

# **FINA 365: Corporate Financial Analysis**

Spring 2019 Syllabus

**Section, Time, Room:** Section 004: Mon/Wed 2:20 - 3:35 pm; DMSB 135  
Section 005: Mon/Wed 3:55 - 5:10 pm; DMSB 135  
Section 006: Mon/Wed 5:30 - 6:45 pm; DMSB 135

**FINAL COMMON EXAM, ALL 3 SECTIONS: Friday, May 3<sup>rd</sup>, 2019, 7:30 – 10:00 pm, DMSB 123**

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## **Purpose:**

This course expands a student’s breadth and depth of knowledge of corporate finance previously learned in the prerequisite course, FINA 363. The overarching objectives are that students (1) gain a deep intuitive understanding of the concepts used in corporate finance, (2) learn tools used in corporate financial analysis, including MS Excel modeling and regression analysis, and (3) gain confidence in applying the concepts and tools in solving multi-stage problems and mini-cases.

## **Course Prerequisites:**

Students are officially required to have taken **FINA 363** (Introduction to Finance). Students are assumed to recall materials from FINA 363, those related to corporate finance in particular. However, we may overview some of the previously covered materials before discussing an advanced concept in corporate finance. You should have good familiarity with mathematics and basic statistics (e.g., mean, standard deviation, covariance, correlation, regression, etc.), and should be able to use Excel spreadsheets and associated functionality.

## **Required eText:**

Jonathan Berk, Peter DeMarzo, and Jarrad Harford (BDH hereafter), *Fundamentals of Corporate Finance*, 4<sup>th</sup> Edition, Pearson Education (2018), with **MyLab Finance Access** that comes with the eText. Pearson MyLab Finance Access is required, as I will assign all homework via MyLab Finance.

## **Additional Requirements:**

You will need to use an advanced **calculator** to solve exam problems. A financial calculator such as an HP 12C or Texas Instruments BA II Plus is essential. In addition, you will need to use MS Excel to solve some of the homework questions and to calculate inputs for the valuation project.

## **Teaching and Learning Activities:**

- **Lectures:**  
The lectures are designed to develop an understanding of advanced elements of corporate finance. The emphasis is placed on the economic logic underlying each concept (not just its definition or formula), and students are trained to recognize the right concepts and tools to apply in solving business problems. The lectures are not note taking drills and generally follow the outline of the text. To benefit most from the lectures, it is absolutely essential that you read the upcoming chapters of the text before they are covered

in class. Moreover, the material needs to be understood, not just read! In addition, it is very important that you deepen your understanding of the materials by solving the end-of-chapter problems and those available at MyLab Finance. It is also very helpful to solve simulated Excel problems of MyLab Finance to improve your Excel computational skills.

- **Stock Valuation Project:**

You are expected to use financial models and concepts presented during the course by working on a valuation project in order to gain some experience in the practice of corporate finance. Your task is to analyse the stock price of a company and give an estimate of the stock price. You need to submit **a report** of your valuation which is due on Monday, April 22, 2019. The report should include:

- an introduction about the company;
- an estimate of the market risk premium based on your calculations;
- a calculation of the cost of equity of the company;
- two estimates of the stock price that are based on your calculations using (1) the dividend-discount model and (2) the method of comparables;
- a conclusion to the report, which includes your estimate of the stock price.
- an appendix, which contains your MS Excel spreadsheet that presents your calculations.

The introductory lecture on the stock valuation project will be provided on Wednesday, April 3, 2019. After the commencement of the course, prepare for this activity by forming working groups of 3-4 students. You are responsible for finding your teammate before the introductory lecture; otherwise, I will randomly assign you to a group. Also, you are not allowed to change your group after informing me. For more details on this project, refer to the ‘Stock Valuation Project’ part of the lectures.

- **Homework:**

Six mandatory homework will be assigned periodically through MyLab Finance. The answers should be entered online into MyLab Finance before the deadline. No extension to the due date will be granted for any reason because you will have around one week between the date posted and the due date. You are encouraged to collaborate with other students. However, each student has to submit their own answers. Homework sent via e-mail are not accepted.

- **Midterm and Final Exams:**

There will be **two** midterms and a **comprehensive** final Exam. Both midterms will be held in class. The final exam will be a **common exam** and held on Friday, May 3<sup>rd</sup>, 2019, at 7:30 pm in DMSB 123. Note that the normal final exam date, which is scheduled by University Registrar, will not apply to this course. There are no make-up exams for any unsatisfactory reason. If an exam 1 or 2 is missed for a valid reason, the points for that exam will be assigned to the final exam. You will be allowed to bring a one-page formula sheet. You need to hand in your formula sheet together with your exam. No sample questions will be allowed on that sheet. If English is not your first language, you may bring a dictionary conditional on the instructor’s approval in advance. The only items permitted during the exam are your formula sheet, the exam form, pens, and a calculator. Cell phones/ tablets are not permitted during the exam. Any violation of these guidelines will result in a grade of 0 for all involved parties on the exam and will be considered a violation of the Honor Code.

**Grading Components and Weightings:**

Homework	10%
Stock Valuation Project	15%
Exam 1	20%
Exam 2	25%
Final Exam	30%

**Grade Scale:**

A: 90-100    B+: 88-89    B: 80-87    C+:78-79    C: 70-77    D:60-69    F:0-59

**Blackboard, MyLab Finance and and USC Email:**

I will use the Blackboard to post all announcements, relevant updates, and class related links and materials (such as my presentations) on a regular basis. All homework will be assigned and submitted via MyLab Finance. You should check Blackboard and MyLab Finance daily for new information or potential updates.

When you send me emails, format the subject as FINA 365-Time of Your Class-Your Question. Send your emails only to [mohammad.irani@moore.sc.edu](mailto:mohammad.irani@moore.sc.edu); otherwise, I will not be able to reply promptly.

**Class Participation/Attendance:**

It is essential that you attend every class, be on time, don't leave class early, and be prepared to participate in whatever class discussion may occur. If you are late for class or miss the class, it is your responsibility to keep up with the material. Following the University Policy, the grade of students who are absent for more than three sessions without a valid excuse will drop one letter grade. However, to encourage full attendance, I will use an attendance bonus: if a student misses two or less than two sessions without a valid excuse and her/his final score is one point below the upper letter grade, I will raise the grade to the upper letter grade. If you have to miss a class, you have to inform both the **teaching assistant** and **me** via e-mail in advance. If you want to get an excused absence, you need to provide a document from a third party (such as a doctor) that explains a reason for missing the class.

**Policy: Electronic Devices in Class**

You can use a laptop or tablet for taking notes or for purposes related to the class. However, you are not permitted to use any device for purposes of texting, checking email or other social media, surfing the internet, or anything unrelated to our class. All devices, such as cell phones, should be silenced and put away during class. Any violation of this policy can cause a grade penalty.

**Grading Policies:**

Exams and homework are mostly multiple-choice questions. All grades are assigned after a careful examination of the work submitted. Any grade disputes should be discussed with the instructor within two weeks of the receipt of the disputed exam. No adjustments will be made after this two-week period.

In addition, there will not be any opportunity for extra credit in this course.

**Course Learning Objectives:****1. Overview of Corporate Finance, Financial Statement Analysis, Valuing Cash Flows:**

- Understand value maximization as a goal for corporate decisions
- Identify conflicts of interests between managers and owners and explain how they are mitigated
- Explain how managerial decisions impact the Balance Sheet and Income Statements
- Infer the transactions that the firm undertook during the year when given two consecutive years of balance sheets and income statements
- Measure firm performance using financial ratios
- Calculate the present and future values of single sums, mixed cash flows, annuities, perpetuities, and growing cash flows
- Explain various type of bonds and compute the price and yield to maturity of a bond
- Understand bond ratings and identify the credit risk as an important determinant of the price and yield to the maturity of corporate bonds

## **2. Capital Budgeting and Firm Valuation:**

- Identify all relevant (incremental) cash flows for a capital budgeting project
- Develop a spreadsheet model to calculate present value of expected cash flows
- Calculate expected cash flows given information about sales, production costs, taxes, depreciation, etc.
- Evaluate alternative projects using investment decision rules (the Net Present Value, Payback Rule, Profitability Index, and Internal Rate of Return)
- Conduct scenario analysis of future cash flows and break-even analysis
- Conduct cost analysis of a project by differentiating between fixed and variable costs
- Construct a valuation model for a firm given information on sales, costs of goods sold, depreciation, tax rates, accounts receivable, accounts payable, inventory, etc.
- Estimate intrinsic value of a stock using the Dividend-Discount model, the Discounted Free Cash Flow Model, and the Comparable Valuation method

## **3. Risk, Cost of Capital, Capital Structure:**

- Describe the difference between firm-specific and systematic risk
- Understand the concept of diversification
- Explain the relation between required (expected) return and systematic risk
- Explain the determinants of a project's cost of capital
- Use the Capital Asset Pricing Model (CAPM) to estimate the cost of equity capital
- Develop MS Excel spreadsheet to estimate equity betas using return data and the regression analysis
- Identify the appropriate risk-free rate for a project
- Demonstrate the impact of financial leverage on risk for the shareholders
- Estimate the Cost of Debt
- Calculate the weighted average cost of capital (WACC)
- Understand the concept of homemade leverage, and MM Propositions I
- Explain M&M Proposition II and why taxes change the conclusion of the M&M Propositions
- Identify costs and benefits of using debt

### **Disability Statement:**

Students with disabilities should contact the Student Disability Resource Center at 777-6142 to make arrangements for appropriate accommodations. I also suggest them to inform me as soon as possible about the type of academic or physical accommodations they need during this course.

### **University of South Carolina Honor Code:**

Students are responsible for following the policies associated with the USC Honor Code as specified on the Office of Academic Integrity site: <https://www.sa.sc.edu/academicintegrity/honor-code-policy-information>.

Moreover, the Student Leadership Council and the faculty of the Darla Moore School of Business expect students to act in accord with the Darla Moore School of Business Code of Student Conduct for Undergraduate Students: [https://www.sc.edu/study/colleges\\_schools/moore/internal/rights\\_and\\_responsibilities/code\\_conduct.php](https://www.sc.edu/study/colleges_schools/moore/internal/rights_and_responsibilities/code_conduct.php).

## Anticipated Schedule

I will try to proceed in the order listed below. However, I might change the schedule to adjust the actual pace of the class and (or) to consider unexpected events. I will announce any changes in advance.

Session	Date	Day	Topic(s)	Reading	Assignment
1	1/14	Mon	Introduction, Syllabus, and Overview of Corporate Finance	Syllabus, Ch.1	
2	1/16	Wed	Introduction to Financial Statement Analysis	Ch. 2	
	1/21	Mon	<b>Dr. Martin Luther King, Jr. Service Day-No Classes</b>		
	1/22	Tue	Last day to change/drop a course without a grade of "W" being recorded & Last Day to Apply for May Graduation		
3	1/23	Wed	Introduction to Financial Statement Analysis	Ch. 2	
4	1/28	Mon	Time Value of Money	Ch. 3&4	HW#1 is posted
5	1/30	Wed	Bond Valuation	Ch. 6	
6	2/4	Mon	Investment Decision Rules	Ch. 8	HW#1 is due
7	2/6	Wed	Investment Decision Rules	Ch. 8	HW#2 is posted
8	2/11	Mon	Fundamentals of Capital Budgeting	Ch. 9	
9	2/13	Wed	Fundamentals of Capital Budgeting	Ch. 9	HW#2 is due
10	2/18	Mon	Fundamentals of Capital Budgeting	Ch. 9	
11	2/20	Wed	<b>Midterm Exam 1</b>		
12	2/25	Mon	Stock Valuation I	Ch. 7	HW#3 is posted
13	2/27	Wed	Stock Valuation I	Ch. 7	
14	3/4	Mon	Stock Valuation II	Ch. 10	HW#3 is due
	3/4	Mon	Last day to drop without "WF" being recorded		
15	3/6	Wed	Stock Valuation II	Ch. 10	
	3/11	Mon	<b>Spring Break-No Classes</b>		
	3/13	Wed	<b>Spring Break-No Classes</b>		
16	3/18	Mon	Risk and Return in Capital Markets	Ch. 11	HW#4 is posted
17	3/20	Wed	Risk and Return in Capital Markets	Ch. 11	
18	3/25	Mon	Systematic Risk and the Equity Risk Premium	Ch. 12	HW#4 is due
19	3/27	Wed	<b>Midterm Exam 2</b>		
20	4/1	Mon	Systematic Risk and the Equity Risk Premium	Ch. 12	
21	4/3	Wed	Introduction to Valuation Project		
22	4/8	Mon	The Cost of Capital	Ch. 13	HW#5 is posted
23	4/10	Wed	The Cost of Capital	Ch. 13	
24	4/15	Mon	The Cost of Capital	Ch. 13	HW#5 is due
25	4/17	Wed	Capital Structure	Ch. 16	
26	4/22	Mon	Capital Structure	Ch. 16	HW#6 is posted & The project is due
27	4/24	Wed	Capital Structure	Ch. 16	HW#6 is due on Fri, April 26
28	4/29	Mon	Review Session		
	<b>5/3</b>	<b>Fri</b>	<b>Comprehensive Common Final Exam</b>		<b>7:30 pm - 10:00 pm, DMSB 123</b>