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Course Description

BUAD 306 is a fundamentals course in business finance. Finance is a way of thinking about economic problems that involve uncertainty over time. This course is designed to provide an introductory framework for understanding how financiers think, how they break down components of a financial problem, and how they make decisions as investors and corporations in the financial market. By the end of the semester, you should be familiar with financial vocabulary, understand aspects of financial theory, develop skills in financial computation, and appreciate the underlying financial mindset as well as incentives involved when solving problems of finance. You will learn how to determine risk, how to make financial decisions, and how to value an investment as a potential financial opportunity.

Learning Objectives

Through lecture, case analysis, worked samples, and by learning to apply appropriate mathematical and financial formulas and functions, you will be able to:

1. Understand basic types, goals, and implications of financial management and the role of the financial decision-maker.
2. Interpret financial statements and how they influence long-term planning and growth.
3. Understand the meaning of time value of money and how to evaluate the tradeoff between dollars today and dollars sometime in the future.
4. Understand how firms decide to commit capital and its impact on cash flow (discounted cash flow).
5. Understand interest rates and bonds and realize how interest rates impact bonds.
6. Understand the different criteria used to evaluate proposed investments (e.g., net present value (NPV), profitability index, payback period).
7. Determine the cost of capital, and understand and apply the concepts of the weighted cost of capital (WACC).
8. Recognize and understand the elements of optimal capital structure, the effects of financial leverage, bankruptcy, and the role of taxes.
9. Understand the dynamics of behavioral finance and its influence on individual and corporate financial decision-making (e.g., the impact of heuristics).
10. Understand derivatives, or options, in the context of corporate finance.

Required Materials

1) Fundamentals of Corporate Finance, Eleventh Edition by Ross, Westerfield and Jordan. ISBN 9781259698712 E-book from the publisher for \$125 available here:

http://connect.mheducation.com/class/j-plotts-library-course_2



2) Harvard Business Publishing: Hansson Private Label, Inc.: Evaluating an Investment in Expansion. The case can be purchased here: <http://cb.hbsp.harvard.edu/cbmp/access/58015921>

3) Calculator with financial functions. The TA will have calculator tutorials using the HP 10bII+. Other calculators are similar, such as the Texas Instruments BA II, the Hewlett Packard 17bII+, Hewlett Packard 12C, and Hewlett Packard 10bII, and the Texas Instruments BA II Plus Professional. Many graphical calculators, such as the TI-83, have built-in financial functions. However, it is the student's responsibility to learn the functions of their particular calculators. You should bring your calculator to all classes and exams. You will be extremely disadvantaged if you do not have your calculator during exams. During exams you will not be allowed to use cellphone calculators, computers, or any other device that can communicate to other devices, so learning how to use the financial calculator is essential for success in the class.

Prerequisites and/or Recommended Preparation:

ACCT 410 or BUAD 280 or BUAD 285a or BUAD 286b or BUAD 305 and ECON 351.

Course Notes:

Copies of lecture slides and other class information are available through your Blackboard account.

Grading Policies:

<u>Assignments</u>	<u>% of Grade</u>
TESTS	
MIDTERM (3/2)	30%
FINAL EXAM (5/4)	30%
HOMEWORK (due 1/26, 2/16, 3/30, 4/20)	10%
QUIZZES (2/9, 4/6)	10%
CLASS PARTICIPATION	5%
GROUP CASE ANALYSIS (2/23)	15%
TOTAL	100.0%

Final grades represent how you perform in the class relative to other students. Your grade will not be based on a mandated target, but on your performance. Historically, the average grade for this class is about a B. Three items are considered when assigning final grades:

1. Your average weighted score as a percentage of the available points for all assignments (the points you receive divided by the number of points possible).
2. The overall average percentage score within the class.
3. Your ranking among all students in the class.

Grading Detail:

Exams All exams are closed book, closed notes. Financial calculators are allowed and recommended, but E-devices (mobile phones, PDAs, I-Phones, other texting devices, laptops, iPads, etc.) are not allowed. All exams will use the Scantron multiple choice format. Students must provide their own pencils. Students must take the exam in the lecture section in which they are registered.

Exam Absence Policy Students are required to be present for all exams. If you are not able to take the exams on the dates and times specified in the detailed schedule, you should not take this class.

Assignments Assignments must be turned in prior to the start of class on the date listed in the schedule below. Assignments must be submitted electronically via Blackboard. Any assignment

turned in late, even by a few minutes, will receive no credit. Assignments will be given a grade of “credit” or “no credit.” Assignment will be assigned a “credit” if and only if the assignment is reasonably complete and correct. Working in groups is encouraged, but each group member must turn in his/her own write-up. Identical or near identical answers will result in no-credit for all parties.

Class Participation

Please arrive to class on time and prepared. Be prepared for cold calling, bring your name card to class. Please come to class rested (if you sleep in class you will be asked to leave).

High Score:

- Regular attendance and active and consistent participation in the class sessions with insightful questions and comments.
- Consistently very high levels of preparation for class sessions and activities.
- Superior and sophisticated understanding, insights, and syntheses of the course material as reflected in group assignments and case analysis and class discussions.
- Proactive and very high levels of involvement in the group case assignment.
- Very high levels of professionalism manifested in interactions with speakers and classmates.

Add/Drop Process

This class will remain open enrollment (R-clearance) through the add deadline. If there is an open seat, students can add the class using Web Registration. If the class is full, students will need to continue checking the *Schedule of Classes* (classes.usc.edu) to see if a space becomes available. Students who do not attend class the first two weeks may be dropped from the course if they do not notify the instructor prior to their absence. It is the responsibility of a late add student to get caught up on any missed classes or work. There are no special accommodations for late adds.

Technology Policy

Laptop and Internet usage is not permitted during academic or professional sessions unless otherwise stated by the respective professor and/or staff. Use of other personal communication devices, such as cell phones, is considered unprofessional and is not permitted during academic or professional sessions. ANY e-devices (cell phones, iPads, other texting devices, laptops, I-pods) must be completely turned off during class time. Upon request, you must comply and put your device on the table in off mode and FACE DOWN. You might also be asked to deposit your devices in a designated area in the classroom. Videotaping faculty lectures is not permitted due to copyright infringement regulations. Audiotaping may be permitted if approved by the professor. Use of any recorded or distributed material is reserved exclusively for the USC students registered in this class.

Teaching Assistants and Tutoring

The teaching assistant contact information and office hours can be found on Blackboard. The TAs will hold regular office hours and can answer questions on the material during office hours or via email.

Tutoring is offered through the Marshall Office of Undergraduate Advising as a supplement to classroom instruction. Tutors are available to assist students in understanding difficult concepts, but tutoring sessions are only effective if students regularly attend class and actively engage in the process or thinking critically about the course content. For more information on tutoring, visit the Marshall Office of Undergraduate Advising in JFF 201 (213) 740-0690 or <http://students.marshall.usc.edu/undergrad/marshall-peer-tutoring-program/tutoring-schedule/>

Academic Integrity and Conduct

USC seeks to maintain an optimal learning environment. General principles of academic honesty include the concept of respect for the intellectual property of others, the expectation that individual work will be submitted unless otherwise allowed by an instructor, and the obligations both to protect one's own academic work from misuse by others as well as to avoid using another's work as one's own (plagiarism). Plagiarism – presenting someone else's ideas as your own, either verbatim or recast in your own words – is a serious academic offense with serious consequences. All students are expected to understand and abide by the principles discussed in the *SCampus*, the Student Guidebook (www.usc.edu/scampus or <http://scampus.usc.edu>). A discussion of plagiarism appears in the University Student Conduct Code (section 11.00 and Appendix A).

Students will be referred to the Office of Student Judicial Affairs and Community Standards for further review, should there be any suspicion of academic dishonesty. The Review process can be found at: <http://www.usc.edu/student-affairs/SJACS/>. Failure to adhere to the academic conduct standards set forth by these guidelines and our programs will not be tolerated by the USC Marshall community and can lead to dismissal.

Discrimination, sexual assault, and harassment are not tolerated by the university. You are encouraged to report any incidents to the *Office of Equity and Diversity* <http://equity.usc.edu/> or to the *Department of Public Safety* <http://dps.usc.edu/contact/report/>. This is important for the safety of the whole USC community. Another member of the university community – such as a friend, classmate, advisor, or faculty member – can help initiate the report or can initiate the report on behalf of another person. *Relationship and Sexual Violence Prevention and Services* (RSVP) <https://engemannshc.usc.edu/rsvp/> provides 24/7 confidential support, and the sexual assault resource center webpage <https://sarc.usc.edu/reporting-options/> describes reporting options and other resources.

Support Systems

Students whose primary language is not English should check with the *American Language Institute* <http://dornsife.usc.edu/ali>, which sponsors courses and workshops specifically for international graduate students. *The Office of Disability Services and Programs* (www.usc.edu/disability) provides certification for students with disabilities and helps arrange the relevant accommodations. If an officially declared emergency makes travel to campus infeasible, *USC Emergency Information* (<http://emergency.usc.edu/>) will provide safety and other updates, including ways in which instruction will be continued by means of blackboard, teleconferencing, and other technology.

Students with Disabilities

The Office of Disability Services and Programs (www.usc.edu/disability) provides certification for students with disabilities and helps arrange the relevant accommodations. Any student requesting academic accommodations based on a disability is required to register with Disability Services and Programs (DSP) each semester. A letter of verification for approved accommodations can be obtained from DSP. Please be sure the letter is delivered to me (or to your TA) as early in the semester as possible. DSP is located in GFS (Grace Ford Salvatori Hall) 120 and is open 8:30 a.m.–5:00 p.m., Monday through Friday. DSP contact info: (213) 740-0776 e-mail: ability@usc.edu.

Emergency Preparedness/Course Continuity

In case of a declared emergency if travel to campus is not feasible, the *USC Emergency Information* web site (<http://emergency.usc.edu/>) will provide safety and other information, including electronic means by which instructors will conduct class using a combination of Blackboard, teleconferencing, and other technologies.

COURSE CALENDAR/READINGS/CLASS SESSIONS

	Topics/Daily Activities	Chapters	Deliverables
1/10	Introduction to Corporate Finance <i>Goal of Financial Management</i>	1	
1/12	Financial Statements <i>Balance Sheet, Income Statement, Cash Flow</i>	2-3	
1/17	Financial Statements <i>Cash flow, ratio analysis, telling a story with #s</i>	2-3	
1/19	Long Term Financial Planning and Growth <i>External financing, internal and sustainable growth</i>	4	
1/24	Time Value of Money <i>Present value, future value</i>	5	
1/26	Discounted Cash Flow Valuation <i>Net present value, annuities, perpetuities</i>	6	Homework #1
1/31	Discounted Cash Flow Valuation	6	
2/2	Interest Rates and Bond Valuation <i>Valuation of debt, yield curve, bond ratings, covenants</i>	7	
2/7	Bond Valuation continued, Stock Valuation	7-8	
2/9	Stock Valuation <i>Dividend growth model</i>	8	Quiz #1
2/14	NPV and Other Investment Criteria <i>NPV, IRR, payback, capital budgeting criteria</i>	9	
2/16	Making Capital Investment Decisions	10	Homework #2
2/21	Special Topic		
2/23	Hansson Private Label Case Discussion		Group Case
2/28	Review		
3/2	Midterm Exam		
3/7	Lessons from Capital Market History <i>Returns through time for different asset classes</i>	12	
3/9	No Class Scheduled*		
3/14-3/16	Spring Break – No Class Scheduled		
3/21	Return, Risk and Security Market Line <i>E(r) for assets and portfolios, diversification, efficient frontier</i>	13	
3/23	Capital Asset Pricing Model <i>Quantifying risk, systematic risk, beta and the market risk premium</i>	13	
3/28	Cost of Capital	14	
3/30	Weighted Average Cost of Capital (WACC)	14	Homework #3
4/4	No Class Scheduled*		
4/6	Raising Capital	15	Quiz #2
4/11	Financial Leverage and Capital Structure Policy <i>Effect of financial leverage</i>	16	
4/13	Mergers and Acquisitions	26	
4/18	Mergers and Acquisitions	26	
4/20	Options and Corporate Finance	24-25	Homework #4
4/25	Review		
4/27	Course Wrap-Up		
5/4	Final Exam Section 14780 2-4pm		
5/4	Final Exam Section 14781 4:30-6:30pm		

*M-W Classes observe both MLK Birthday and President's Day.

Hansson Private Label Group Case Due 2/23/17

Harvard Business Publishing: Hansson Private Label, Inc.: Evaluating an Investment in Expansion
The case can be purchased here: <http://cb.hbsp.harvard.edu/cbmp/access/58015921>

Submission Process:

Your group case analysis will be turned in as a written deliverable. Please work on your cases in groups of 3-6 people. Seeking assistance or “hints” from the instructor, the T.A. or past students is not authorized. A written case analysis should consist of a written (executive summary) using a standard font and font size (such as Times New Roman size 11-12), addressing the case questions with supporting computations and tables in a separate appendix. Put your group members’ names on Page 1 of the document. Submit the entire document including any exhibits with excel calculations in a PDF document. Submit your files on Blackboard by the start time of class of the due date. Please format your deliverable as a PDF with excel exhibits in the appendix.

Prior to working on the group case it is advisable to review the textbook and also the Capital Budgeting supplement and slides provided to you including the excel spreadsheet with the Project Greenlight example. The group case assignment grade is based on the quality of your analysis, how well you support your assumptions and apply corporate finance and valuation techniques, and the judgment you exercise and on the professionalism of your presentations. The quality of work product should be reflective of what you would be comfortable presenting to an employer. Case grades will be determined relative to the analyses of other groups in the class. Groups may be randomly selected to verbally present their findings on the case analysis during the class session.

Hansson Case Questions

- Evaluate HPL’s historical financial performance. How has HPL performed? Consider historical analysis of financial performance ratios and peer comparison.
- Utilizing the data provided, determine whether the expansion project is attractive in strategic and economic terms. Calculate the total project cash flows, NPV, IRR, and payback period given the supplied project forecasts. Perform a basic sensitivity analysis on key variables and drivers of the NPV analysis.
- Will the expansion position HPL for any form of sustainable competitive advantage? Will it allow HPL to improve long-term profitability? If HPL wants to decline the proposal, what practical alternatives does he have?
- What are the risks of the investment? What might be done to mitigate these risks?

The following is taken from page 3 of the case.

Investment Proposal

The investment proposal in Hansson’s hands included the following elements:

Cost Components	Amount	Est. Life	Depr.
Facility Expansion	\$10,000	20yrs.	\$ 500
Manufacturing Equipment	20,000	10yrs.	2,000
Packaging Equipment	15,000	10yrs.	1,500
Working Capital ⁽¹⁾	<u>12,817</u>		<u>0</u>
Total Investment	\$57,817		\$4,000

⁽¹⁾ The increase in working capital is not expected to occur up front at the time of the initial investment. It is assumed to take place throughout the year and should be considered as part of the 2009 cash flows.

Note: Working capital is defined as accounts receivable plus inventory less accounts payable and accrued expenses. At the end of the project, working capital will be returned in an amount equal to accounts receivable less accounts payable.

Calculation Hints:

Your group must set up a financial analysis of the project. Refer to the discussion of the Investment Proposal and exhibit 5 and also to your textbook chapters on Capital Budgeting. Refer to the Hansson spreadsheets provided.

The Year 0 Initial Investment will be \$45,000 (Facility Expansion, Manufacturing Equipment, and Packaging Equipment. Assumptions have been provided for depreciation and maintenance expenses.

For purposes of calculating the 10-year project free cash flow (2009-2018) I have provided my 2009 (first year) calculation. *There is a discrepancy in the case writers' Manufacturing Overhead in 2009. In the case is \$3600, but the HBS excel file shows \$3920. If we use \$3920 it gets us to the case writers' NWC number, \$12,817.*

<u>Operating Results:</u>	2009
Revenue	84,960
Less: Raw Material Costs	45,120
Less: Labor Expense	18,640
Less: Manufacturing Overhead	3,920
Less: Maintenance Expense	2,250
Less: Selling, General & Administrative Expense	6,594
EBITDA	8,436
Less: Depreciation	4,000
EBIT	4,436
Less: Taxes	1,774
NOPAT	2,662
<u>Un-Levered Free Cash Flow:</u>	
NOPAT	2,662
Plus: Depreciation	4,000
Less: Change in Working Capital	12,817
Un-Levered Free Cash Flow	(6,156)

Note: Your textbook defines Inventory Turnover = Cost of Goods Sold / Inventory Days' Sales in Inventory = 365 / Inventory Turnover. In the Hansson case refer to the definition of DSO, DPO and DSI that is being used in the case:

$$DSO = \frac{\text{Ending Receivables}}{\left(\frac{\text{Sales}}{360 \text{ Days}}\right)} \text{ and } DSI = \frac{\text{Ending Inventory}}{\left(\frac{\text{Sales}}{360 \text{ Days}}\right)} \quad DPO = \frac{\text{Ending Accounts Payable}}{\left(\frac{\text{Cash Operating Exp.}}{360 \text{ Days}}\right)}$$

Projecting the working capital accounts is simply a matter of algebraic manipulation. For example, if the assumption for DSO is 47.6x, then to project the amount of accounts receivable needed for the first year in the project (2009) it would be:

$$DSO = \text{Ending Receivables} / (\text{Sales} / 360 \text{ days})$$

$$A/R = (DSO / 360) \times \text{Sales}$$

$$11,223 = (47.6 / 360) \times 84,960$$

DSI= Ending Inventory/(Sales/360 days)

Inventory= (DSI/360) x Sales

8,865=(37.562/360) x 84,960

DPO=(Ending Accounts Payable/Cash Operating Expenses/360)

Accounts Payable= (DPO/360) x Cash Operating Expenses*

7,270=(34.2/360) x 76,524

*Cash Operating Expenses includes Raw Material Costs, Labor Expense, Manufacturing Overhead, Maintenance Expense, Selling, General & Administrative Expense.

The increase in working capital is not expected to occur up front at the time of the initial investment. It is assumed to take place throughout the first year and should be considered as part of the 2009 cash flows. You will notice that going from working capital of 0 in year 0 to 12.8 million in year 1, the first year of Un-Levered Free Cash Flow for the project will subtract a “use” of cash of 12.8 million. As a reminder, Net Working Capital is calculated by taking current assets (Accounts Receivable and Inventory) less current liabilities (Accounts Payable). The Change in Working Capital is from one period to the next and shows the cash flow impact.

In each subsequent year 2010-2018 the amount subtracted will be much less since working capital will have already been established in the first year and you will just evaluate the change (increase) in net working capital. As a reminder, according to the footnote in the case on page 3, at least some portion of net working capital will be returned to investors at the end of the project in 2018. The return of working capital is equal to the balance of accounts receivable less accounts payable (at the end of 2018). According to the case assumptions, inventory is assumed to be worthless. Because the property, plant, and equipment is specialized and almost completely depreciated, it is assumed to be worthless. You will need to discount the return of the net working capital back to present along with the project cash flows.

Since we have not yet discussed the Weighted Average Cost of Capital (WACC) or the appropriate assumption for a discount rate, please assume 9.38% for your discount rate “r” for the NPV analysis (this was the cost of capital calculated in exhibit 7 for a 20% Debt/Value assumption). Exhibit 7 includes some terminology and calculations that will be revisited in the discussion about capital structure, debt, etc.

The purpose of the case analysis is for groups to perform analysis of a real world capital budgeting case. Many of the examples in the textbook are simplified and may not be as relevant to you in a practical setting. When we have our class discussion I hope we can encourage debate as to what Hansson should do and what makes strategic sense – whether he should accept or decline the project – and your reasoning for this decision. This should include a discussion of the risks of accepting the project and other potential options and/or opportunities.