

BUSN 6640-FINANCIAL MANAGEMENT
University Of Colorado At Denver Online MBA Program
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Key items in syllabus

- Materials for course - page 1
- Assignments and grading - page 2
- List of key dates and class schedule - page 4
- Online class success strategies - page 5
- Company analysis assignment instructions - page 6

Course Description

An introduction to the tools, techniques, and concepts of financial management, including financial forecasting using pro forma statements, the time value of money and basic security valuation, cost of capital, capital budgeting, capital structure and evaluation of a firm's financial position through the examination of its financial statements.

Text

Foundations of Corporate Finance, 2nd edition, by Hickman, Hunter and Byrd, 2002, Southwestern College Publishing. The text is available at the Auraria Book Center and used copies should be available through most on-line booksellers. The ISBN number is 0-324-01639-5 in case you want to search for it from an on-line bookseller.

Other course materials:

The Wall Street Journal and the Financial Times are wonderful newspapers to see how finance affects companies. You do not have to subscribe to either paper, but the rates are very good and it is a good way to keep up on business news. You can subscribe to the Wall Street Journal at:

<http://wsjstudent.com/>

The cost is \$29.95 for 15 weeks and includes online access.

An excellent source of information, with a much broader range of articles than the WSJ, is the Financial Times. You can subscribe to the Financial Times at:

https://www.ftnewspaper.com/cgi-bin/ftusa.cgi/fess/vanity_us_student

The cost is \$32 for 15 weeks, \$70 for 33 weeks and \$110 for 52 weeks

Calculator

Personally, I use an Excel spreadsheet much more than a calculator. I like having the data laid out in front of me where I can see what is going on. It is also easy to print or move into a word processing program. If you don't know much about calculators or spreadsheets, I would suggest learning Excel. It is a very powerful tool that all business students should be comfortable with. I will give sample keystrokes for the HP 10B (now extinct) calculator for some problems.

Prerequisites

You need basic accounting skills, familiarity with basic statistical concepts such as mean, standard deviation, correlation, co-variance and regression, and some comfort with the basic concepts of competitive markets, such as entry, exit, competitive market pricing, profits in imperfectly competitive markets, etc. The CU Denver courses that provide this material are:

1. BUSN 6620--Applied Economics for Managers
2. BUSN 6530--Data Analysis for Managers
3. BUSN 6550--Analyzing and Interpreting Accounting Information

Your understanding of finance will be enhanced if you have completed the prerequisite classes or an equivalent course or equivalent knowledge.

Group Assignment and Participation – There are no group assignments in this class. That means you could complete the class while being a complete hermit. But you'll get more out of the class and enrich other students' experience if you participate. The on-line class structure offers three ways to interact with other students: threaded discussions, 'Finance Questions' and via e-mail. The first week we will introduce ourselves and give approximate study times. You might be able to identify potential study partners from these introductions. You can use EMAIL in the eCollege course shell to contact them. Participating in the threaded discussions will not affect your grade, but it might give you a better understanding of the concepts introduced in the class.

Copies of assignments – Around due dates I'll have 40 or 50 e-mails arriving for the class. I have very limited organizational skills. As hard as I try not to, sometimes I will misplace or delete something related to the class. Please keep a copy of every assignment and exam you send me for the duration of the semester in case I need another copy.

Course Objectives

Financial management is concerned essentially with acquiring and investing funds to create wealth for shareholders. It develops key concepts of risk, return, and value, and teaches the quantitative techniques necessary to create an analytical and institutional (financial markets) framework for making the firm's investment and financing decisions. This course builds upon and applies material from prerequisite classes in accounting, business data analysis, and economics. Upon completing this course, you should be able to:

- Understand corporate structure and the concept of agent-principal relationships.
- Use discounted cash flow techniques to value securities like bonds and stocks.
- Estimate project cash flows and use discounted cash flow techniques to determine whether to pursue investment opportunities (NPV analysis and capital budgeting).
- Estimate a risk measure for a firm's stock.
- Calculate an asset's risk adjusted required rate of return.
- Calculate the average cost of obtaining funds to acquire assets (cost of capital).
- Evaluate the mix of debt and equity financing for a firm (capital structure).
- Assess the financial health of a company through quantitative analysis and interpretation of its financial data.
- Understand call and put options, and know the factors that affect the price of options.
- Recognize both the strengths and limitations of the state of the art in understanding the major decisions facing financial managers, and be able to use this to assess arguments presented in the financial press and elsewhere.

Meeting Course Objectives

Some type of assessment is required if grades are to be assigned. There will be two 50-point quizzes during the term. These are scheduled for weeks 4 and 6. The quizzes will be entirely on-line and include true-false, multiple choice, fill-in and multiple answer questions. The quizzes follow the presentation of important quantitative material, so give you an opportunity to test your understanding of these numerical techniques before they appear on an exam. There will be two 150-point exams: a mid-term exam in week 9 (due after the spring break if you would like more time) and a final in week 16. The exams will consist of two parts: an online exam worth 50 points and a second part, worth 100 points, that I will e-mail to you, with essay questions, problems, and short case analyses. The quizzes and exams will be available for 7 to 10 days. You may complete the quiz or exam anytime during that period.

To help you prepare for the quizzes and exams there are non-graded, practice quizzes in each unit. Answers for these practice quizzes are provided and you may take the practice quizzes more than once. Short cases or practice problems are included for the major class topics. Usually there will be a discussion area where students can exchange ideas about the case solutions. In addition to the exams and quizzes, you will apply course material to an actual public corporation. The project is divided into three parts with separate due dates, and is described in detail below.

Grading

Graduate School of Business policy indicates that the average GPA for this class should be between 3.1 and 3.5. I will grade on a curve, but I have certain minimum requirements for the grade of B. Grading on a curve means giving some percentage of A grades, some percentage of B grades, etc. It does not mean that a 90% average will earn an A. Sometimes the lowest A is at 95% and sometimes at 88%. I use a curve because I believe that in the long-run most classes have about the same proportion of A, B and C students. Using a curve reflects this consistency. Grades will be determined based on the points each student earns from the following total:

Exam #1 (Week 9 – March 12 th through March 28 th)	150 points
Exam #2 (Week 17 – May 3 rd through May 10 th)	150 points
Quiz #1 (Week 4 – February 2 nd through 12 th)	50 points
Quiz #2 (Week 7 – February 23 rd through March 5 th)	50 points
<u>Company analysis (Part 1 Feb 15th, Parts 2 & 3 April 19th)</u>	<u>50 points</u>
TOTAL	450 points

Virtual office hours

During the week I check e-mail often and usually respond within 24 hours unless I am out of town. I will probably be making one or two trips this semester so there will be a few times when it will be a day or two before I have access to a computer. Please know that I will get to your e-mail as soon as I can. I try and protect at least part of every weekend for family time. If you send something on Friday evening I may not respond until Monday. When you write be sure to put your name in the note and include BUSN 6640 in the subject line.

Important class dates

I have listed the key dates for the class here. Please put them in your Palm Pilot, Daytimer, etc. that you look at often or can access easily.

Quiz 1- Available February 2nd through 12th, covers material from weeks 1 through 3 (Pro Forma, PV, Valuation)

Project Part 1-Due February 15th

Quiz 2- Available February 23rd through March 5th, covers material from weeks 4 through 6 (Capital Budgeting - Cash flows, NPV, IRR, Payback, etc.)

Exam 1 – Online portion available March 12th through March 28th

Exam 1 – Essay portion due on or before March 28th

Project Parts 2 and 3- Due April 19th

Final Exam - Online portion available May 3rd through May 10th

Final Exam - Essay portion due on or before May 10th. The Final Exam is comprehensive.

Tentative Class Schedule

Week	Monday	Topic	Assignments/Activities	Textbook Readings
1	16-Jan	Intro; Accounting review	Discussion 'Introductions' Pro forma case	1, 2, 3
2	22-Jan	Basics of Present Value	Refinance & Retirement Cases	4
3	29-Jan	Bond & Stock Valuation	Quiz #1 2/2 - 2/12	5
4	5-Feb	Capital Budgeting		7
5	12-Feb	Capital Budgeting	Project Part 1 due Feb 15th	7
6	19-Feb	Capital Budgeting - Real Options	Capital Budgeting Case Quiz #2 2/23 - 3/5	Note on Real Options
7	26-Feb	Risk and Return	2-Asset Portfolio.xls	6
8	5-Mar	CAPM & Beta	Beta estimation case	
9	12-Mar	Exam #1 150 points	Online Portion 3/12-3/28 Essay due March 28th	
	19-Mar	SPRING BREAK		
10	26-Mar	Capital Structure	Essay exam due March 28th	10
11	2-Apr	Dividends & WACC	Mandalay WACC case	8 & 11
12	9-Apr	Options & Convertibles	Option exercises	pp. 232-240 Note on Options
13	16-Apr	Short-Term Asset Management	Project Parts 2 & 3 due April 19th	12 Byrd: Note on Working Capital
14	23-Apr	Financial Analysis	Cash Budget Case	13
15	30-Apr	Mergers and Acquisitions		14, Essay & Article
16	7-May	Final Exam May 3 - 10th	Essay due May 10th	15 & 16

Class Success Strategies

Here are some tips that might help you in this class especially if you are new to on-line courses.

Understand the class format – This class may be structured differently than other on-line or live classes you have taken. The structure is designed to help you, but you have to understand how items fit together to get full value from the class. Here is one possible schedule that also describes most of the class components:

Read the Weekly Introduction: Weekly unit introductions in the eCollege course shell give an overview of the topic, list that week's Powerpoint lectures, text readings and mini-cases, list any activities for the Week (e.g., threaded discussions, quizzes) and provide due date reminders. Check in here to see what the Week requires.

Read the Powerpoint lectures: Powerpoint lectures mimic the lecture of a live class. They are available on the class website, in DOC SHARING for download or I can send you a CD (which includes cases too). The Powerpoint lectures are a good place to start each week's material. Some students print them out (3 or 4 slides per page) others read them from the screen and make notes. Downloading the Powerpoint slides (or using the CD of class materials) gives you more printing options and usually faster view times than viewing the slides as a posted item on the eCollege website. I have provided them in different ways so you can choose the method that works best for you.

Read the textbook: Skim sections that you understand from the lecture, and read more carefully over those topics that were fuzzy after the Powerpoint lecture. End-of-chapter problems are great practice. I provide solutions for these problems in DOC SHARING.

Take the practice quizzes: Each Week has a practice quiz. These quizzes do not affect your grade in any way. You may repeat them, print them, and look at my answers. They will help you prepare for the on-line quizzes and exams.

Review the Powerpoint slides: I suggest reviewing the Powerpoint lecture after reading the text chapter(s) and doing the quiz to strengthen your command of the topics.

Do the practice case if one is available: These cases do not affect your grade but are similar in difficulty and style to the exam problems. Solutions are provided in DOC SHARING, but try to complete the case without looking solution. If you have questions post them in the case area or in 'Finance Questions' for that week.

Don't get behind - The flexibility of the on-line format sometimes lulls people into putting off doing course work so long that they cannot catch up. On-line classes require some diligence and self-discipline.

Ask questions early – This is a corollary to "Don't get behind." Use the 'Finance Questions' area to ask and answer questions. Every few days I'll answer these questions and send my response to you in an e-mail. Prior to my answering other students may have answered, which is great. I encourage that type of interaction. You are also welcome to send me an e-mail. That is the best strategy if your question is time-sensitive. If you write, see the next point.

Use your name and the subject line when you write - When you e-mail me be sure to put your name in the note (You would be surprised how many nameless e-mails I receive from BUSN 6640 students!). Please put BUSN 6640 and whatever the topic of the message in the subject, e.g., BUSN6640 Jane Doe Project Part 3. That will help me identify the e-mails that may need immediate attention and keep track of assignments as they arrive.

Company Analysis Project

Company analysis (50 points):

Part #1 due February 15th

Parts #2 & #3 due April 19th

Important 1: Send your assignments to me as e-mail notes not as attachments and be sure your name is in your e-mail. Failing to follow these instructions could result in a lower score.

Important 2: These due dates are flexible. If family, school or work demands are high as a project due date approaches, you can automatically have an extra several days. If a few days are not sufficient, write and we can work out a more convenient schedule.

Important 3: This project is graded Pass/Fail, with everyone eventually receiving a Pass and all the points (unless you persist on not following the delivery instructions - See Important 1, above). If I catch an error I will write you and ask that be corrected.

Eventually everyone receives full credit. Since everyone receives the same score this assignment cannot improve your final letter grade.

The objective of this assignment is to familiarize you with sources of financial data, practice applying some of the quantitative tools of the course, and enrich our somewhat stylized approach to finance with some of the complexity of real-world corporate finance. The assignment has three parts. All three parts will be based on a single company that you choose. Part 1 asks you to investigate the governance and compensation features of the company. This allows you to see the structure of a proxy statement, how CEO pay is reported and what type of people sit on corporate boards. Part 2 asks you to estimate the equity beta for your company. The equity beta is the most commonly used risk measure in finance. This aspect of the project gives you some practice in finding stock price data, computing returns, and doing a little statistical analysis. The final part asks you to compute the weighted average cost of capital (WACC) for your company. The WACC is often used as a discount rate in investment analysis. The computation will expose you to the capital structure of a company, which is rarely as neat as our textbook examples.

To begin the project you need to find an appropriate company.

1: Select a public, non-financial corporation. It should be a company that has been publicly traded for at least two years, so you can get financial statement information and stock prices. Many companies have links to their financials on their websites. A wonderful source of financial data is the SEC's EDGAR database at:

<http://www.sec.gov/edgar/searchedgar/companysearch.html>

The company should have some long-term debt listed on the balance sheet of its financial statements. Check that the company has some long-term debt before starting the project.

2. Obtain the company's latest annual report or SEC Form 10K and proxy statement (DEF 14A). The data for most companies is also available on the internet either on the company's website (usually under Investor Relations) or at the SEC EDGAR website. You can also get these by calling the company's investor relations department (the number is usually on their website) and asking for them to be mailed to you. It usually takes about a week.

3. See if historical stock prices are available for at least a year and preferably two years. There are several websites that have such data. A particularly good one is Yahoo, look for Historical Quotes under Research Tools, at:

<http://biz.yahoo.com/r/>

Yahoo Stock Data

Enter the ticker symbol for your company then click on **Historical Quotes** on the lower right part of the page. A screen will appear that asks for some information. Select **Daily** for the type of return and enter some dates (maybe start two years from today). When the data appears click on **Last** to see if there is data for your entire two-year period. You can also scroll to the bottom of the data and click on **Download to spreadsheet**. Using this command I have been able to download all of the data right into Excel.

Assignment Part 1: Governance information (Due by February 15th) 15 points.

Send me an e-mail with the information listed below for your company. Almost all of the data can be found on the proxy statement. **Please do not** send the assignment as an attachment. They are slower for me to access and grade. Just write an e-mail and send it to me at:

john.byrd@cudenver.edu

Your name

Company name

Where traded (e.g., NYSE, NASDAQ, etc.)

Names of CEO and Chairman

The total CEO and Chairman compensation (salary and bonus shown separately)

CEO and Chair total stock ownership

Stock options granted to the CEO and Chair (or other officers) in the most recent year

Number of directors on the board

Categorize directors as:

Inside directors (current or former employees of the firm or family members of employees or former employees)

Affiliated outside directors (not a current or former employee of the firm, but has some business relationship. See "Related Transaction" section of the Proxy Statement)

Independent outside directors (no link to the firm other than their board seat)

The number of directors in each category and the ratio of inside and affiliated directors to independent outside directors.

Existence of any large stakeholders in company (more than 5% of stock)

Stock market performance of the company over the last 5 years, and a comparison to a major stock index and a peer group (as shown in the proxy).

Assignment Part 2 : Estimate the equity beta (Due April 19th). 15 points

Introduction: The Capital Asset Pricing Model (CAPM) is a standard model used to estimate an asset's risk. It can be applied to any asset for which there is a time-series of price data. The beta estimate is the covariance of the returns of the asset to the returns on some broad market index, standardized by the variance of the returns to the index. It sounds more complicated than it is. Here are a few steps that should help you compute a beta for the stock of your company.

1. Collect price data for your company's stock and for an index.

You will need about 250 daily prices for this project. That is about one year's worth of trading. Yahoo is probably the best source for the data for this project because it gives you dividends as well as prices. The URL is:

<http://biz.yahoo.com/r/>

The instructions for getting the historic prices are given at the beginning of these instructions. You will need the ticker symbol for your stock and the index you plan on using. On Yahoo the ticker for the S&P500 is ^SPX and the ticker symbol for the NADAQ Composite is ^IXQ.

2. Change closing prices into returns.

We cover this in Week 2 or 3. A return is the price change and income from an asset divided by the price paid. For this assignment we need daily returns so the formula will be something like:

$$\text{Return}(\text{Day2}) = \frac{\text{Price}(\text{Day2}) - \text{Price}(\text{Day1}) + \text{Dividends}}{\text{Price}(\text{Day1})}$$

Where Prices are the closing prices on the respective days. Only once a quarter, and only for some stocks, will there be a dividend. For example, if Apple Computer (aapl) closed at \$20.00 on Monday and \$20.25 on Tuesday and paid no dividend that day, its return would be $\$0.25/\$20.00 = 0.0125 = 1.25\%$

$$\text{Return}(\text{Day2}) = \frac{\$20.25 - \$20.00 + \$0.00}{\$20.00} = \frac{\$0.25}{\$20.00} = 0.0125 = 1.25\%$$

You need to convert your price series and your index series into returns. You must be very careful to match the dates of the index and the stock. If you are off by just one day the estimation procedure will not work.

3. Compute the beta.

The beta is the slope coefficient from a regression of the index returns (x-variable) on the stock's returns (y-variable). You can compute this slope coefficient several ways. EXCEL has a LINEST command that will give you the beta estimate. The command can be inserted in a cell using the INSERT pull-down menu then selecting FUNCTION. LINEST is under the statistical functions. The company stock returns are the y-variable and the index returns are the x-variable. If you reverse the ordering your beta estimate will be pretty far off. If your company return data is in column A from cell 1 to 250 and your index return data is in column B from cell 1 to 250, then the LINEST command should look like this

=LINEST(A1:A250,B1:B250)

You can also use Regression Analysis in EXCEL's Data Analysis Add-in (under the TOOLS MENU).

4. Find a published estimate of your company's beta.

There are several internet sources that have beta estimates. Yahoo finance is a good source (<http://finance.yahoo.com>). Enter your company's ticker symbol then go to Key Statistics. The Beta is under Trading Information on the right-hand side of the page.

Other sources are:

<http://www.quicken.com/investments/stocks/>

<http://www.dailystocks.com/>

5. Send me your estimate.

Please send just a brief e-mail note (john.byrd@cudenver.edu) with your name, the name of your company, your beta estimate and the published beta estimate. If your beta is very different from the published beta you might write a paragraph discussing why this difference exist. **Please send this as an e-mail not as an attachment. Do not send the data.**

Assignment Part 3: Estimate your company's WACC (Due April 19th). 20 points

The weighted average cost of capital (WACC) is a standard approach to estimating a discount rate for NPV analysis. Although the WACC is appropriate only in a limited number of situations, it remains a good starting point for discount rate estimation. In this portion of the assignment you will estimate the WACC for your company. In past classes some students have found WACC estimates for their company on the internet. A Google search might find one. The New Zealand office of PriceWaterhouseCoopers has an interesting website with WACC estimates for many New Zealand companies. You might want to look at these estimates and see how they compare to yours. The URL is:

<http://www.pwc.com/Extweb/pwcpublications.nsf/docid/748F5814D61CC2618525693A007EC870>

The WACC requires 4 to 6 inputs depending on whether the company has preferred stock.

Market value of long-term debt

Market value of preferred stock

Market value of equity

Cost of long-term debt

Cost of preferred stock

Cost of equity

1. Market value of long-term debt - This may not be possible to compute. If your company's debt is publicly traded find the current price and multiply by the number of bonds. If it is not publicly-traded use book value (current principal outstanding from the balance sheet (or balance sheet footnotes)).

2. Market value of preferred stock - Current market price times number of shares outstanding. Most companies DO NOT have preferred stock. Ignore this step and Step 5 if you cannot find any preferred stock listed on the balance sheet.

3. Market value of equity - Current market price times number of shares outstanding.

4. Cost of long-term debt – This is the trickiest part of the assignment. The best place to find this information is in the footnotes to the balance sheet. The footnotes will often have detailed information on the coupon rates of many of a company’s debt issues and may have information on the year-end market price of the debt. Here described from best to worst are several approaches for estimating the cost (or required rate of return) of debt.

A. If the market price of debt is available (not often) use it to estimate the current yield-to-maturity of the debt. See our notes from Week 3 of the class on how to do this. The yield-to-maturity is the best estimate of the cost of debt.

B. If the market price of debt is not available look for the coupon rate. Compute an average coupon rate (or weighted average if the size of debt issues vary) using all the coupon rates available. This becomes your estimate for the cost of debt.

C. If coupon rates are not available you can estimate the coupon rate by dividing the interest expense by the book value of the debt. It is best to use the average of the book value of debt from the end of the previous year (the start of the current year) and the end of the current year. This will correct for debt being issued or repaid.

5. Cost of preferred stock – Annual Preferred Stock dividend divided by the current market price of the preferred stock

6. Cost of equity - Use the CAPM and the beta you estimated in Part 2 of the project to estimate the cost of equity. Let us all use 5% as the risk-free rate and 7.2% as the market risk premium. Also, since a few beta estimates were either very small or large, let us agree that the final cost of equity must be higher than the cost of preferred stock, which should be higher than the cost of debt. A cost of equity that has a 5% to 12% premium over the cost of debt is probably reasonable.

7. Compute the Weighted Average Cost of Capital

Use the WACC formula remembering to adjust the cost of debt for its preferential tax treatment. You can use the company's average tax rate (tax expense divided by taxable income) or 0% if the company has losses. The tax rate is usually reported in footnotes to the financial statement.

$$\text{WACC} = \frac{\text{BV Debt}}{\text{Total Capital}} \text{CostDebt} + \frac{\text{MV Preferred}}{\text{Total Capital}} \text{CostPreferred} + \frac{\text{MV Equity}}{\text{Total Capital}} \text{CostEquity}$$

Where: Total Capital is the sum of BV Debt + MV Preferred and MV Equity

8. Submit your WACC estimate

Please send me the following information in an e-mail (not an attachment):

Your name

Company name

Market (or book) values of debt, preferred stock and common stock.

The tax rate used to compute the after-tax cost of debt.

The cost of each type of security, e.g., the rates used in the WACC computation.

Your WACC estimate

A brief discussion of what problems or weaknesses you see in your estimate.