# ENG 111 - INTRODUCTION TO FINANCE & MARKETING FOR ENGINEERS

#### UCLA| Winter 2020 | MW - 10am to 11:50 am WGYOUNG CS76

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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.

One source: https:// www.amazon.com/Corporate-Finance-10th-Stephen-Rossdp-0078034779/dp/0078034779/ ref=mt\_hardcover? \_encoding=UTF8&me=&qid=

#### Grading

Midterm - 30%

HW - 20%

Group Paper - 10%

Participation - %10

Final - 30%

85 and above A

80-85 A-

75-80 -B+ ...etc.

## week 1

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

Form a group if you would like to work on your homework with your classmates. You may change your group anytime throughout the quarter or work on your own. Post your online current event forum comment.

### 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

#### TO DO

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:

 $\diamondsuit$  2.5 Financial Cash Flow  $\diamondsuit$  3.1 Financial Statements Analysis  $\diamondsuit$  3.2 Ratio Analysis

### **Grading Details**

#### **Important Dates:**

• Midterm: Feb 3, 4-5:50 pm

• Final: March 20, 8-11am

• Group Paper: March 21, 11pm

Homework: Mostly Sundays,

11pm

#### Homework:

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

#### Midterm:

Midterm Review: 4th week discussion section

Midterm: Feb 3, in class, closed notes, you can bring a formula sheet (one face of one sheet), and a calculator. Please go to your assigned location (according to first letter of last name):

TBA

#### Final:

Final Review: TBA

Exam: Thursday, March 20, 8am, location TBA. Closed notes, you can bring a formula sheet (both faces of a regular sheet), and a calculator.

#### **Group Project:**

Saturday, March 21, 11pm submission online. See the class webpage for details.

#### **Participation:**

In-class online polls 5% - lowest 2 will be dropped

Online current event forum 5% - lowest one will be dropped

#### TODO

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

# week 4

Textbook Reading:

 $\diamondsuit$  The DuPont Identity  $\,\diamondsuit$  3.4 Financial Models  $\,\diamondsuit$  3.5 External Financing and Growth

#### TODO

Submit your homework. Post your online current event forum comment. Attend the midterm review session during discussion hours on Friday.

# week 5

Textbook Reading:

♦ Midterm on Feb 3rd Monday, see the left column for details
♦ 4.1 Valuation – One Period Case
♦ 4.2 Multiperiod Case
♦ 4.3 Compounding Periods
♦ 4.4 Simplifications

#### TODO

No homework due this week. Post your online current event forum comment. Form your team for the *Group Project* and enter your group member names on google sheets:

TBA

## week 6

Textbook Reading:

 $\diamondsuit$  5.1 Why Use Net Present Value  $\diamondsuit$  5.2 The Payback Period Method  $\diamondsuit$  5.3 Discounted Payback Period Method  $\diamondsuit$  5.6 Profitability Index  $\diamondsuit$  6.1 Incremental Cash Flows: The Key to Capital Budgeting  $\diamondsuit$  6.2 The Baldwin Company: An Example  $\diamondsuit$  7.1 Sensitivity, Scenario, and Break-Even Analysis  $\diamondsuit$  7.2 Monte Carlo Simulation

TODO

Submit your homework. Post your online current event forum comment. Make sure you have a team in place for the group project.

# week 7

#### Textbook Reading:

 $\diamond$  8.1 Bonds and Bond Valuation  $\diamond$  8.2 Government and Corporate Bonds  $\diamond$  8.5 Determinants of Bond Yields  $\diamond$  9.1 The Present Value of Common Stocks  $\diamond$  9.2 Estimates of Parameters in the Dividend Discount Model  $\diamond$  9.3 Growth Opportunities

#### TODO

Submit your homework. Post your online current event forum comment. Start to meet with your team to organize and distribute the work for the group project.

### week 8

#### Textbook Reading:

♦ 10.1 Returns ♦ 10.2 Holding Period Return ♦ 10.3 Return Statistics ♦ 10.4 Average Stock Returns and Risk Free Returns ♦ 10.5 Risk Statistics ♦ 10.6 More on Average Returns

#### TODO

No homework due this week. Post your online current event forum comment.

# week 9

#### Textbook Reading:

 $\diamondsuit$  11.1 Individual Securities  $\diamondsuit$  11.2 Expected Return, Variance, and Covariance  $\diamondsuit$  11.3 The Return and the Risk for Portfolios  $\diamondsuit$  11.4 The Efficient Set of Two Assets

#### TODO

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

### week 10

#### Textbook Reading:

♦ 11.5 The Efficient Set for Many Securities ♦ 11.6 Diversification

#### TODO

Submit your homework. Post your online current event forum comment. Attend the midterm review session.