

# **NUS Business School**

## **FIN2004X Finance**

*Semester II 2015/2016*

**COURSE INSTRUCTOR: Dr. Jumana Zahalka**

**COURSE TUTORS:** As well, depending on your assigned tutorial section, you will be assigned one of a number of potential tutors – details to be announced. You must attend your officially registered tutorial section and only your officially registered tutorial.

### **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**

S.A. Ross, R.W. Westerfield, B.D. Jordan, J. Lim and R. Tan (2015), **Fundamentals of Corporate Finance**, 2nd Edition, McGraw-Hill Education. A financial calculator is also necessary – Texas Instruments BAII Plus Financial Calculator.

### **PREREQUISITE**

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

### **ASSESSMENT METHODS**

Mid-Term - 30%

Final Examination - 55%

Quizzes - 10%

Class Participation - 5%

- **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.**
- **Quizzes:** There will be **three** quizzes held over the course of the semester (please see the detailed course plan below for details). These quizzes will be drafted by your tutor and will take place during your tutorial session – you must attend your assigned tutorial section. The **best two** quiz marks will count toward your quiz grade. There will be **no make-up quizzes.** All tutorial quiz marks from each tutorial section will be normalized at the end of the semester, such that all tutorial sections will have the same average mark.
- **Class Participation:** Your class participation mark will be allocated by your tutor based on your tutorial attendance, participation in class discussion and (if presentations are assigned by your tutor) tutorial presentations. **You will only receive credit for participation made in your specifically assigned tutorial section. You must attend your assigned tutorial section and only your assigned tutorial section!**

## **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: Jan 11 -15	<i>Introduction &amp; Overview of Financial Management</i> (RWJLT Chapter 1)	No Tutorial
2: Jan 18 – 22	<i>Financial Statement Analysis</i> (RWJLT Chapters 2,3)	No Tutorial
3: Jan 25 – 29	<i>Time Value of Money</i> (RWJLT Chapters 5,6)	Tutorial 1: Overview and Financial Statement Analysis
4: Feb 1 – 5	<i>Risk and Return I</i> (RWJLT Chapters 12, 13)	Tutorial 2: Time Value of Money
5: Feb 8 – 12	<i>Risk and Return II</i> (RWJLT Chapters 12, 13)	Tutorial 3: Risk and Return I
6: Feb 15 – 19	<i>Bonds</i> (RWJLT Chapter 7)	Tutorial 4: Risk and Return II <b>QUIZ #1:</b> On Weeks 1-4 Lecture Topics
<b>Feb 22 – 26</b>	<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: Feb 29 – Mar 4	<i>Common Stock</i> (RWJLT Chapter 8)	Tutorial 5: Bonds
8: Mar 7 – 11	<i>Capital Budgeting I</i> (RWJLT Chapters 9, 10)	Tutorial 6: Common Stock

9: Mar 14 – 18	<i>Capital Budgeting II</i> (RWJLT Chapters 9, 10)	Tutorial 7: Capital Budgeting I
10: Mar 21 – 25	<i>Long-term Financial Planning</i> (RWJLT Chapter 4)	Tutorial 8: Capital Budgeting II <b>QUIZ #2:</b> On Weeks 5-8 Lecture Topics
11: Mar 28 – Apr 1	<i>Short-term Financial Planning</i> (RWJLT Chapter 18, 19, 20)	Tutorial 9: Long-term Financial Planning
12: Apr 4 – 8	<i>Options</i> (RWJLT Chapter 24)	Tutorial 10: Short-term Financial Planning
13: Apr 11 – 15	<i>No new lecture material to be covered</i>	Tutorial 11: Options <b>QUIZ #3:</b> On Weeks 9-11 Lecture Topics
<b>April 25:</b>	<b><i>FINAL EXAM</i></b> <b><i>Covering All Topics</i></b> <b><i>Time: 9:00 AM</i></b> <b><i>Venue: To Be Announced</i></b>	