

NATIONAL UNIVERSITY OF SINGAPORE
NUS-RMI Master of Science (Financial Engineering) Program

FE5105 Corporate Financing and Risk
Special Term, AY 2017-18
Course Outline

Instructor: Ravi Jain
E-Mail: bizrj@nus.edu.sg

Module Description and Objectives

The main objective of this module is to understand the ways in which managers can create value by applying appropriate financial strategies. We will analyze the core financial decisions made by firms – the investment decision, the financing decision, and the payout decision. Towards this purpose, finance theory will be used to solve practical problems faced by financial managers using a variety of examples and assignments. The course includes some coverage of basic accounting concepts and principles.

By the end of this course you should be able to:

- Understand the conflicts between shareholders and managers
- Understand the time value of money and calculate present value of future cash flows
- Value bonds
- Value stocks
- Estimate cash flows for a project
- Calculate the cost of capital
- Use the net present value rule and other methods to evaluate a project
- Measure the risk of individual securities and portfolios
- Evaluate different sources and methods of financing
- Analyze a firm's capital structure
- Set payout policy of a firm

Module Format

Prior to each session you should read the relevant material in the lecture slides, textbook and any assigned readings. We will follow the textbook fairly closely but supplement the theoretical and conceptual material with discussion of real-world examples and practices. The textbook provides a very solid foundation of basic finance concepts. However, for those who are new to the subject, it may be difficult to understand all the concepts in the first reading (prior to the lecture) but after the class discussion it should become relatively easier.

Please bring a calculator (that has a power function) to each class and for the final exam. You may also use a financial, statistical, or scientific calculator.

You may bring a laptop to each class. Some exercises will be done using Excel. However, you will not be allowed to use a computer during the final examination.

You are expected to access the module's page on IVLE (ivle.nus.edu.sg) for module related information including announcements, lecture slides, Excel spreadsheets, assignments, and

links to additional readings or useful websites. There is also a discussion forum set up on IVLE where you can discuss module related as well as general finance related issues.

Textbook

The textbook for this module is *Principles of Corporate Finance, Concise Edition*, Richard A. Brealey, Stewart C. Myers, and Franklin Allen (2nd edition), McGraw-Hill (ISBN 978-007-1289916-0). You may refer to the textbook's Online Resource Center, which contains a lot of useful information including some practice quizzes:

http://highered.mheducation.com/sites/0073530743/student_view0/index.html.

Assessment

Your grade will be based on your performance in homework (10%), a case assignment (10%), a project (10%), a mid-term exam (20%), and a final exam (50%). The assignments -- homework, case, and project -- are to be done by *groups* comprising four to five students each.

Homework

You will be asked to do a series of homework assignments. At the end of the term I will grade only two randomly selected assignments. Failure to turn in an assignment (even one which is not eventually graded) by the deadline will result in a penalty.

Case

Each group will have to submit a case memorandum for a case that we will discuss in class. The case memorandum should be a maximum of two pages (typed and double-spaced) for the write-up and a maximum of three pages for any supporting tables/graphs/exhibits. More details on the case assignment will be provided in a separate document.

Project

Each group will estimate a real-life firm's intrinsic stock value by using relative valuation techniques to determine whether the stock is undervalued, fairly valued, or overvalued. More details on the project will be provided in a separate document.

Exams

The format for both the midterm exam as well as the final exam will be a combination of multiple-choice questions, short problems, long problems, and essay-type questions. These questions will be designed to test your analytical and problem solving skills, and your knowledge of conceptual and qualitative material. The final exam will be cumulative but will emphasize topics covered after the mid-term exam.

The exams are 'closed-book'. You may use any calculator, including a financial calculator. You will be provided with a formula sheet and, if necessary, a table containing the present value of annuity factors.

Contact Information

Please feel free to contact me through email (bizri@nus.edu.sg) for any questions, concerns, or comments both during the session as well as prior to our first face to face meeting. You can also make an appointment to meet with me in my office.

CODE OF CONDUCT (ABSTRACT)

NUS Code of Student Conduct

As a widely respected institution of higher learning, the National University of Singapore (NUS) is dedicated to cultivating academic and personal excellence in a way that is inclusive and supportive, where communal values as well as the dignity and rights of each person are respected.

NUS students are expected to maintain and uphold the highest standards of integrity and honesty at all times, as well as embrace community standards, diversity and mutual respect for one another, both within the University and the wider Singapore community.

This Code of Student Conduct is intended to guide students' conduct in both the academic and non-academic aspects of their University life by providing an overview of the behaviour generally expected of them as members of the University community. It is meant to serve as a broad framework, and should not be treated as an exhaustive list.

In line with the above, the University expects students to uphold both the spirit and letter of this Code of Student Conduct at all times.

Academic, Professional, and Personal Integrity

The University is committed to nurturing an environment conducive for the exchange of ideas, advancement of knowledge and intellectual development. Academic honesty and integrity are essential conditions for the pursuit and acquisition of knowledge, and the University expects each student to maintain and uphold the highest standards of integrity and academic honesty at all times.

The University takes a strict view of cheating in any form, deceptive fabrication, plagiarism and violation of intellectual property and copyright laws. Any student who is found to have engaged in such misconduct will be subject to disciplinary action by the University.

It is important to note that all students share the responsibility of protecting the academic standards and reputation of the University. This responsibility can extend beyond each student's own conduct, and can include reporting incidents of suspected academic dishonesty through the appropriate channels. Students who have reasonable grounds to suspect academic dishonesty should raise their concerns directly to the relevant Head of Department, Dean of Faculty, Registrar, Vice Provost or Provost.