

# NUS Business School

## FIN2004 Finance

*Semester I 2016/2017*

### **COURSE DESCRIPTION**

This course provides students with the foundations to understand the key concepts and tools used in Finance. It offers a broad overview of the financial environment under which firms operate and equips students with the conceptual and analytical skills necessary to make sound financial decisions for the firm.

### **COURSE MATERIALS**

► **Text:** S.A. Ross, R.W. Westerfield, B.D. Jordan, J. Lim and R. Tan (2015), **Fundamentals of Corporate Finance**, 2nd Edition, McGraw-Hill Education.

► **Course Notes & Other Postings:** Class notes, tutorials and sample tests/exams will be posted on IVLE. Please note that these materials are for your personal use and are not permitted to be distributed.

► **Calculator:** A financial calculator is also necessary – Texas Instruments BAII Plus Financial Calculator is recommended.

### **PREREQUISITE**

ACC1002/ACC1002X Financial Accounting. As well, it is preferred that students have taken the equivalent of BZ1008 Statistics.

### **ASSESSMENT METHODS**

Class Participation - 30%

Mid-Term - 20%

Final Examination - 40%

Group Project - 10%

- **Class Participation:** Your class participation will form a major part of your final mark. Class participation will be regularly graded by your instructor throughout the semester. Note that although you will receive informal feedback about your participation

throughout the course, all students are encouraged to seek more formal feedback at set stated occasions during the semester. The purpose behind such a high allocation to class participation is to encourage students to articulate their thoughts, be they in the form of questions or comments. The business school understands that both knowledge and the ability to communicate that knowledge are necessary complements to success. This course will provide students with the opportunity to develop both skills. Class participation marks will be *normalized across all FIN2004 sections*, such that each section maintains the same average participation mark.

- ***Mid-Term and Final:*** You will be allowed to bring up to two calculators as well as **TWO A4 size sheets of paper** (with any notes/formulas you wish to write, on the front and back of those two A4 size sheets) to the exams. **NO TEXT BOOK OR OTHER NOTES WILL BE ALLOWED.**
- ***Group Project:*** You will complete a final course project in a group context. Details regarding the course project will be provided by your instructor at the beginning of the semester. Group project marks will be normalized across all FIN2004 sections, such that each section maintains the same average group project mark.

## **ACADEMIC HONESTY & PLAGIARISM**

Academic integrity and honesty is essential for the pursuit and acquisition of knowledge. The University and School expect every student to uphold academic integrity & honesty at all times. Academic dishonesty is any misrepresentation with the intent to deceive, or failure to acknowledge the source, or falsification of information, or inaccuracy of statements, or cheating at examinations/tests, or inappropriate use of resources.

Plagiarism is 'the practice of taking someone else's work or ideas and passing them off as one's own' (The New Oxford Dictionary of English). The University and School will not condone plagiarism. Students should adopt this rule - You have the obligation to make clear to the assessor which is your own work, and which is the work of others. Otherwise, your assessor is entitled to assume that everything being presented for assessment is being presented as entirely your own work. This is a minimum standard. In case of any doubts, you should consult your instructor.

Additional guidance is available at:

<http://www.nus.edu.sg/registrar/adminpolicy/acceptance.html#NUSCodeofStudentConduct>

Online Module on Plagiarism: <http://emodule.nus.edu.sg/ac/>

## **COURSE OUTLINE**

### **1. Introduction**

- Forms of business organization
- Goal of financial management
- Agency problem between shareholders and managers
- The firm and its sources of funds

### **2. Financial statement analysis**

- Uses and limitations of financial statements
- Ratio analysis
- Liquidity ratios
- Asset management ratios
- Debt management ratios
- Profitability ratios
- Market value ratios
- Du-Pont identity
- Uses and limitations of ratio analysis

### **3. Time value of money**

- Time lines
- Future value and present value
- Annuity and Perpetuity
- Uneven cash flows
- Semi-annual and other compounding periods
- Comparing interest rates

### **4. Concepts of Risk and Return I**

- Stand-alone risk
- Expected return and variability of return of a single asset
- Portfolio risk
- Diversifiable risk vs. market risk
- Principle of diversification

### **5. Concepts of Risk and Return II**

- The concept of Beta
- Borrowing and lending at the risk-free rate
- Capital market line and security market line
- Capital asset pricing model
- Underpriced and overpriced assets
- Cost of capital

### **6. Bonds**

- Characteristics of bonds
- Bond valuation

- Bond yields
- Price-yield relationship
- Changes in bond values over time
- Bond risks – interest rate and reinvestment rate
- Sensitivity of bond price to changes in interest rate
- Different types of bonds

### **7. Common Stock**

- Characteristics of stocks
- Common stock valuation
- Dividend discount model – one period and multi-period
- Constant dividend growth model
- Non-constant growth rate
- Bonus/rights issue

### **8. Techniques of Capital Budgeting I**

- Capital budgeting process
- Net present value (NPV)
- Internal rate of return (IRR)
- Multiple IRRs & MIRR
- Payback period
- Discounted payback period
- Comparisons of capital budgeting methods

### **9. Techniques of Capital Budgeting II**

- Project analysis
- Incremental cash flows
- Sunk costs, opportunity costs & externalities
- Cash flow estimation – single project
- Cash flow estimation – replacement project

### **10. Long-term Financial Planning**

- Strategic planning
- Sales forecasting
- The AFN Equation
- Forecasted Financial Statements
- Growth and financial requirements

### **11. Short-term Financial Planning**

- Cash conversion cycle
- Alternative current asset investment policies
- Cash budget
- Cash and marketable securities
- Inventory management
- Credit policy, terms and standards

- Monitoring accounts receivable

## 12. Options

- Features of Options
- Calls
- Puts
- Option Payoffs
- Valuation of Options

WEEK	LECTURE TOPIC	TUTORIAL TOPIC
1: Aug 8 - 12	<i>Introduction &amp; Overview of Financial Management</i> (RWJLT Chapter 1)	No Tutorial
2: Aug 15 – 19	<i>Financial Statement Analysis</i> (RWJLT Chapters 2,3)	No Tutorial
3: Aug 22 – 26	<i>Time Value of Money</i> (RWJLT Chapters 5,6)	Tutorial 1: Overview and Financial Statement Analysis
4: Aug 29 – Sep 2	<i>Risk and Return I</i> (RWJLT Chapters 12, 13)	Tutorial 2: Time Value of Money
5: Sep 5 – 9	<i>Risk and Return II</i> (RWJLT Chapters 12, 13)	Tutorial 3: Risk and Return I
6: Sep 12 – 16	<i>Bonds</i> (RWJLT Chapter 7)	Tutorial 4: Risk and Return II
<i>Sep 17 – 25</i>	<b>RECESS WEEK</b>	
<b>Date to be Announced:</b>	<b>MIDTERM</b> <b>Covering Lectures 1 to 5 (<u>Tutorials 1 - 4</u>)</b> <b><u>Time:</u> To Be Announced</b> <b><u>Venue:</u> To Be Announced</b>	
7: Sep 26 – 30	<i>Common Stock</i> (RWJLT Chapter 8)	Tutorial 5: Bonds
8: Oct 3 – 7	<i>Capital Budgeting I</i> (RWJLT Chapters 9, 10)	Tutorial 6: Common Stock
9: Oct 10 – 14	<i>Capital Budgeting II</i>	Tutorial 7: Capital Budgeting I

	<i>(RWJLT Chapters 9, 10)</i>	
10: Oct 17 – 21	<i>Long-term Financial Planning (RWJLT Chapter 4)</i>	Tutorial 8: Capital Budgeting II
11: Oct 24 – 28	<i>Short-term Financial Planning (RWJLT Chapter 18, 19, 20)</i>	Tutorial 9: Long-term Financial Planning
12: Oct 31 – Nov 4	<i>Options (RWJLT Chapter 24)</i>	Tutorial 10: Short-term Financial Planning
13: Nov 7 – 11	<i>No new lecture material to be covered</i>	Tutorial 11: Options
<b>November 25:</b>	<b><i>FINAL EXAM Covering All Topics Time: 9:00 A.M. Venue: To Be Announced</i></b>	