Finance 551
Problems in Business Finance
Autumn 2018: Evening

Professor Jennifer L. Koski
Paccar 577, (206) 543-7975
jkoski@uw.edu
Office Hours: Mondays, 3:00-4:00 p.m., Tuesdays 4:30-5:30 p.m., and by appt.
Course materials available on Canvas

DESCRIPTION:

Finance deals with two types of questions: 1.) how to raise money, and 2) what to do with money. This class is a case course examining the corporate financing and investment decisions and related issues in financial strategy. The course is organized into four sections:

1. Short-Term Financial Management
2. Capital Structure
3. Capital Budgeting
4. Firm Valuation and Corporate Restructuring

In the first two sections of the course, we deal with two important problems relating to raising capital: managing the cash flowing through the business and financing company operations. In the last two sections, we turn our attention to evaluating investment opportunities, estimating discount rates, valuing firms, and analyzing bankruptcy, corporate restructuring, and mergers.

When you complete this course, you should be able to:

- Analyze a company’s financial statements and draw inferences about the firm’s strengths and weaknesses.
- Use a computer spreadsheet to create pro forma financial forecasts.
- Evaluate the appropriate balance between debt and equity capital.
- Identify an investment’s relevant costs and benefits to calculate free cash flows.
- Estimate a company’s weighted-average cost of capital and understand its role in investment decision making.
- Use a variety of techniques to evaluate capital expenditures and to value firms.
• Use valuation models to analyze strategic business alternatives.

PREPARATION:

Most of our class time will be devoted to discussion of assigned cases. To get the most out of class you must prepare conscientiously and participate actively in study group and class discussions. Failure to participate robs others of your perspective and increases the chances that the discussion will not be relevant to your interests and abilities. Please participate actively.

So what is conscientious case preparation? Read the case thoroughly; identify principal issues to be addressed in the case; attempt to analyze these issues using your common sense and any appropriate tools or techniques and note any action recommendations implied by your analysis. Alternatively, if you find yourself hitting a roadblock, try to articulate what the problem is. Oftentimes, identifying roadblocks is as valuable as a complete analysis. You should expect to spend between two and three hours preparing each case for class discussion.

For each case assigned you will note below that I have posed one or more preparation questions. The questions play several roles depending on the case. Usually the questions are simply guidelines to help you get started on your analysis. In some instances, I may give you additional information in the questions, or when the case is a mechanical one, I may ask you to perform specific calculations. You should not assume that answering all of the preparation questions necessarily constitutes a complete analysis. My general advice is always to read the preparation questions, but do not feel overly constrained by them.

Do not be surprised if after conscientious preparation you still feel there are some loose ends in the case about which you are uncertain. Your test of whether you are learning the material and progressing adequately should be how you feel after the class discussion, not before. You are doing fine if after a class discussion you believe you could adequately handle a similar situation in the future.

I will alternate between asking for volunteers and calling on individuals. If you are not prepared, please notify me before class, and we can both avoid the embarrassment. If you have spent appropriate time on the case but still feel unsure of your opinions, consider yourself prepared.

COURSE RESPONSIBILITIES:

Your grade will be based on the following:

- Participation 30%
- Group Assignments (3) 30%
- Individual Assignments (4) 40%
The assignments are as follows:

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Due Date</th>
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<tbody>
<tr>
<td>I. Ceres Gardening (Individual)</td>
<td>Tuesday, Oct. 9</td>
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<tr>
<td>II. National Gypsum Products (Group)</td>
<td>Tuesday, Oct. 16</td>
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<tr>
<td>III. California Pizza Kitchen (Group)</td>
<td>Tuesday, Oct. 23</td>
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<tr>
<td>IV. Intel WACC (Individual)</td>
<td>Tuesday, Nov. 6</td>
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<tr>
<td>V. Bay Baby Produce (Individual)</td>
<td>Tuesday, Nov. 13</td>
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<tr>
<td>VI. RJR Nabisco (Group)</td>
<td>Tuesday, Nov. 27</td>
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<tr>
<td>VII. Dow’s Bid for Rohm and Haas (Individual)</td>
<td>Tuesday, Dec. 4</td>
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More details about the assignments are provided in the syllabus. Please note that the specific deliverable for each case may differ from the study questions (provided as a basis for class discussion) also included in the syllabus. Assignments for the graded deliverables are outlined in boxes.

**Participation.** Your participation grade will be based on your presence in class, my assessment of the extent to which you helped make the class a productive learning experience, and my assessment of the depth of your command of the material.

There are two types of written assignments, Group and Individual. All assignments are due at the beginning of the session during which we will be discussing the case. Please bring **PAPER COPY** of your assignments to class to submit.

**Group Assignments.** During the quarter, you will be responsible for completing three group assignments. Each group should consist of from 3-5 students, and you should retain the same group for each group assignment. Please email me a list of names of students in your group. If you would like help arranging a group, there will be some time in the first class session.

**Individual Assignments.** You are also responsible for completing four individual written assignments. Although you are allowed to discuss the assignment with others as described below, you must each prepare and turn in your own work.

You are encouraged to discuss any of the written assignments with other students in the class or with me. You are also welcome to use the internet or any other written resources to research background on the case, although (except as otherwise noted) I don’t anticipate that you will need to do any outside research. Please **DO NOT** use sample solutions from the internet or any other source for any of the case assignments. In particular, this means that you should not discuss any of the cases or written assignments with a student in the other section if their section has already covered the case in class and your section has not.

**Final Exam.** There is no final exam for this class.
MATERIALS:

The following materials are required for this course:

- A required packet of cases is available to purchase for electronic download or hard copy from the HBS website at the following link: https://hbsp.harvard.edu/import/565101


In addition, there are some resources that may serve as useful background reading. These books are on reserve at the Foster Business Library.


TECHNOLOGY POLICY:

I encourage the use of laptops in class for class-related purposes such as note taking and accessing your financial models. Learning how to prepare financial models in Excel is an important objective of the class. However, I support the School’s policy against accessing email, surfing the Internet, etc. during class. Please constrain the use of your laptop during class to class-related purposes.

MBA HONOR CODE:

I employ the policies and procedures espoused by the Foster School of Business Honor Code to maintain academic integrity in the course.

ACCOMMODATIONS:

If you have already established accommodations with Disability Resources for Students (DRS), please communicate your approved accommodations to me at your earliest convenience. To request academic accommodations due to disability, please contact Disability Resources for Students (DRS), uwdrs@uw.edu or (206) 543-8924.
Course Schedule

SHORT-TERM FINANCIAL MANAGEMENT

Tuesday, Oct. 2

Session 1: Course Introduction

Session 2: Financial Forecasting and Cash Budgeting

Prepare: NanoLabs (Case Available on Canvas)
Read: Higgins, Chapter 2 (especially pp. 37-53) and Chapter 3 (especially pp. 80-86)

a.) How has NanoLabs performed so far? What are the company’s main strengths and weaknesses?
b.) Why has NanoLabs borrowed increasing amounts despite its consistent profitability?
c.) How much money will NanoLabs need? For how long, a few months or longer?
d.) As a banker, would you approve NanoLabs’ request for a larger loan? If so, what conditions would you put on the loan?

Tuesday, Oct. 9

Session 3: Managing Working Capital

Prepare: Ceres Gardening Company: Funding Growth in Organic Products
Read: Higgins, Chapter 4

a.) Evaluate Ceres’ historical operating performance and marketing efforts. What are the company’s strengths?
b.) How has the company grown? What is its basic marketing strategy, and how has this strategy evolved? What is Get Ceres?
c.) Prepare a financial forecast for 2007. What do you learn from this forecast?
d.) Should the GetCeres program be expanded? Why or why not?

Graded Assignment I (Individual Assignment)
Please submit a printout of a spreadsheet with your 2007 forecast for Ceres. Clearly note any assumptions, either on your spreadsheet or in an attached memo. How much external debt funding (if any) do they need?

Session 4: Seasonalities in Working Capital

In this session, we will discuss seasonalities in net working capital using materials to be distributed in class.
CAPITAL STRUCTURE

Tuesday, Oct. 16

Session 5: Long-Term Financing Alternatives

Prepare: National Gypsum Products Corporation 2018 (Case Available on Canvas)
Read: Higgins, Chapter 6, pp. 199-206

a.) What are the advantages and disadvantages of the three methods NGP might use to raise the needed external capital?

a.) Estimate NGP’s pro forma book value leverage ratio (D/D+E) in early 2018, and their fiscal year 2018 coverage ratio and EPS under the three alternatives.

b.) Which of the financing methods do you recommend? Why?

Graded Assignment II (Group Assignment)
Please submit written responses to the three study questions, above. In your response to question (b), clearly state any assumptions.

Tuesday, Oct. 23

Sessions 6 and 7: Optimal Capital Structure- Tradeoff Theory

Prepare: California Pizza Kitchen
Read: A Managerial Primer on the U.S. Bankruptcy Code
Higgins, pp. 206-218 and Chapter 6 Appendix (pp. 223-226)

a.) Evaluate CPK’s strategy and operating performance. How would you characterize CPK’s business risk? Why is CPK considering this transaction now?

b.) For each scenario in Exhibit 9, calculate the marginal impact of the interest tax shield on the value of the firm, assuming that the new debt is permanent. Clearly state any additional assumptions you need to make.

c.) Calculate the coverage, EPS, and market value leverage ratios for the three scenarios in Exhibit 9. How many shares can they repurchase in each scenario, and at what price?

d.) Is their line of credit a reasonable source of funding for this transaction? Why or why not?

e.) Using the data in Higgins Table 6.5 (p. 203), estimate CPK’s bond rating under the alternative recapitalization scenarios. How likely is CPK to run into financial distress? What are the potential costs of distress to CPK?

f.) What are the advantages and disadvantages to CPK of increasing its leverage?

g.) What should CPK do, and why? Be specific.

Graded Assignment III (Group Assignment)
Please submit written responses to questions (a) through (d) and (g), above.
CAPITAL BUDGETING

Tuesday, Oct. 30

Session 8: Lecture: Capital Budgeting

Read: Higgins Chapter 7 Appendix (pp. 269-276),

Session 9: Incremental Cash Flows – Replacement Problem

Prepare: Fonderia del Piedmonte S.p.A.

a.) What are the incremental cash flows associated with acquiring the machine?
b.) What is the appropriate discount rate? Why? What is the NPV of the project at this discount rate?
c.) What other factors might influence your recommendation? Are there any qualitative factors that you did not incorporate into the NPV? What would be the impact of an inflation rate of 2%?
d.) Should Martina Bellucci proceed with the project?

Tuesday, Nov. 6

Session 10: Cost of Capital

Prepare: Intel Build vs Buy: Weighted Average Cost of Capital (Case Available on Canvas)
Read: Higgins, pp. 294-306

a.) How did Andrews calculate her WACC? Do you agree with her assumptions?
b.) Calculate the cost of equity using at least three different techniques.
c.) What is your estimate of the WACC for Intel?
d.) Is the WACC for Intel appropriate to use as a discount rate for this part buy vs. build decision? Why or why not?

Graded Assignment IV (Individual Assignment)
Please submit a 1-2 page memo with your estimate of the cost of capital for Intel. In your memo, please explain your assumptions and provide a specific value for the WACC.

Session 11: Incremental Free Cash Flows

Prepare: Intel Build vs Buy: Incremental Cash Flows (Case Available on Canvas)
Read: Higgins, pp. 258-269

a.) How would you define the “project”?
b.) What are the incremental cash flows for the project?
c.) What is the NPV of the project? Should Intel undertake this project?
FIRM VALUATION AND CORPORATE RESTRUCTURING

Tuesday, Nov. 13

Session 12: NPV Valuation

Prepare: Bay Baby Produce (case available on Canvas)

a.) What is Bay Baby Produce worth today?

Graded Assignment V (Individual Assignment)
Please submit a printout of a spreadsheet with your valuation of Bay Baby. Use the NPV method to answer this question. Clearly note any assumptions, either on your spreadsheet or in an attached memo.

Session 13: Firm Valuation Lecture (NPV and APV)

Read: Higgins, pp. 337-351 and Chapter 8 Appendix (pp. 321-326)

Tuesday, Nov. 20

Session 14: APV Valuation

Prepare: Infinity Carpets, Inc.

a.) Why did Infinity Carpets get into financial difficulty? Was it bad luck, bad strategy, or bad execution?
b.) How pressing is the situation? Can Infinity get by without restructuring?
c.) What do you think Infinity would fetch in liquidation? How would these proceeds be divided among the claimants?
d.) What is a reasonable, conservative estimate of Infinity’s firm value?
e.) As Benson, recommend an action plan to Infinity’s controlling stockholder, SLP.

Session 15: Lecture, Valuation using Comparable Trades and Merger Valuation

Read: Higgins, pp. 351-355

Tuesday, Nov. 27

Sessions 16 and 17: Leveraged Buyouts

Prepare: RJR Nabisco
Read: Higgins, pp. 356-365

a.) What is the value of RJR Nabisco under
i. The pre-bid operating strategy?
ii. The Management Group’s operating strategy?
iii. KKR’s operating strategy?

b.) What accounts for any difference in the value among the three operating plans?
c.) Evaluate the Special Committee’s use of an auction of RJR Nabisco.
d.) Which bid should the Special Committee select, if any? What other actions should the Special Committee take?

Graded Assignment VI (Group Assignment)
Please submit your responses to questions (a.i) and (b) above. For question (a), use the APV method to value RJR Nabisco. You only need to submit your valuation under the pre-bid scenario; please submit your spreadsheet for this valuation, along with a brief discussion of your assumptions. Express your valuation as a stock price per share. Your response to question (b) should be one or two paragraphs and should be based on the case discussion and the cash flow projections provided in the case. Please see Canvas for some additional assumptions to help you with your analysis.

Tuesday, Dec. 4

Session 18: Mergers and Acquisitions

Prepare: Dow’s Bid for Rohm and Haas

a.) Why does Dow want to buy Rohm and Haas?
b.) How much is Rohm worth per share on a standalone basis? How much is Rohm worth to Dow? Was the $78 per share bid reasonable?
c.) What are the major deal risks inherent in this merger transaction? How and to whom does the merger agreement allocate these key risks? (Hint: Analyze some of the provisions in case Exhibit 4. What risk does each provision address and which party ultimately bears the risk?)
d.) As of early February 2009, what should Liveris do, and what should Gupta do?

Graded Assignment VII (Individual Assignment)
Please submit written responses to all four study questions, above. In responding to question (b), you should estimate the value of Rohm both when Dow originally announced the deal (July 2008) and based on the revised expectations as of early February 2009 (so you will have four valuations total: standalone and as an acquisition target, in July 2008 and February 2009). Please include the printout of a spreadsheet with these valuations in your response. Be sure to discuss clearly your main assumptions. On page 4, the case discusses the $800 million in annual cost synergies, which can be achieved with a one-time cost of $1.3 billion. Assume that both the $800 million and the $1.3 billion figures are pre-tax.

Session 19: Summary and Course Overview