

DEPARTMENT OF FINANCE
MCCOMBS SCHOOL OF BUSINESS
UNIVERSITY OF TEXAS AT AUSTIN

Finance 367 - Investment Management

Spring 2013

Monday & Wednesday 11:00 – 12:15, UTC 4.104, unique #03405

Monday & Wednesday 12:30 – 13:45, UTC 4.104, unique #03410

Professor: **Shimon Kogan, PhD**

GSB 5.159, Shimon.Kogan@austin.utexas.edu

Class website: Blackboard

Office Hours: Monday, 5:00 – 6:00

Office Location: GSB 5.159

TA: Qifei Zhu

TA office hours and location: posted on BlackBoard

Course Description

Finance 367 is an introductory survey investments course. We structure the course to study answer a deceptively simple question – how should one invest his/her current excess liquidity (e.g., funds contributed to retirement funds) to meet specific future liquidity needs (e.g., pay for retirement)? We start with an overview of the investment process. After discussing the link between risk and expected returns, we build tools to estimate risk and return on traded asset. We then turn to look at the various asset classes available to global investors, the means in which they are grouped, and their underlying trading platforms.

We then turn to study the asset allocation decision -- its formation and objectives. Using the discussion of asset classes' performance, we analyze the portfolio optimization problem and its implication for asset allocation. Finally, we aggregate the asset allocation choices of individuals and link them to expected returns and risk as they come together in the CAPM. We conclude this discussion with an analysis of factor models.

Next, we turn to look at market efficiency and its implications. After understanding what it means for markets to be efficient we go beyond passive investment and ask whether there are dynamic equity portfolios that can deliver – stock portfolios that have better tradeoff between risk and expected return than the market index. In so doing, we discuss various quantitative strategies (size, book-to-market, and momentum), show how they are constructed, and study their properties.

The second half of the course is dedicated to valuing and investing in three main classes of securities: equities, fixed income, and derivatives. These assets are all instrumental in building a modern investment portfolio. We learn how to price these assets (one at a time) and

then how to combine them. Each class requires a different set of valuation tools, and fits differently in the overall investment portfolio. The course will conclude with an overview of the asset management industry and a discussion of performance evaluation methods.

Throughout the course, we put a great deal of emphasize on the use of data to both understand patterns of returns and apply the tools we discuss. The course will combine lecture, discussion, and exercises.

Course Requirements and Grading

Grades will be based on the student's performance on the four *non-cumulative* exams and the two group projects. The weights on each component of the overall course grade are as follows:

Exam I	February 6	20%
Exam II	March 6	20%
Exam III	April 8	20%
Exam IV	See university schedule	20%
Group Project I	TBD	12%
Group Project II	TBD	8%

Exams

The four examinations given during the semester will carry equal weight toward your final grade. The tests will involve a combination of questions designed to assess your analytical and interpretative (i.e., qualitative) skills. Each examination will be designed to include problem-solving, short-answer and multiple choice questions. The difficulty level of the multiple choice questions will be similar that found on professional credentialing examinations, such as for the Chartered Financial Analyst (CFA) designation.

Each test will be closed-book, closed-note. All necessary materials (i.e., test booklet, equation sheet, extra paper) will be provided to you. You will need to bring to each exam the following items: writing instruments, financial calculator, and a picture ID card. You will not be allowed to use laptop computers or any other electronic devices during the examinations.

The examinations will test all of the material that is covered in class, some of which may not appear in the textbook or other assigned readings. The quantitative test problems will be modeled after (but not be identical to) the assigned end-of-chapter problems and other numerical examples that are demonstrated during the relevant class sessions. A topic review sheet will be provided prior to each examination to help in the preparation process.

Two other course policies regarding examination should be noted: (i) copies of examinations from past semesters will not be released or posted; and (ii) students will not be allowed to keep their graded examinations, but will have ample opportunity to review their performance. Make-up and extra-credit assignments are not possible. Your grade will be determined solely by the components listed above.

Group Projects

The Group Projects component of your grade will consist of two separate projects that will be spread throughout the semester. These projects will allow you to explore several different aspects of the investment process, including the asset allocation decision, the valuation and selection of individual securities in the context of the portfolio formation process, and a performance evaluation of a security portfolio. The specific descriptions associated with these assignments will be distributed formally in mid-January.

Completion of the assigned projects will require you to work in groups of *four people*. You will stay in the same four-person group for the entire semester, but you will be allowed to select your own group. While you will be able to work fully with other members within your assigned group, you will not be permitted to collaborate in any form with members of other groups. At the end of the semester, you will have the opportunity to provide a peer evaluation of the other members of the group to help determine the quality of each person's relative contribution.

On each project, the same grade will be assigned to every member of the group, assuming each person contributes equal effort and output to the assignment. Further, no late projects will be accepted for any reason.

Final Course Grades

At the end of the semester, the raw number of points that you earned on each graded component will be weighted by the percentages listed above. The weighted total scores for all students in both sections of the course will be combined to determine a final distribution. The following percentile ranges will be applied to this distribution of final scores:

A: 92.0 and Above

A-: 90.0-91.9

B+: 87.0-89.9

B: 82.0-86.9

B-: 80.0-81.9

C+: 77.0-79.9

C: 72.0-76.9

C-: 70.0-71.9

D+: 67.0-69.9

D: 62.0-66.9

D-: 60.0-61.9

F: Below 60.0

In assigning final grades, there will be two distinct evaluations using this grading scale:

(i) *Curved Score Evaluation*: For all students who satisfy the Class Attendance Policy described below, the raw weighted average score they accumulate over the semester will be adjusted upwards by curving the final distribution of eligible students.

(ii) *Raw Score Evaluation*: For all students who do not satisfy the Class Attendance Policy, the raw weighted score they accumulate over the semester will not be adjusted upwards.

Based on past experience, the upward score adjustments associated with curving the final distribution can be considerable. *It is in the best interest of every student to satisfy the Class Attendance Policy and become eligible to be part of the curved distribution.* Finally, please note that the Curved Score distribution will result in an assignment of final course grades that is commensurate with all other sections of FIN 367 that are being taught this semester.

Class Attendance, Participation, and the use of laptop computers in class

I expect you to attend class and contribute to the in-class discussion. There will be a considerable amount of material that *is not* covered by the textbook. That said, I recognize that for a variety of reason you may miss class or be late. Accordingly, I will excuse a total of *three absences during the semester, regardless of the reason.*

After three incidents of absence from class, you will not be eligible to be included in the curved score distribution at the end of the semester and your final grade will be determined solely by where your raw weighted average score falls in the percentile range matrix described previously. Further, an excessive number of unexcused absences will be interpreted as a sign of neglect and lack of preparation, which could lead to being dropped from the course.

I will take attendance at the beginning of each class session. You will only be allowed to sign the attendance sheet if you come to class on time and stay for the entire session. That is, *instances of tardiness or leaving class early without explicit prior permission will be counted as the equivalent of an absence.*

Finally, please note that **signing the attendance sheet for another student under any circumstance is considered an act of academic dishonesty and will be handled accordingly.**

You cannot use your laptops in class, unless instructed otherwise; it just doesn't seem to work.

Course Materials

The course home page on Blackboard will also serve as an important mechanism for communicating course-related information. In addition to electronic versions of many of the materials distributed in class, the website will contain a file that summarizes the material covered in previous classes as well as one that specifies the required readings and problems for the next session. These files will be updated -- assuming there are no network problems -- no later than 2:00 pm on the day before a class session.

Electronic files containing the class slides will also be posted no later than 2:00 pm on the day before a class session. As a rule, these slides will not be distributed in class; if you would like to have them available during the lecture, you should download them (in hard copy form) and bring them with you to class.

In addition, we will be using the following materials:

Textbook

Investment Analysis and Portfolio Management 10e by F. Reilly and K. Brown
(Cengage South-Western, 2012)

Supplementary Readings

In addition to formal assignments from the textbook there will also be a supplementary reading in the form of journal articles and other lecture notes. All of these supplementary readings can be downloaded from the course website.

Financial Calculator

Any business calculator with versions of the following function keys will be acceptable: PV, FV, PMT, I, n, CF and IRR. (The HP 12c is considered by many to be the finance industry standard, along with the TI BA II Plus.) The use of a calculator will be required on all examinations in the course.

General and Miscellaneous Policies

Academic dishonesty (as defined by the Policy Statement on Scholastic Dishonesty for the McCombs School of Business) will not be tolerated and will be dealt with in the most severe manner possible. I assume that all students in this course will act as if bound by this policy and you can expect the same from me. In particular, I will expect that on every individual assignment or examination the work you submit will be entirely your own and that you will provide a level and quality of input to the group projects commensurate with that of your colleagues. Failure to do so may result in failure on the project or failure in the course.

The McCombs School of Business has no tolerance for acts of scholastic dishonesty. The responsibilities of both students and faculty with regard to scholastic dishonesty are described in detail in the BBA Program's Statement on Scholastic Dishonesty at <http://www.mcombs.utexas.edu/BBA/Code-of-Ethics.aspx>. By teaching this course, I have agreed to observe all faculty responsibilities described in that document. By enrolling in this class, you have agreed to observe all student responsibilities described in that document. If the application of the Statement on Scholastic Dishonesty to this class or its assignments is unclear in any way, it is your responsibility to ask me for clarification. Students who violate University rules on scholastic dishonesty are subject to disciplinary penalties, including the possibility of failure in the course and/or dismissal from the University. Since dishonesty harms the individual, all students, the integrity of the University, and the value of our academic brand, policies on scholastic dishonesty will be strictly enforced. You should refer to the Student Judicial Services website at <http://deanofstudents.utexas.edu/sjs/> to access the official University policies and procedures on scholastic dishonesty as well as further elaboration on what constitutes scholastic dishonesty.

The Provost's Office offers the following statement to help inform students of available resources and to fulfill due diligence for Americans With Disabilities Act (ADA):
Students with disabilities may request appropriate academic accommodations from the Division of Diversity and Community Engagement, Services for Students with Disabilities, 512-471-6259, <http://www.utexas.edu/diversity/ddce/ssd/>.

Course Schedule and Readings

The following outline lists the topic coverage and corresponding textbook chapters. **This is a tentative schedule and it may change as we go along.**

Class	Date	Topic	Chapter
		Overview of the Investment Process	
1	Jan-14	Introduction <ul style="list-style-type: none"> • What is “investment”? • Overview of finance and investment in it • Risk aversion and required rate of return 	
2	Jan-16	Measuring Returns <ul style="list-style-type: none"> • Historical holding returns • Expected returns • Variance and standard deviation of returns 	1
3	Jan-23	Investing in Asset Classes: Indexes <ul style="list-style-type: none"> • What uses do we have for indexes? • Weighting schemes • Stock and bond indexes 	5
4	Jan-28	Investments in Global Markets <ul style="list-style-type: none"> • Different asset classes • Different countries • Alternative investments 	3
5	Jan-30	Markets <ul style="list-style-type: none"> • Primary capital market • Secondary markets <ul style="list-style-type: none"> •public exchanges •over the counter • Orders and execution 	4
6	Feb-4	The Asset Allocation Process <ul style="list-style-type: none"> • Goals and constraints • Life cycle considerations 	2
7	Feb-6	<i>Exam I</i>	
		Portfolio Theory	
8	Feb-11	Portfolio Optimization <ul style="list-style-type: none"> • Risk aversion • Mean variance criteria • Portfolio risk and return 	7

Class	Date	Topic	Chapter
9	Feb-13	Capital Asset Pricing Model <ul style="list-style-type: none"> • Optimal portfolios • Capital Market Line • Risk and expected returns 	8
10	Feb-18	Systematic and idiosyncratic risk <ul style="list-style-type: none"> • Risk in modern capital markets • Differentiating systematic from idiosyncratic risk 	
11	Feb-20	Factor Models <ul style="list-style-type: none"> • Sources of factors • Estimating and using factor models 	9
		Markets Efficiency and Investment	
12	Feb-25	Market Efficiency <ul style="list-style-type: none"> • Experiment • Forms and implications 	6
13	Feb-27	Size, value, and momentum anomalies <ul style="list-style-type: none"> • Dynamic portfolio management • Sorting portfolios based on characteristics 	16
14	Mar-4	No class	
15	Mar-6	<i>Exam II</i>	
		Equity Valuation	
16	Mar-18	Intro to Security valuation <ul style="list-style-type: none"> • Top-down approach • Primary to DCF 	11
17	Mar-20	Discounted Cash Flows Analysis <ul style="list-style-type: none"> • Forecasting cash-flows • Firm vs. equity value 	14
18	Mar-25	Relative Valuation <ul style="list-style-type: none"> • Rational • Common ratios: earning, cash-flows, sales 	14
		Fixed Income Investment	
19	Mar-27	Bond Fundamentals <ul style="list-style-type: none"> • Basic features • Main issuers 	17

Class	Date	Topic	Chapter
20	Apr-1	Bond Valuations <ul style="list-style-type: none"> • Calculating yields • Pricing risk-less debt 	18
21	Apr-3	Bond Investing <ul style="list-style-type: none"> • Future vs. realized rates • Expectation Hypothesis: evidence 	18
22	Apr-8	<i>Exam III</i>	
		Derivatives	
23	Apr-10	Forwards and Futures Valuation <ul style="list-style-type: none"> • Motivation and structure • No-arbitrage pricing 	21
24	Apr-15	Investing in commodities <ul style="list-style-type: none"> • Basis • Performance of commodity funds 	
25	Apr-17	Option Valuation <ul style="list-style-type: none"> • Basic terminology • Binomial pricing • The Black, Merton and Scholes Model 	22
26	Apr-24	Option Strategies <ul style="list-style-type: none"> • Payoff and profit diagrams • Use of static option strategies 	22
		Asset Management	
27	Apr-29	Asset Management Industry <ul style="list-style-type: none"> • Overview of the industry • Key trends • Alternative investment vehicles 	24
28	May-1	Performance Evaluation <ul style="list-style-type: none"> • Peer comparison • Risk-adjusted measures 	25
	University schedule	<i>Exam IV</i>	