 15	Equilibrium - APT (pp. 364-371 & 383-391)	E&G - Ch. 16: 1-4.
Apr. 20	Interest Rates & Bond Portfolio Management	Bond Mgt Notes.
Apr. 22, 27	Futures - Mechanics & Valuation	E&G - Ch. 24: 1-6.
Apr. 29, May 4	Options - Mechanics & Valuation	E&G - Ch. 23: 1-5.
May 6	International Diversification	E&G - Ch. 12: 1, 3, 4.
Friday, May 15	**** Final Exam (7:30am - 10:00am) ****	E&G - Ch. 7, 8, 12, 13, 16, 19, 23, 24, Bond Mgt

Notes.

<u>Important Dates</u>	<u>Subject</u>	<u>% of Grade</u>
Feb. 9	Deadline for choosing firm for group term projects.	
Mar. 9	Midterm Exam	25
Apr. 6	<i>Group</i> Term Project I due	5
Apr. 13	<i>Group</i> Term Project II due	5
2 Times	2 <i>Group</i> Analyst Reports	10
Throughout term	Quizzes	25
May 15	Final Exam (7:30am - 10:00am)	<u>30</u>
	Total	100

The Trading Simulation: Your Option

Each of you should pay the \$20 required to establish a simulated trading account of \$1,000,000. This account will give you the opportunity to learn how the trading process works, in a realistic setting. I will provide all the information you need to learn how to trade various securities that we will discuss throughout the course, including bonds, stocks, futures, and options. The simulation will track your trading performance, along with all students in the class. I will provide details about what is expected of you, and how your trading performance will be evaluated.

At the end of the semester, your performance will be ranked with all students in the class, into quintiles. The top 20% will earn 5 points for this simulation exercise; the next highest 20% will be given 4 points; the third highest 20% will be given 3 points; the fourth highest 20%, 2 points; and the lowest, 1 point.

We will have 11 quizzes throughout the semester. Each quiz score will have a total of 5 points possible. Remember, your lowest quiz score will automatically be thrown out.

YOU WILL HAVE THE OPTION to replace up to five more (of your lowest) quiz scores with the score you earn on this trading simulation. For example, *if* your trading performance is in the top quintile, you can replace five more of your lowest quiz scores with perfect scores of 5 points each.

The University of Kansas School of Business Honor System

The School of Business Honor System promotes academic integrity by its students and faculty through adherence to the following Code:

We, the faculty, instructors, and students of the School of Business pledge to fulfill our mutual responsibilities to each other and the academic community at large with honor and integrity in order to build and maintain a climate of respect and trust that will enhance our research, teaching, and learning. We will support the Honor System of the School and will not tolerate activities that undermine academic integrity.

As a student in a School of Business class, you will be protected by and expected to conduct yourself in accordance with this system. For a complete description of the system, see: <http://www.bschool.ukans.edu/policies/honor.htm>. This is required reading for all students.

In accord with this policy, the following pledge must be signed by all students after all exams:

On my honor, I have neither given nor received any unauthorized aid on this exam.
Nor am I aware of anyone giving or receiving any unauthorized aid on this exam.

Signature

Date

As two examples of how this class will operate to promote the Honor System:

1. There will be no **graphing** calculators allowed on any quizzes or exams.
2. No cell phones are allowed to operate during class, quizzes, or exams.
Be sure to turn your cell phone off during every class, & during exams.

Students with disabilities:

Any student in this course who has a disability that may prevent her/him from fully demonstrating his/her abilities should contact me personally as soon as possible so we can discuss accommodations necessary to ensure full participation and facilitate the educational opportunity.