**National University of Singapore**

**NUS Business School**

ACC3705 Valuation

### Instructor

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| Name | Role | Email | Room | Phone |
| Assistant Professor Jean Zeng | Lecturer | jeanzeng@nus.edu.sg | BIZ1, 7-23 |  |

### Overall learning objectives

* To equip students with the key concepts and understanding in the valuation of major asset classes in corporate balance sheets: debts, financial derivatives, valuation for equity, valuation for invested capital, and M&A

### Course coverage

Broadly, this course will cover the following:

* Basics in valuations (parameters, models and applications)
* Various valuation methodologies
* Valuation of different corporate assets and liabilities: debts, financial derivatives, valuation for equity, valuation for invested capital, and M&A.

### Learning outcomes

Upon successful completion of this course, students will be able to:

* Understand the basic economic theory that drives valuation
* Understand the major valuation methodologies for the various assets and liabilities in corporate balance sheets.
* Understand the corporate financing strategies and capital structure theories.

### Optional Readings:

The lecture slides are self-contained and thus no textbook is required. For those of you who wish to do optional readings in addition to lecture slides, I recommend:

1. **Damodaran,** Aswath, *Investment Valuation: Tools and Techniques for Determining the Value of Any Asset,* University Edition, 3rd Edition, John Wiley & Sons, 2012.
2. **Lundholm**, R., and **Sloan**, R., “*Equity Valuation and Analysis*”, 5rd Edition.
3. **Fabozzi,** Frank J., *Bond Markets, Analysis and Strategies,* 9th Edition, Pearson Publishing, 2016.
4. **Hull,** John C., *Options, Futures and Other Derivatives,* 10th Edition, Pearson Publishing., 2018.

### Assessment

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| --- | --- |
|  | **Allocation****%** |
| 1. Class assignments and participation
	* Class participation and discussion -- 10%
	* Two quizzes -- 10%
	* One group project -- 25%
 | 45 |
| b. Mid-term test  | 25 |
| c. Final test  | 30 |
| **Total** | 100 |

**Class participation and discussion (10%)**

Students are expected to attend face-to-face classes and your attendance will be marked. You will be exempt from two unexcused absences from classes. If you need to request for additional absences due to medical reasons, please upload your MCs to the “Absence Justification” folder in Canvas. Students are responsible for all missed work, regardless of the reason for absence. It is also the absentee’s responsibility to review all relevant notes or materials and catch up with your classmates.

In addition to class attendance, your participation mark will be largely dependent on your discussions in class, your participation in Polleverywhere questions, your interactions with your classmates in the online forum, and how your interactions would add value to the class or your classmates. If you hardly speak up in class or discussion forum throughout the semester, you should expect a low mark for your class participation.

### Two quizzes (10%)

Several after-class exercises with their answers will be made available during the semester. To incentivize students to go over after-class exercise questions, two quizzes will be conducted in class during the semester. The quiz questions will be very similar to after-class exercise questions. You will likely get full marks if you understand the after-class exercises questions.

### Group project (25%)

The instructors will assign you to small working groups for the purposes of group projects in line with the thinking explained below.

In your future professional career, you will often find yourself working as a team with people you do not know or do not know well. This is particularly so if you work in a large auditing or advisory practice where you are usually assigned centrally to various engagements. Also, in most executive development programs, the participants are deliberately assigned to different groups for different projects so as to allow them maximum networking opportunities. You should use this opportunity to get to know more fellow students.

Your instructors expect all team members to help each other to ensure no member is left behind. Please do your best to contribute as a good team player and not be detested by your team members a freeloader. In awarding marks, the instructors will take into consideration how you collaborate or handle tension within your working group. All members of the same working group will get the same mark. In exceptional circumstances, the instructors may moderate the marks to deal seriously with the freeloader.

Information about the group project will be provided in class. The requirements of the group project will be issued in **Week 2** and the report is due for submission at the end of **Week 10.**

### Mid-term test (25%)

There is a mid-term test in addition to a final test. It is your responsibility to be present for the mid-term test. Absence without a valid reason from the mid-term test will be given a score of zero. The excused absence with a make-up test will be given only in **EXCEPTIONAL CIRCUMSTANCES** as allowed by NUS policies. You **must** make arrangements with the instructors in writing prior to the mid-term test as soon as you know you may have difficulty attending the mid-term test.

All materials covered during the semester in **Weeks 1 to 6** in lectures, presentations, assignments, and assigned readings are examinable. All University-approved calculators are permitted. Any other electronic and mobile devices e.g. laptop, smartphones, and mobile phones are not allowed.

When sitting the mid-term test, students are allowed to bring in **one (1) SHEET** of A4 size paper with hand-written or typewritten notes on both sides.

### Final test (30%)

It is your responsibility to be present for the final test. Absence without a valid reason from this final test will be given a score of zero. The excused absence with a make-up test will be given only in **EXCEPTIONAL CIRCUMSTANCES** as allowed by NUS policies. You **must** make arrangements with the instructors in writing prior to the final test as soon as you know you may have difficulty attending the final test.

All materials covered during the semester from Week 7 to 12 in lectures, presentations, assignments, and assigned readings are examinable. In setting the final test, it is assumed that you have internalized the knowledge acquired in Week 1 to 6.

All University-approved calculators are permitted. Any other electronic and mobile devices

e.g. laptop, smartphones, and mobile phones are not allowed.

When sitting the final test, students are allowed to bring in **1 SHEET** of A4 size paper with hand-written or type-written notes on both sides.

### Expectations.

### Lecture notes will be uploaded to CANVAS before the start of class each week. Students are advised to read the lecture notes before class each week. Additional readings assigned would also be uploaded to CANVAS before each lecture. No physical handouts will be given in class. Students are expected to download and print the materials if they wish to have a hard copy.

Since you are training to become accounting professionals, ethics and professionalism are extremely important. Please take note of the NUS Code of Conduct. If any student is found violating the code of conduct or cheating in quizzes, exercises, tests or projects, he or she will be dealt with seriously and may end up obtaining zero for the relevant assessment or failing the entire module. **We take compliance with ethical conduct very seriously.**

**Detailed syllabus**

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| **Week beginning**  | **Topic** | **Optional Reading Materials** | **Due** |
| **Week 1**  | **Overview of valuation** | Damodaran Chapters 1-3;FRS 39 and 113 |  |
|  **Week 2** | **Equity valuation 1** * Basic valuation parameters and models for equity
* Understanding the past financial statements
 | Damodaran Chapters 1-4  |  |
| **Week 3** | **Equity valuation 2** * Forecasting the future financial statements
 | LS Chapters 7-8 |  |
| **Week 4** | **Equity valuation 3*** Cost of equity
 | Damodaran Chapters 7-8 |  |
| **Week 5** | **Equity valuation 4*** Cost of debt
* Valuation models
 | Damodaran Chapters7-8, 10-16  | Quiz 1 |
| **Week 6** | **Equity valuation 5*** Valuation models (cont’d)
* Relative valuation
* Review
 | Damodaran Chapters10-16, 17-20 |  |
| **Week 7** | * **Q&A, Mid-term test**
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| **Week 8** | **Equity valuation 6*** Growth rates
* Challenges in valuation
* Building a DCF model
* Practical Application
 | Damodaran Chapters11, 21-27 |  |
| **Week 9** | **Liabilities in balance sheet 1*** Zeros

Coupons | FabozziChapters 2, 3, 5 and 18Lecture notes |  |
| **Week 10** | **Liabilities in balance sheet 2*** Seasoned Bond 1
* Floating Rate Notes
 | FabozziChapters 2, 3, 5 and 18Lecture notes | Group project report |
| **Week 11** | **Financial derivatives 1** * Valuation of the Forward Rate Agreement (FRA)
 | HullChapters 1, 2, 3 and Lecture notes |  |
| **Week 12** | **Financial derivatives 2** * Cox, Ross and Rubinstein binomial model
* Black-Scholes option-pricing model
 | HullChapters 7, 10, 11 and 12; Chapters 14, and 15;Lecture notes | Quiz 2 |
| **Week 13** |  **Final Exam**  |  |  |