**Course Description:**

The course is designed as an introduction to the fundamentals of finance for executives that have limited direct exposure to the finance function. An overview of finance including tools for financial analysis, sources of funds and capital structure, efficient allocation of funds for capital projects, the firm's cost of capital, and firm valuation will be covered. You will master fundamental techniques such as time value of money and discounted cash flow analysis, and apply them in a valuation framework. This course will allow you to gain an understanding of the important issues faced by corporate managers and the criteria that managers use to make financial decisions.

The course will combine traditional lectures and case discussions. Please keep in mind that the pace of the course will be quite rapid and demanding. You are expected to have completed the readings and assignments in advance and come well-prepared to class to actively participate.

**Course Objectives:**

The objective of the course is to provide a good understanding of the core corporate finance and capital market issues.

**Course Take-Aways**

- understand how capital markets function
- perform valuation of stocks and bonds
- perform capital budgeting analysis for corporate projects
- perform valuation of companies
Required materials (books, course packs, readings, other materials)

- Course material will be put up on Blackboard. You are expected to make full use of Blackboard. It will be used regularly for announcements/assignments/lecture notes/readings/cases.

Recommended materials (suggested to supplement coursework but not mandatory)

- Financial Times, Wall Street Journal, Economist

Class Participation

Students must display their name tags in each class else it will be assumed that you were absent. You must bring your I-Clicker to each class so that you can participate in class and your participation can be recorded.

Active class presentation is a must for this course. You can participate actively only if you have prepared the material for the class in advance. Everyone is expected to participate in discussion of course material, cases, and assignments. If you are not present in class then you obviously cannot participate. It is important that you express your ideas and also ask questions. Several students will be cold called during each class and you must be prepared at all times.

I-Clicker will also be used to track class participation. Throughout class I will ask certain questions that must be answered using the clicker. You will get 50% credit for just answering the question even if the answer is incorrect. Cheating in the use of the clicker will be considered similar to cheating on an exam. Only you should click responses in your clicker. You should not communicate with anyone else about the correct answer to a clicker question during class.

Students are responsible for adhering to all course procedures and policies, including class attendance. If you miss 50% or more of the class attendance, you will receive an Incomplete for the course. There is no exception! This is an EMBA curriculum policy.

Computer and Excel Usage

We will use Excel throughout the course. I will assume you know how to use Excel but will provide a brief introduction to financial functions in Excel.

Academic Integrity and Professional Standards

All students are responsible for adhering to the guidelines outlined in the MSB MBA Academic Integrity System. Violations of the system will be reported to the Academic Integrity board for
review. Students who are unclear on the details of the system should consult their professor and/or program office. In order to avoid any confusion, please understand:

**Individual assignments may not be discussed with anyone at any point except with the faculty member. Group assignments may only be discussed among your group members.**

Students seeking assistance and also students providing assistance are committing the same violation.

**Grading Framework**

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<thead>
<tr>
<th>Assignment</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Three Quizzes</td>
<td>60% (20% each)</td>
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<tr>
<td>Class Participation</td>
<td>10%</td>
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<tr>
<td>Valuation Assignment (group of four or less)</td>
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<tr>
<td>Part 1</td>
<td>10%</td>
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<tr>
<td>Part 2</td>
<td>20%</td>
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<tr>
<td>TOTAL</td>
<td>100%</td>
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Work that is turned in late will not get credit. For the group assignment, each group should have **no more than four students**. Please make sure all members of the group are contributing. Each group is expected to work independently on the analysis.

There is no short-cut. In order to get the most out of the course and do well, it is extremely important to do practice problems at the end of the chapter. Reading the text will often give the false impression that you understand the material. Only by doing problems and cases will you get an understanding of the nuances.

After calculating the raw score based on the above weights, I will then rank all of the scores and assign letter grades in order of the rankings in accordance with the official MSB grading policy in which the average GPA for a core course is no higher than 3.33. (for a non-core course it is 3.5).

**Topics Covered**

**Overview**
We will start with an introduction to finance and capital markets. In addition to typical bonds and equity, we will also discuss the role of asset classes such as private equity and hedge funds. An understanding of financial statements, financial ratios, and forecasting of financial statements will be provided.

**Time Value of Money**
A basic premise to doing any financial analysis is to understand that cash flows in different periods cannot be compared directly but must be adjusted for the time value of money. We will use practical examples to study the concept of present value, future value, lump sum, annuities, perpetuities, and uneven cash flow.
**Fixed Income and Equity**
The characteristics of fixed income securities will be examined from the perspective of both firms and investors. We will analyze how corporate bonds are priced; how rates of return are determined; and how various factors affect the corporation’s cost of borrowing. We will introduce the equity market from the perspective of the investor faced with competing alternatives and the firm wishing to raise funds. Valuation of stocks using the dividend discount model will be presented. We will also value growth stocks that pay little or no dividends.

**CAPM & WACC**
Risk and return will be examined in the context of the Capital Asset Pricing Model (CAPM). All valuations and capital budgeting decisions require an estimate of the firm’s cost of capital. We will estimate sample firm’s weighted average cost of capital (WACC) and evaluate reasons for variation across firms and industries.

**Capital Budgeting**
The decision to undertake a project will depend on a mix of strategic, behavioral and economic decisions. Decisions on the type of equipment, mix of labor and capital, and method of financing must be analyzed in the financial framework of discounted cash flow analysis. The payback method, NPV, and IRR analysis will be studied. The relevant cash flows of a project including investment in property, plant and equipment, working capital, operating cash flows, and the effect of depreciation and taxes will be analyzed.

**Firm Valuation**
Valuation plays a key role in many areas of finance including mergers and acquisitions, corporate finance, portfolio management, and privatization. Different approaches to valuing a company’s equity and firm value will be discussed. In the comparables approach, the value of an asset is derived from the market pricing of comparable assets, standardized using a common variable such as earnings, revenues, or cash flows. The free cash flows approach is used to determine the present value of the business. It requires the analyst to forecast the balance sheet and income statement for several years, and also the firm’s terminal value.
<table>
<thead>
<tr>
<th>Class</th>
<th>Date</th>
<th>Topics Covered</th>
<th>RWJ Chapter</th>
</tr>
</thead>
</table>
| 1     | March 7 | • An Overview of Finance and the Changes in the Financial System  
                   • Financial Statement Analysis and Forecasting | 1, 2, 3      |
| 2     | March 8 | • Time Value of Money                                                       | 4            |
| 3     | March 21| • Quiz 1                                                                 | 4, 8         |
|       |         | • Time Value of Money continued                                             |              |
|       |         | • Fundamentals of Bonds: Yield Curve, Coupon, YTM                           |              |
| 4     | March 22| • Valuation of Fixed-Income Securities: Bond Prices, Bond Returns Valuation  
                   of Fixed-Income Securities; Duration and Convexity | 8            |
| 5     | April 11| • Quiz 2                                                                 | 9            |
|       |         | • Fundamentals of Stock Valuation; Dividends, Capital Gains; Constant Growth Valuation, Growth Stocks |              |
| 6     | April 12| • Part 1 of Valuation Project Due                                           | 10, 11, 13   |
|       |         | • Risk and Return, Portfolio Theory Mean-Variance; Diversification;       |              |
|       |         | • CAPM; Betas; WACC                                                         |              |
|       |         | • Fundamentals of Capital Budgeting: NPV, IRR Capital                      |              |
|       |         | • Budgeting Continued: Cash Flows Components                               |              |
| 7     | May 2   | • Quiz 3                                                                  | 5, 6         |
|       |         | • Capital Budgeting Continued – IRR Revisited                              |              |
|       |         | • Firm Valuation – Comparables Method                                      |              |
| 8     | May 3   | • Firm Valuation – Free Cash Flow Approach                                  |              |
|       |         | • Group Projects                                                          |              |
GROUP PROJECT

The project can be done in groups of four or less. You may select your own groups. The project accounts for 30% of your course grade. The purpose of this project is for you to gain experience applying what you have learned in class. In addition, you need to be familiar with financial data sources (a list of potential data sources is provided in the last section). Finally, we will gain “real time” experience in financial analysis by relating our work to current events. The main focus of the project is on valuation analysis.

Assume you are a senior research analyst and will send your report/analysis to all the firm’s clients. It will be helpful to see the structure/presentation of a few real analyst reports. I will post some on Blackboard.

Select an appropriate name for your team.

Choose a publicly-traded non-financial company (no banks or insurance companies). Make sure that your company has had publicly-traded equity for at least 5 years. You should discuss your choice with me. Please send me an email stating the choice of your company latest by March 15.

In order to make sure that the project is not left for the last minute, the analysis is due in two parts: Part I and II. You should also be meticulous in citing your sources.

PART I: Background and Forecast

Due on Saturday, April 12. Please submit a two-page write-up and an Excel file on Blackboard and also hand-in a hard copy in class.

I. Who is your company? Introduce your company. Introduce your company by explaining its primary business activities and the goods and/or services it sells. Your company’s web site, particularly its “investor relations” link should be a good source, as would the capsule descriptions on the web such as Yahoo! Finance, Reuters, marketguide.com, or cnnfn.com. (Limit write-up to about half page.)

II. What is the news on your company? Search the news wires over the past year for significant news stories related to your company, with special attention to the effects of current events on the firm. Discuss how you would expect the “value drivers” of the stock (current income, future growth, or required returns) to be affected by these news developments. Be as specific as possible. For example, does the news suggest an increase or decrease in revenues for the company due to recent events? Are there estimates of the magnitude of the effects? Are the effects certain, likely, or just possible? (Limit write-up to about half page.)

III. Summarize your firm’s stock price performance for the past five years. Present the data in either chart or table form. Also examine the daily trading volume. Present a comparison of your stock’s price behavior with the S&P 500 and the industry over this time period. Present the data in either chart or table form (data options include Bloomberg terminals in the MSB, BigCharts.com, Yahoo! finance). Most large companies are covered by analysts who put out their forecast for “Earnings per Share (EPS)” for up to the next two years. Many websites (such as Reuters or Yahoo! Finance) allow you to get this data. Describe briefly the consensus view of analysts about the company.
Relate your stock’s price performance to how the stock price and/or volume responded to the news discussed earlier. Do you think that the stock price performance makes sense given available information? Are there any big jumps or declines that do not appear to be explained by either market movements or company news? Discuss whether the firm hit or missed its earnings forecasts and determine whether the market responded to the “surprise”, if any. Do the major changes in the stock price appear to be due to company, industry, or market factors? (Limit write-up to half page and charts.)

IV. Create an Excel file that includes the last 5 years of income statements and balance sheets. You have a number of potential data sources some of which I describe below:

- Wharton Research Data Services (WRDS) - Georgetown subscribes to this powerful user interface with many financial databases. I have created a class user name and password (Username is emba807 and password is HoyaSaxa1789).
- You can get data from Reuters or Yahoo! finance;
- Company’s Website - Financial information is usually provided under “Investor Relations”.

V. Estimate the ratios needed for a “Percent of Sales Forecast” method (we shall cover it in class.) Prepare a five-year Pro Forma Income statements and Balance sheets. Please make sure that you create a separate worksheet where you input your assumptions for the forecast such as sales growth rate, etc.) THIS ITEM FORMS THE MAJOR PART OF THE WORK NEEDED FOR PART I OF THE PROJECT.

PART II: Valuation

Due on Thursday, May 8. Please submit a 3-5 write-up and an Excel file on Blackboard.

I. Estimate your firm’s WACC and Capital Structure. Begin by generating 5-year of income statements and balance sheets. Use these data to estimate capital structure weights and the firm’s effective tax rate. Remember to use the market value for equity: current price per share × shares outstanding. To estimate the cost of debt, use either the actual yield on the firm’s bonds or the YTM on similarly rated bonds. Estimate the firm’s cost of equity using CAPM and the firm’s beta. Use the T-Bond rate as the risk-free rate and use the historical data from your textbook as the market risk premium. You may use year-end financial statements, but use current stock prices in all calculations.

II. Comparables/Multiples Method of Valuation

In this approach, a firm’s value is derived from the pricing of similar firms. Select 3-5 comparable firms to do your valuation. Justify why these firms were selected. Comparable firms will typically be in a similar line of business, have similar size, growth and risk profiles as the firm being valued. In practice, it is not easy to find a group of comparable firms because no two firms are alike. Therefore, you will need to think broadly about the selection of comparable firms as we will discuss in class.

Next, identify the multiples (3-6) that will be used for valuation purposes. Some of the popular multiples used include P/E, P/B, P/Cash Flows, and P/Sales. The multiples selected will depend on the nature of the business. For example, if the firm being valued is from a relatively new industry that has no earnings then it might not make sense to use the PE ratio. Depending on the specific industry other multiples, for example, revenue per passenger mile for airlines, are also typically used.

III. Free Cash Flow Approach

You want to value the firm as a whole. The following steps are required:

1. Estimate the firm’s cost of equity, cost of debt, and WACC.
2. Prepare projected balance sheet and income statement for the next 5-15 years.
3. Estimate annual free cash flows based on the projected balance sheet and income statement.
4. At the end of the explicit forecast period (5-15 years), estimate the firm’s terminal value. Terminal value can be estimated using the multiples approach or the perpetuity approach as discussed in class.
5. Calculate the PV of the annual free cash flows and the terminal value using WACC.
6. Subtract debt from the PV calculated above and make other necessary adjustments to get the value of equity and piece per share.

Data Sources:

Wharton Research Data Service (WRDS): http://wrds.wharton.upenn.edu
Reuters: http://www.reuters.com/investing
Yahoo Finance: http://finance.yahoo.com
CNN Money: http://money.cnn.com/data/markets
Data on Bonds: Bloomberg Terminals are available in the building. A basic guide for using Bloomberg can be found at http://guides.library.georgetown.edu/content.php?pid=230084&sid=1903924