FIN 332

INVESTMENT THEORY

Fall 2008
Section: 001
Grise Hall 342

Instructor: Ling Lo, Ph.D.
Office: 325 Grise Hall
Office Hours: T 2:05pm ~ 2:30 & 3:30 ~ 5:30pm, W & R 9am ~ 11am, and by appointment.
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PREREQUISITE: FIN 330.

CLASS MEETING: T R 12:45pm ~ 2:05pm.

REQUIRED TEXTBOOK: *Essentials of Investment.* Bodie, Kane, and Marcus, **7th** edition, Irwin McGraw-Hill, 2007. ISBN-10: 0073368717.

FINANCIAL CALCULATOR: Texas Instruments TI BAII PLUS "**IS REQUIRED**".

COURSE OBJECTIVES:
To establish basic understanding of individual investment alternatives, issues involved in investment theory and practice, and investment analysis and valuation. Emphasis will be placed on the understanding of the background, terminology and risk/return characteristics of different investment opportunities.

ATTENDANCE POLICY:

- PUNCTUAL ATTENDANCE ON A REGULAR BASIS IS EXPECTED.
- NO DISRUPTIVE BEHAVIOR IN THE CLASSROOM.
- CHECKING ATTENDANCE OCCURS AT THE BEGINNING OF THE CLASS.
- STUDENTS ARE EXPECTED TO CHECK BLACKBOARD AND EMAIL REGULARLY FOR IMPORTANT ANNOUNCEMENTS.

HOMEWORK:
Homework questions/problems will be assigned after completion of each chapter. I do not require you to turn in your homework. However, understanding of the assigned problems and questions will be essential for you to perform well on exams.

BONUS: Bonus quizzes will occasionally be provided to help you understand the course material. Take-home bonus problems may also be provided to encourage teamwork and facilitate learning.

EXAMS:
Tentative exam dates and are as follows:

Exam I: Thursday, Sep. 18th

Exam II: Tuesday, Oct. 21st

Exam III: Tuesday, Nov. 18th

Final: Tuesday, Dec. 9th 10:30am ~ 12:30pm

1. The four exams will be weighted equally. If you are unable to take an exam at the scheduled time, you must contact me **prior** to the exam and indicate why you cannot take the exam. Failure to do so will result in a grade of zero on the exam that you miss. If you miss an exam due to an excused absence, it is essential that a date for a makeup exam be scheduled as soon as possible. Otherwise, you will not be allowed to take the makeup

2. Exams will consist of multiple choice, true/false questions, and application problems. All exams and quizzes are closed-book. Makeup exams will consist of only short essays and application problems.

3. A formula sheet will be provided for you with each exam. A copy of the formulas will be posted on Blackboard prior to the exam, so you will know what to expect.

4. You need to bring a calculator, a pencil, and a scantron to the exam.

5. No cell phone and no hat is allowed during exams or 10 points will be deducted from you exam score.

TENTATIVE GRADING SCALE: Grades will be based on the weighted average of your exams. An incomplete will only be granted with the consent of the Finance Chairman.

A 90% (405 out of 450 points) and higher
B Else if 80% (360 points) and higher
C Else if 68% (306 points) and higher
D Else if 58% (261 points) and higher
F Below 58% (261 points)

THE LEARNING CENTER
The Learning Center (TLC) (located in the Academic Advising and Retention Center, DUC-A330). Should you require academic assistance with this course, or any other General Education Course, there are several places that can provide you with help. TLC tutors in most major undergraduate subjects and course levels throughout the week . To make an appointment, or to request a tutor for a specific class, call 745-6254 or stop by DUC A330. Log on to TLC's website at www.wku.edu/tlc <http://www.wku.edu/tlc> to find out more. TLC hours: M-Thur. 8am-9pm, Fri. 8am-4pm, Sat.-Closed, and Sundays 4pm-9pm.

AMERICAN DISABILITIES ACT STATEMENT:
Students with disabilities needing academic accommodations should 1) register with and provide documentation to the **OFFICE FOR STUDENT DISABILITY SERVICES (OFSDS)** located at Potter Hall, Room 447, Voice/TDD (270) 745-5004; and 2) bring a letter to the instructor from OFSDS indicating that you need academic accommodations. This must be done within the first week of class.

COURSE OUTLINE:

Topic	**Readings Chapter**
Introduction	1
Financial Securities and Markets	2 &3
Mutual Funds and Investment Companies	4
Risk and Return	5
Efficient Diversification	6
Capital Assets Pricing Model	7
Efficient Market Hypothesis	8
Fixed Income Investments	9 & 10
Equity Evaluation	12
Options Markets	14
Futures Markets	16

Project (50 points)

- Each student is required to complete a group project reports that involve a research/survey on the common stock of a publicly traded company of your choice.
- Each group will consist of three to four members. The group must choose a company in which the group has some interest--your present or future employer, your parent's employer or a firm that you know (or would like to know) something about.
- The selected company must satisfy two conditions: (1) the company you choose must have had at least one stock split **AND** stock dividend during your study period (preferably both), and (2) the company must be approved by the instructor.
- No more than two groups can study the same company. Companies are selected in first-come first-serve basis (You need to e-mail me (1) the name of each team member and (2) the name and ticker symbol of the firm you are interested in for the approval).
- Late project reports will be docked 5 points per day from the total points available. For instance, if you turn in your project two days late, I shall deduct 10 points from your score.
- A grade will be assigned to a group as a whole on the basis of the group's understanding of concepts involved, clarity of written presentation in the project report. The professor will not involve in the dispute between the group members.

You need to do the following:

1. In no more than three sentences explain why you chose your company.

2. This project will cover a period of 1998 (third quarter) to 2008 (second quarter). Therefore, on **sheet 1**, you will download daily price information of the company that you are analyzing and of S&P 500 (ticker symbol = "^GSPC") from the **last trading day in June of 1998** to the last trading day in June of 2008. You use stock prices on the **LAST** trading day of March, June, September, and December to represent the price in the first, second, third, and fourth quarter respectively of each year. Beginning on **1998:Q3**, trace the price history of your chosen stock in **quarterly basis**. (Note: a good source of the stock/dividend information is in www.yahoo.com.) Please note that if you download data from Yahoo, the data are provided in "descending" order with the most recent data on the top. To facilitate the calculation process, you will need to "resort" the data in "ascending" order with the oldest data on the top. On **sheet 2**, state your name(s) and the company and the "ticker symbol" that you are analyzing. Use a graph and a table to show the price per share (**close price**) in each quarter **without the stock splits and stock dividends adjustment**. Indicate on the graph and the table any stock splits. (Use "Insert", "Shapes", , then type in specifically whether it is a 2-for-1 split or 3-for-2 split, etc. in the bubble to indicate the size and timing of the split/dividend.) Below the above graph, construct a similar graph with only cash dividend during the same holding period, **without stock splits or stock dividends.**

Note: all the questions below require stock splits and stock dividends adjusted information

3. Let us assume you owned one share of the stock at the beginning of July, 1998. (You will need to use the **close price** of the last trading day in June of 1998 as your initial investment.) Assuming you own one share of the stock at the beginning of July, 1998, show a graph and a

table the value of your original share (We will call it "Equity" assuming you have a cash account.) in each subsequent quarter. Also prepare a table and a graph showing the dividends you would have received in **each year** if you had one share at the beginning of July, 1998. To prepare these two tables/graphs you would need to adjust for all stock splits and stock dividends yourself. Do not use the "adjusted close" prices in Yahoo because they use a different and an unconventional adjustment scheme.

4. On **sheet 3**, compute and show, on table(s)/graph(s), **quarterly** capital gains yield (price changes), dividend yield and total yield (holding period return) on your one share of original stock. **Make sure to have the results in the format of xx.xx%.**

5. Graph your quarterly holding period return (HPR) against the quarterly total return from holding a market portfolio (Such as S&P500 or other broad market indices).

6. Compute the total risk (variance) of the returns of your stock and the total risk of the returns on the market portfolio. Also compute the correlation coefficient of your stock with the market portfolio.

7. Compute the geometric average rates of returns of your stock and of the market portfolio. Which one performs better during this period? Use the "product" function to compound the (1+HPR) across the 40 quarters then use "F2" to modify the equation by adding "^(1/40)-1" at the end.

8. Compare the coefficient in the regression with your calculated CAPM Beta, are they similar? What can you conclude with respect to systematic risk of the chosen stock? Use no more than 50 words to explain the meanings and significance. To regress the HPRs, go to "data", "data analysis", "regression", "ok", …. If you do not see "data analysis" after clicking on "data", go to "excel options", "add-Ins", "manage: excel add-ins", "go", make sure your "analysis toolpak" is checked, "ok" to add the analysis tool to excel. **(To answer essay type of questions, you need to "insert" "Text Box" then type your answers in the Text box.)**

9. Compute the **arithmetic average** of the dividend growth rate based on the stock's quarterly dividends **collected** (1998:Q3 to 2008:Q2).

10. On **sheet 4**, choose the appropriate dividend model (or other methods) to compute your best judgment for value of your stock at the beginning of 2008. **Tell me why you choose the above model and list the assumptions** and/or estimates you made for this step. **If you obtain any information other than from the above, you need to specify where and when the information is obtained.**
    i.e. The information is obtained from Author's name. "Title of the Article." <u>Name of the Newspaper</u> Date, Month, Year: Section or page number.
    Or http://web.lexis.nexis.com/universe, etc….

11. Look up the latest market price available for your stock and indicate if your stock is fairly priced, under- or over-valued. State the "date" of the latest price in comparison.

12. High light all of your <u>final</u> solutions and send your file to the instructor via e-mail **BEFORE December 3rd, 2008**.