# FUNDAMENTALS OF FINANCE

## **BA 140**

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### STUDENT HANDBOOK

Fundamentals of Finance Lincoln University January 2010

#### **Course Description**

Application of financial theories and techniques to decision making, with emphasis on the important tools of financial analysis, on capital and investment decisions, and on cost control.

#### **<u>Required Texts</u>**

Scott, David F., Martin, John D., Petty, J. William, and Keown, Arthur J., *Basic Financial Management*. (10<sup>th</sup> ed.) Upper Saddle River, N. J.: Prentice-Hall, 2004.

#### **Overview**

The course covers the finance cycle in an organization from its inception to operations and possible mergers and reorganizations. Finance is concerned with determining value – what is something worth, and how one makes the best decisions for increasing value. So this course builds from financial accounting, which uses historical data. Problems of financing an organization, maintaining liquidity and profitability, and making investment and capital budget decisions are discussed in-depth.

The course stresses the importance of data analysis and its use in problem solving and decision-making. Methods for comparing costs and benefits are discussed in selecting among options available. Cost saving techniques in the management of cash, receivables, and inventories are reviewed. In a broad sense, the course enables the student to relate to the functions of the financial officer in playing a key role in carrying out the objectives of an organization.

#### **Course Objectives**

- Introduce the group to the role of financial management in helping achieve company goals; understand the role of a firm's performance in creating shareholder value.
- Familiarize students with the major literature in the field; have students become literate in terminology used in modern day finance

- Enable students to read, understand, and analyze financial statements; review the importance of the cash flow statement and how it is used in budgeting
- Study the various sources of financing and relative advantages and disadvantages of each; provide an understanding of financial securities and markets that affect capital structure
- Emphasize the importance of time value concepts in financial decision-making and clarify techniques for applying the concepts
- Assimilate time value concepts to calculate an array of financial problems (i.e. amortization schedules, present value calculations, annuity and perpetuity comparisons); study how interest rates are used in discounting future values; provide an understanding of the nature of risk and its effect on rates of return
- Articulate the components of bond valuation; employ concepts for bond pricing
- Utilize the Dividend Discount Model and/or the Capital Asset Pricing Model to determine the return on equity and to value stocks; use perpetuity concept to value preferred stock
- Explain the effect of income taxes in influencing business decisions
- Use the concepts of Net Present Value and Internal Rate of Return to gain a fuller appreciation of capital budgeting and their use in selection of projects; integrate Discounted Cash Flow techniques for valuation purposes.
- Explain the methods of management of cash, receivables and inventories
- Obtain an understanding of the use of spreadsheets in the calculation of financial problems

#### Academic Honesty, Plagiarism Policies and Procedures:

Lincoln University intends to be a community of educators and learners with shared values. Accordingly, Lincoln

expects the highest standards of honesty and integrity from all members of the academic community.

*What is considered academic dishonesty?* It is generally taking credit for work which is not your own or attempting to receive credit or improve a grade through fraudulent or deceptive means. Examples include taking information from or providing information to another student, or plagiarism (the intentionally or knowingly representing the word or ideas of another as one's own in any academic exercise).

What is Plagiarism? Whenever you quote from, make reference to, or use ideas attributable to others in your writing, you must identify these sources in citations or bibliography, or both. If you do not, deliberately or accidentally, you have committed plagiarism. Plagiarism, defined as the act of stealing or using as one's own the ideas of another, is not permitted in college or university work or in any published writing. "Plagiarism may take the form of repeating another's sentences as your own, adopting a particular apt phrase as your own, paraphrasing someone else's argument as though it were your own." (Modern Language Association Handbook, New York: MLA, 1977, P.4). The sanctions for plagiarism range from reprimands and counseling to expulsion from the University. The appropriate sanction is determined by the University Committee on Academic Dishonesty. The University faculty may use internet-based services to identify those portions of student written assignments that might not meet the full standards of academic integrity as defined in this statement.

#### **Class Schedule**

<u>Session</u>	<u>Text</u> <u>Chapter</u>	<u>Problems</u>	<u>Integrative</u> <u>Problem</u> <u>Assignment</u>	<u>Tests</u>
1-2 Introduction to Finance	1, 2	2-2A 2-3A 2-5A	Discuss Assignments	
3-4 Evaluating Financial Performance and Forecasting Techniques	3, 4	3-7A, 3-8A Chapter 3 Integrative Problem: Blake vs. Scott 4-3A, 4-5A, 4-8A Chapter 4 Integrative Problem: Phillips Petroleum	Integrative Problem 3	
5-6 Time Value of Money and Risk	5, 6,	5-8A, 5-13A, 5-15A 5-30A,5-36A, 6-3A , 6-6A, 6-8A	Discuss Questions	Quiz
7-8 Bond and Stock Valuation	7,8	7-1A, 7-4A, 7-8B 8-5A, 8-9A, 8-10A	Integrative Problem 7	
9-10 Capital Budgeting, Cash Flows in Cap. Budgets, Risk Analysis 11-12	9, 10, 11	9-4A 10-4A 10-6A 11-1A Integrative Problems 9, 10, or 11 or <b>Pinto Case</b>	Discuss Integrative Problem Requirements Pinto Case	Quiz
Cost of Capital	12, 13, 14	12-3A, 12-4A		
13-14 Final Exam	Chapters 1- 14	Course Review		Final Exam

#### **Course Requirements**

#### 1. <u>Textbook Assignments</u>

Students should read all assignments and be prepared to discuss the material covered. Assigned problems should be worked out in advance as a basis for review in class. Students should pinpoint major concepts and procedures in each chapter, understand their meaning and application, and raise questions in class on areas of complexity or ambiguity. Study in teams is recommended both to accelerate the learning process and to obtain feedback on individual interpretations. Homework may be collected for purposes of extra credit.

#### 2. <u>Integrative Problems/Cases</u>

Through the completion of selected integrative problems, each student will show the application of concepts covered in the course, such as study of annual reports, ratio and other analysis including comparison with other companies, and bond and stock valuation. Students are encouraged to work in teams, and each team will select a topic. Grades will be based on content, innovative ideas, and presentation. Instructors may require students to make an oral presentation in class based on their paper.

#### 3. Quizzes and Final Exam

Tests will be given at the end of the third and sixth sessions, and an examination during the final session. The purpose of these tests is to evaluate the student's understanding of the concepts and how to apply them. This includes learning how to perform the calculations and use the techniques that are an integral part of a course in finance. The tests also serve to let the student know how he or she is doing and what areas need further emphasis.

#### **Evaluation** Criteria

Class Participation and Homework Problems10%	
Team Projects – Integrative Problems and Pinto Case 30%	
Tests: Quiz 1 – 15%, Quiz 2 – 15%, Final – 30%60%	

#### **Financial Decision Making**

#### Session 1

#### **Introduction to Finance**

1. Read

Applied Economics *AE 437 Student Handbook* Scott, Martin, Petty, and Keown, Chapters 1 and 2

2. Do problems as listed in the class schedule above. The instructor may add new problems as well.

#### **Objectives**

Session 1 is an introduction to the study of financial management and lays a foundation for the course. Legal forms of business organization are discussed as well as tax implications of business decisions. The market environment for raising long-term capital is reviewed, and investment banking services are detailed. Theories of the term structure of interest rates are introduced. Importantly, the 10 Financial Axioms in chapter 1 shall serve as a guide in our exploration of finance in the course.

At the completion of Session 1, you should be able to:

- 1. Describe the subject of financial management;
- 2. Relate the subject of the course to material covered in prior courses taken in economics and accounting;
- 3. Understand the axioms that form the basics of financial management;
- 4. Differentiate between goals of the firm as to maximization of profit and maximization of shareholder wealth;
- 5. Identify income tax features that affect business decisions;

- 6. Identify the sources of funds, both internally and externally, and the financing mix generally used for raising long term capital;
- 7. Become familiar with the web as a source of information for the study of finance and related decision-making.

#### **Financial Decision Making**

#### Session 2

#### **Evaluating Financial Performance**

In preparation for class:

- 1. Read Scott, Martin, Petty, and Keown, Chapters 3 and 4;
- 2. Do problems as listed in the course guide
- 3. Prepare quiz for next class period
- 4. Begin Integrative Problem assignment for Class period 4.

#### **Objectives**

Financial ratios are introduced as a basis for assessing the financial condition and performance of a firm. Forecasting and budgeting techniques are presented as an essential tool of financial planning.

At the completion of Session 2, students should be able to:

- 1. Prepare and analyze basic financial statements;
- 2. Understand the difference between the cash method and accrual method of accounting and interpret the cash flow statement;
- 3. Obtain copies of a company's annual report and Form 10-k report and understand their Contents;
- 4. Calculate financial ratios and use them to evaluate liquidity, profitability, and financing mix;
- 5. Use the percent of sales method to forecast financing requirements;
- 6. Prepare both fixed and flexible cash budgets;

#### Session 3

#### Time Value of Money and Risk

In preparation for class:

- 1. Turn in Integrative Problems 3 or 4
- 2. Read Scott, Martin, Petty, and Keown, Chapters 5 and 6.
- 3. Do problems as listed in the course schedule.
- 4. Prepare for Quiz at the end of class

#### **Objectives**

The concept of time value of money is discussed in determining financial strategies and comparing projects. Students become familiar with the use of calculators to solve practical compound interest problems. Risk is defined and the need to recognize risk in financial decisions is emphasized. As risk increases there is a trade-off with return, with higher returns expected. Risk of individual investments can be measured and compared with market risk.

At the completion of Session 3, you should be able to:

- 1. Understand the importance of compounding and its importance in financial management;
- 2. Solve time value problems (i.e. annuities and perpetuities) and demonstrate applications in making financial decisions
- 3. Define and measure the expected rate of return of an individual investment;
- 4. Understand the nature of risk and its relationship to rates of return;
- 5. Differentiate between firm-specific risk that can be reduced and market-related risk that cannot be reduced through diversification;
- 6. Utilize the Capital Asset Pricing Model to determine the investor's required rate of return;

#### Session 4

#### **Bond and Stock Valuation**

In preparation for class:

- 1. Read Scott, Martin, Petty, and Keown, Chapters 7 and 8
- 2. Do problems as listed in the course schedule.
- 3. Present 1<sup>st</sup> Integrative Problem (either from Chapter 3 or Chapter 4).

#### **Objectives**

Discussion is held on how to value assets, especially bonds. The chapter distinguishes between different types of bonds and describes how bonds react to changing conditions. In addition, this session describes preferred stock and common stock and their valuation. The shareholder's expected rate of return is discussed.

At the completion of Session 4, you should be able to:

- 1. Estimate the value of a bond and compute a bond-holder's expected rate of return
- 2. Explain the relationships that appear in bond valuation and their effects on changing conditions
- 3. Determine the value of preferred stock and understand its features;
- 4. Calculate the value of common stock and understand its features; Utilize either the DDM or CAPM.
- 5. Understand the relationship between earnings and the market price of stock;

#### Session 5

#### Capital Budgeting, Cash Flows in Capital Budgeting and Risk Analysis

In preparation for class:

- 1. Read Scott, Martin, Petty, and Keown, Chapters 9, 10, 11.
- 2. Do problems as listed in the course schedule.
- 3. Review Integrative Problems 9, 10, or 11 for presentation and completion next class period

#### **Objectives**

Capital budgeting is explained and the importance of finding profitable projects covered. The student also learns the mechanics of determining whether a new project should be accepted, using various techniques (i.e. Net present value and Internal Rate of Return). Guidelines for measuring the value of each proposal are presented in terms of costs and benefits. Chapter 11 finishes the discussion of capital budgeting by discussing the use of a risk-adjusted discount rate in determining the acceptability of a new project.

At the completion of Session 5, you should be able to:

1. Determine whether a new project should be accepted using the payback period and profitability index;

2. Compare the use of the net present value and the internal rate of return methods for evaluating the acceptance of new projects;

- 4. Identify the guidelines for measuring cash flows in capital budgeting;
- 5. Understand the tax implications of capital budget decisions; and calculate a project's benefits and costs in terms of after-tax cash flows.
- 6. Determine the acceptability of a new project using a risk-adjusted discount rate;

#### Session 6

#### **Cost of Capital**

In preparation for class:

- 1. Read Scott, Martin, Petty, and Keown, Chapters 12.
- 2. Do problems as listed in the course schedule.
- 3. Pinto Case Study.

#### **Objectives**

In Chapter 12 the theory of weighted average cost of capital is introduced and compared with the capital asset pricing model in evaluating capital investments.

At the completion of Session 6, you should be able to:

- 1. Calculate a firm's weighted average cost of capital;
- 2. Use the cost of capital to evaluate new investment proposals;
- 3. Calculate the economic profit and value added;

#### Session 7

#### **Course Review and Final Exam**

In preparation for class:

- 1. Review Chapters 1-12
- 2. Prepare for Final Exam.

#### **Objectives**:

The first portion of the last course session will serve as a review of the course material. After a thorough review of students' questions, the instructor will proxy the final exam, which will be all-inclusive of the material in-class.

At the completion of Session 7, students should be able to:

- 1. Demonstrate an excellence of all the previously mentioned learning objectives;
- 2. Get ready for spring break!