

**Capital Budgeting**  
**Finance 4480**  
Department of Finance  
Albers School of Business and Economics  
Seattle University

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Course Description:

This course is focused on the critical examination of the best practices associated with evaluating corporate investment opportunities (Capital Budgeting). We will cover the following topics: key performance indicators (NPV, IRR, Payback, ROI, etc.), cash flow estimation, appropriate methods for adjusting for risk, application of Monte Carlo analysis to assess risk, the effect of capital constraints, the effect of debt financing, acquisition analysis, and investing overseas. We will spend the last week of the course discussing the exciting topic of real option analysis. Besides learning the tools and various models this course is designed to improve your financial analysis skills. We will focus on how to create and present professional quality financial analysis in a written report, via Excel spreadsheets, and through a Zoom presentation.

Course Objectives:

Provide you with an understanding of how capital budgeting is currently practiced.

Provide you with the information and skills to effectively research the internet for various financial data necessary for the application of the various tools to be applied.

To improve on your abilities to present your analysis clearly orally, in writing, and in exhibits (spreadsheets).

**To create a comfort level with the various models (tools) such that you can adopt the financial models (tools) presented in class to suit a unique real-world application.**

**To help you advance your long-term professional career.**

Course Requirements:

You are expected to actively participate in the learning process, you are expected to complete five case analyses, and you are expected to take an on-line midterm and on-line comprehensive final exam.

*Course Participation:*

Course participation refers to your contribution to the learning process, the more we participate, the more we will learn. Therefore, you are expected to participate in the learning process by listening to the recording, reviewing of the PowerPoint slides, attending and participating in the Zoom meetings, and by asking questions. The level and quality of your participation would make up 10% of your grade.

### *Assigned Cases:*

There will be five assigned cases during the quarter. The first four cases require a short write-up (maximum of 2 typed pages, double spaced, font size 12, one-inch margins all around) accompanied by your quantitative analysis. The fifth case will require a PowerPoint presentation of your analysis via a Zoom meeting. Group work on the cases is highly recommended but not required. Maximum group size is three students. For the first four cases, you (or your group) will be submitting your analysis on-line via Canvas (a word document for the write up and an excel file with your analysis, please no PDF files as I will be grading on-line). Note: You will be required to use @Risk software on two of the last three cases and the software is easily accessible two different ways. A one-year subscription to the @Risk software can be acquired at a student discount for \$50 ([www.palisade.com/academic/students.asp](http://www.palisade.com/academic/students.asp)) or via VMware (desktop.seattleu.edu). In total the five case assignments will make up 40% of your grade and for the first four cases, the grading criterion is presented on pages 6 & 7 of this syllabus. A separate grading rubric will be provided for the presentations required for case 5.

### *Midterm Exam:*

There will be an on-line midterm exam on Thursday, April 29<sup>th</sup> that will focus on the conceptual issues discussed during the first half of the course. The midterm exam is **not a collaborative effort**, you should not communicate with any one during the exam. The midterm will make up 20% of your grade.

### *Final Exam:*

There will be an on-line comprehensive exam on Thursday, June 10<sup>th</sup> that will focus on the conceptual issues discussed during the course. The final exam is **not a collaborative effort**, you should not communicate with any one during the exam. The final exam will make up 30% of your grade.

### Grading:

10% is based on the class participation,  
40% is based on the cases (cases 1-4: 20 points each, case 5: 40 points)  
20% is based on the midterm exam, and  
30% is based on the final exam.

### Required Readings:

Various articles that are listed in the Course Schedule (pages 4 & 5) and are available from the course website found on Canvas under the Module tab.

### Optional Readings:

Titman and Martin, *Valuation: The Art & Science of Corporate Investment Decisions*, 3<sup>rd</sup> Edition, 2016, Pearson Education, Inc. (Earlier editions are significantly cheaper and not significantly different).

## Academic Resources

- Library and Learning Commons (<http://www.seattleu.edu/learningcommons/>)  
(This includes: Learning Assistance Programs, Research [Library] Services, Writing Center, Math Lab)
- Academic Integrity Tutorial (found on Canvas and SU Online)

## Academic Policies on Registrar website

(<https://www.seattleu.edu/redhawk-axis/academic-policies/>)

- Academic Integrity Policy
- Academic Grading Grievance Policy
- Professional Conduct Policy (only for those professional programs to which it applies)

## Notice for students concerning Disabilities:

If you have, or think you may have, a disability (including an ‘invisible disability’ such as a learning disability, a chronic health problem, or a mental health condition) that interferes with your performance as a student in this class, you are encouraged to arrange support services and/or accommodations through Disabilities Services staff located in Loyola 100, (206) 296-5740. Disability-based adjustments to course expectations can be arranged only through this process.

## Notice Regarding Religious Accommodations

It is the policy of Seattle University to reasonably accommodate students who, due to the observance of religious holidays, expect to be absent or endure a significant hardship during certain days of their academic course or program. Please see, *Policy on Religious Accommodations for Students* (<https://www.seattleu.edu/media/policies/Policy-on-Religious-Accommodations-for-Students---FINAL.PDF>).”

## Office of Institutional Equity:

Title IX of the Education Amendments of 1972 (Title IX) prohibits discrimination based on sex in educational programs or activities that receive Federal financial assistance. This prohibition includes sexual misconduct, which encompasses sexual harassment and sexual violence. Seattle U remains committed to providing a safe and equitable learning, living, and working environment. Seattle U offers emergency, medical, and other support resources, as well as assistance with safety and support measures, to community members who have experienced or been impacted by sexual misconduct.

Seattle U requires all faculty and staff to notify the University’s Title IX Coordinator if they become aware of any incident of sexual misconduct experienced by a student.

For more information, please visit <https://www.seattleu.edu/equity/>. If you have any questions or concerns, you may also directly contact the Title IX Coordinator in the Office of Institutional Equity (email: [oi@seattleu.edu](mailto:oi@seattleu.edu); phone: 206.296.2824) University Resources and Policies

## COURSE SCHEDULE & ASSIGNMENTS

<u>Topic</u>	<u>Class Dates</u>	<u>Readings</u>	<u>Due Date</u>
<b>I. Basics of Capital Budgeting</b>	3/30, & 4/1	“How Do CFOs Make Capital Budgeting and Capital Structure Decisions?” (pages 8-13) “Internal Rate of Return: A Cautionary Tale” Titman & Martin – Chapters 1 and 2	<b>Case 1: Due Friday 4/9</b>
<b>II. Estimating the Appropriate Required Return</b>	4/6 & 4/8	“Best Practices in Estimating the Cost of Capital: Update” “Single vs. Multiple Discount Rates” “How High a Hurdle Rate?” Titman & Martin – Chapters 4 and 5	<b>Case 2: Due Friday 4/16</b>
<b>III. Risk Assessment Tools</b>	4/13 & 4/15	“What’s Wrong with Modern Capital Budgeting?” “Risk Management and Monte Carlo Simulation” Titman & Martin – Chapter 3	<b>Case 3: Due Sunday 4/25</b>
<b>Open Date: Midterm Review</b>	4/27		
<b>Midterm Exam (from 4:00 to 5:30 pm)</b>	4/29		
<b>V. Merger &amp; Acquisition Analysis</b>	5/4, 5/6 & 5/11	“Company Valuation in Mergers and Acquisitions: How is Discounted Cash Flow Applied by Leading Practitioners?” “Creating Wealth with Mergers and Acquisitions” Titman & Martin – pages 350-352	<b>Case 4: Due Sunday 5/16</b>
<b>VI. Ranking Alternative Investment Opportunities</b>	5/13	“Capital-Rationing Decisions of Fortune 500 Firms: a Survey”	
<b>VII. Evaluating International Investments</b>	5/18 & 5/20	“Incorporating Country Risk in the Valuation of Offshore Projects” “Accounting for Sovereign Risk When Investing in Emerging Markets” “Emerging Markets Aren’t as Risky as You Think”	<b>Case 5: Presentations June 2, 3 &amp; 4<sup>th</sup> (3:45 – 5:45 pm)</b>
<b>VIII. Introduction to Real Option Analysis</b>	5/25 & 5/27	“Exploiting Uncertainty” “Real Options: State of the Practice” Titman & Martin – sections 11.1 to 11.4	
<b>Prepare for Presentations Case 5: Presentations</b>	6/1 6/2, 6/3, & 6/4	Open Class: Prepare for Presentations	<b>June 2, 3 &amp; 4<sup>th</sup> (3:45 – 5:45 pm)</b>
<b>Final Exam:</b>	6/10		<b>Thursday, 6/10 from 4:00 to 6:00 pm PST</b>

## Grading Criteria for Assigned Cases

Each case will be graded based on the written report (1/2) and the presentation of the quantitative analysis (1/2).

### Written Report

90% or more	Easy to read and is targeted to the appropriate audience Purpose of the analysis is clearly stated in the introduction Almost all sentences are well structured All paragraphs are well structured Methods used and key assumptions are stated clearly All relevant results are reported clearly with a discussion of the relevant implication for each result reported A concluding paragraph that clearly summarizes the implication(s) of the analysis and provides a recommendation supported by the analysis
80% to 89%	Mostly easy to read with some rough spots and an attempt was made to target the report to the appropriate audience Some reference to the purpose of write-up is stated in the beginning Most sentences are well structured Most paragraphs are well structured Some reference to methods used and key assumptions applied Most relevant results are reported in a reasonable fashion with a discussion of the relevant implication for most of the results reported A concluding paragraph that mentions key implication(s) of the analysis and mentions a recommendation related to the analysis
70% to 79%	Hard to read No reference to the purpose of write-up is stated in the beginning Many sentences are poorly structured Many paragraphs are poorly structured Brief to no mention of methods used and key assumptions applied Most of relevant results are not reported or are not reported clearly No concluding paragraph exists or one that does not mention the implication(s) of the analysis nor provides a clear recommendation

Presentation of Quantitative Analysis

90% or more	Exhibits have informative titles that suggest the contents of the exhibit An assumption box was used containing all of the necessary assumptions It is easy for the reader to understand the structure of the exhibits All equations and sources are provided All relevant results are clearly presented The relevant financial tools or techniques are applied correctly and completely.
80% to 89%	Exhibits have titles An assumption box was used containing some of the necessary assumptions It is not difficult for the reader to understand the structure of the exhibits Most equations and sources are provided Most relevant results are presented in a reasonable fashion The relevant financial tools or techniques are mostly applied correctly
70% to 79%	Exhibits do not have titles No assumption box used It is difficult for the reader to understand the structure of the exhibits Few or no equations and sources are provided Some relevant results are not reported or results are reported in an unclear manner There was a good attempt to apply the relevant tools or techniques correctly