# UCLA SPRING 2021 ENG 111 - INTRODUCTION TO FINANCE & MARKETING FOR ENGINEERS

LECTURES: TR - 10am -11:50 PDT Via Live Zoom <a href="https://ucla.zoom.us/j/95361248197?pwd=M1JDU1FQb3dnaHY1VkRyTU56NFVUQT09">https://ucla.zoom.us/j/95361248197?pwd=M1JDU1FQb3dnaHY1VkRyTU56NFVUQT09</a> Passcode:eng111

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## **Course Objective**

Introduce the fundamentals of internal and external financing of a company as well as the basic principles of investment

#### **Text**

Ross, Westerfield, Jaffe "Corporate Finance", 8th edition or later.

I will be using the 10th edition: https://www.amazon.com/Corporate-Finance-10th-Stephen-Rossdp-0078034779/dp/0078034779/ ref=mt\_hardcover? \_encoding=UTF8&me=&qid=

### Grading

HW - 25%

Group Paper - 20%

Online Poll Questions - 15%

Current Event Posts - 10%

Final - 30%

85 and above A

80-85 A-

75-80 -B+ ...etc.

## **Course Format:**

Lectures will be held online via live Zoom sessions. It would be advisable to read the relevant textbook chapters before the lecture but it is not a must. During each lecture, quick-answer online poll questions will be asked based on the lecture content. Lectures will be recorded. However, only those who participate in live lectures will be able to answer the online poll questions. Polls will be closed before the live sessions end. If you are located outside of California with more than 4-hour time difference, you will be given makeup poll questions. You have to sign up for make-up polls by April 2nd by emailing <a href="mailto:melikeg@ucla.edu">melikeg@ucla.edu</a>.

## week t

Textbook Reading:

♦ 1.1 What is Corporate Finance
♦ 1.2 The Corporate Firm
♦ 1.3 The Importance of Cash Flows
♦ 1.4 The Goal of Financial
Management
♦ 1.5 The Agency Problem

#### TODO

You will have to work on your homeworks as a group (4 members). Sign up in the following sheet for a group:

https://docs.google.com/spreadsheets/d/1KHJ350WXcGTS-aK2nRagLpRw8NojL6z2-iQI\_4iJn2I/edit?usp=sharing

## **Grading Details**

#### **Important Due Dates:**

- Final: June 7, 3pm PDT
- Group Paper: June 12, 11pm PDT
- Homework: Mostly Tuesdays, 11pm PDT

#### Homework:

Online submission (PDF) only. You will work on your homework with your classmates (4 people). Only one of you should submit the homework with all group member names appearing clearly on the document submitted.

#### **Online Poll Questions:**

Each lecture, 2 to 3 online poll questions will be asked based on that day's lecture. Polls will close before the live session ends. Each correct answer will get 100 points. Each incorrect answer will get 50 points (for participation). No participation will get 0 points. Lowest 4 polls will be dropped before calculating the average.

#### Final:

Exam: June 7, 3pm PDT. Closed notes, books, and www. You will be able to use a formula sheet (both sides of a regular sheet) as well as a simple calculator with no text memory

#### **Group Project:**

See the class webpage for details.

#### **Current Event Posts:**

Each week, one or more current event articles will be posted on ccle. You are expected to post a brief comment on the forum provided below the articles. Forum will be closed each week at 11pm on Sunday. You will get 100 points per week for comments adhering to the rules outlined at the forums.

## week 2

### Textbook Reading:

 $\diamondsuit$ 2.1 The Balance Sheet  $\diamondsuit$  2.2 The Income Statement  $\diamondsuit$  2.3 Taxes  $\diamondsuit$  2.4 Net Working Capital

### TODO

Submit your homework. Post your online current event forum comment. Check out the group project outline posted on ccle under Group Project tab.

## week 3

### Textbook Reading:

♦ 2.5 Financial Cash Flow (Only the Definition) ♦ 3.1 Financial
Statements Analysis ♦ 3.2 Ratio Analysis ♦ The DuPont
Identity ♦ 3.4 Financial Models

### TODO

Submit your homework. Post your online current event forum comment.

## week 4

Textbook Reading: ♦ 3.4 Financial Models-continued ♦ 3.5 External Financing and Growth

#### TODO

Submit your homework. Post your online current event forum comment. This is a good time to plan for the group project. Please read the instructions on class webpage under "group project" tab.

## week 5

### Textbook Reading:

 $\diamondsuit$  4.1 Valuation – One Period Case  $\diamondsuit$  4.2 Multiperiod Case  $\diamondsuit$  4.3 Compounding Periods  $\diamondsuit$  4.4 Simplifications  $\diamondsuit$  5.1 Why Use Net Present Value  $\diamondsuit$  5.2 The Payback Period Method  $\diamondsuit$  5.3 Discounted Payback Period Method

### TODO

Submit your homework. Post your online current event forum comment.

## week 6

Textbook Reading:

 $\diamondsuit$  5.6 Profitability Index  $\diamondsuit$  6.1 Incremental Cash Flows: The Key to Capital Budgeting  $\diamondsuit$  6.2 The Baldwin Company: An Example

### TODO

Submit your homework. Post your online current event forum comment. Make sure you have a team in place for the group project. If you do not have a team with at least 4 and at most 6 people LET ME KNOW!!!

## week 7

Textbook Reading:

♦ 7.1 Sensitivity, Scenario, and Break-Even Analysis ♦ 7.2 Monte Carlo Simulation

#### TODO

Submit your homework. Post your online current event forum comment.

Start to meet with your team to organize and allocate the work among team members..

## week 8

Textbook Reading:

 $\diamond$  8.1 Bonds and Bond Valuation  $\diamond$  8.2 Government and Corporate Bonds  $\ \diamond$  8.5 Determinants of Bond Yields

### TO DO

Submit Your Homework. Post your online current event forum comment.

## week 9

Textbook Reading:

 $\diamondsuit$  9.1 The Present Value of Common Stocks  $\diamondsuit$  9.2 Estimates of Parameters in the Dividend Discount Model  $\diamondsuit$  9.3 Growth Opportunities  $\diamondsuit$  10.1 Returns  $\diamondsuit$  10.2 Holding Period Return  $\diamondsuit$  10.3 Return Statistics  $\diamondsuit$  10.4 Average Stock Returns and Risk Free Returns  $\diamondsuit$  10.5 Risk Statistics  $\diamondsuit$  10.6 More on Average Returns

### TODO

Submit your homework. Post your online current event forum comment.

## week 10

#### Textbook Reading:

♦ 11.1 Individual Securities ♦ 11.2 Expected Return, Variance, and Covariance ♦ 11.3 The Return and the Risk for Portfolios ♦ 11.4 The Efficient Set of Two Assets ♦ 11.5 The Efficient Set for Many Securities ♦ 11.6 Diversification ♦ 11.6 Riskless Borrowing and Lending ♦ 11.6 Market Equilibrium 11.6 CAPM

### TODO

Submit your homework. Post your online current event forum comment.

## Here are some sources that you may find useful:

Student Remote Learning: https://www.teaching.ucla.edu/resources/student-remote-learning

Free or reduced cost student resources: <a href="https://docs.google.com/document/d/18-EXvsYZoA-f9txYxAWzOADeCTQD1tLhk9km\_xfFuBg/edit">https://docs.google.com/document/d/18-EXvsYZoA-f9txYxAWzOADeCTQD1tLhk9km\_xfFuBg/edit</a>