# The University of Hong Kong Faculty of Business and Economics Academic Year 2021-2022 Semester 1 Valuation Using Financial Statements Course Syllabus and Outline



### I. COURSE INFORMATION

**Course Name:** Valuation Using Financial Statements **Course Code:** ACCT3114 **Prerequisite:** Introduction to Financial Accounting and Intermediate Accounting I

Instructor: Dr. Jing Li Office: KK1212 Phone: 39171004 Email: acjli@hku.hk Consultation Time: By appointment

Tutor: Amy Lee Office: KK 609 Phone: 39174833 Email: <u>amyleesw@hku.hk</u> Consultation Time: By appointment

**Textbook:** Stephen Penman, *Financial Statement Analysis and Security Valuation*, fifth edition, New York McGraw-Hill/Irwin, 2013

Recommended Supplementary Textbook: *Accounting for Value* (Columbia University Press, 2011). This book is supplementary reading for the course that can be read as the course proceeds.

## **II. COURSE DESCRIPTION**

With a stock market bubble and a financial crisis in our recent history, there have been increasing calls to "return to fundamentals." This is a course on fundamental analysis. The primary emphasis is on equity (share) valuation, with a focus on developing and applying methods for valuing firms using financial statement analysis.

The course has a very practical focus. The methods of fundamental analysis will be examined in detail and applied in cases and projects involving listed companies. Topics include models of shareholder value, a comparison of accrual accounting and discounted cash flow approaches to valuation, the determination of price/earnings (P/E) and market-to-book (P/B) ratios, the reformulation of financial statements, the analysis of profitability, growth and valuation generation in a firm, and diagnosing accounting quality.

The course does not "assume market efficiency." Rather, it develops the techniques for challenging traded prices in order to assess whether investments are appropriately priced. Most importantly, we learn how to handle accounting and financial reports in valuation. We see that valuation is really a matter of appropriate accounting for value. The course combines accounting principles and investment principles to answer the question: How do I account for value so that I can challenge stock prices with some confidence?

The course will be taught from the perspective of designing techniques to be used in an (independent) equity research department or firm. Accordingly, the material is pertinent to the security analyst – particularly the equity analyst – who must issue a buy, hold or sell recommendations on stocks. However, much of the material covered in the course is also relevant to the corporate financial analyst for evaluating acquisitions, restructurings and other investments, and for calculating the value generated by strategic scenarios.

## **III. COURSE OBJECTIVES**

This course is designed to improve your ability to analyze financial reports and value companies. After completing this course, you will gain two valuable tools in your skill set: (1) financial statement analysis; and (2) equity valuation principles. The focus of financial statement analysis is a rigorous reformulation of published GAAP statements. The reformulation is needed to highlight the shareholder-value generation and distribution process of the firms. The focus of the equity valuation is on theory-consistent valuation benchmarks. These benchmarks provide important guidance to further, more detailed firm valuation methodologies. Time permitting, we may cover special topics like accounting quality analysis, etc.

### IV. ASSESSMENT TASKS/ACTIVITIES (ATs)

| Homework assignments            | 10%  |
|---------------------------------|------|
| Class participation             | 5%   |
| Final test                      | 50%  |
| Group project and presentations | 35%  |
| Total                           | 100% |

#### Homework Assignment (10%)

Short <u>Individual Homework Assignments (IHA)</u> are given and collected. The homework helps individual understand lecture materials better and practice the methods and technologies learned in class.

#### Final test (50%)

One final test will be held during the term as part of the continuous assessment of the course. The test is designed to reinforce your basic understanding of the principles and concepts of financial statement analysis and valuation. All students must take the exam on the same date. No make-up exam is allowed with exceptions for legitimate reasons such as documented medical issues.

<u>Group Project (Report and Presentations) (35%)</u> A major part of the course evaluation is a group project based on real-life companies. You are required to deliver a project that involves financial analysis and valuation using tools developed in the course. The project is done in a group up to six students. Each group chooses one company you wish to cover to analyze. Some guidelines on choosing companies will be emailed later.

The group project contains two parts (*one presentation and one report are required*). Part I of the group project requires reformulation of balance sheet, income statement, shareholders' equity and cash flow statements, and then based on the reformulated statements, performing your own financial statement analysis of the company to understand the value drivers and growth of the company. Part II of the project requires your group to do a valuation analysis for your company, using alternative valuation technologies learned in class and publicly available information, and afterward using a modified accounting-based valuation model based on the financial statement analysis to value the company.

The case report is graded on rigor, creativity, demonstration of depth of knowledge, and clarity in

communication. Group presentation is part of the overall grading of the group project. Detail instructions about the group project will be distributed in class shortly.

# V. LEARNING OUTCOMES AND ASSESSMENT CRITERIA

# 1. INTENDED LEARNING OUTCOMES (ILOs)

On completion of this course, students will be able to:

- *ILO1.* Construct the basic skills needed to interpret and reformulate financial statements for the purpose of valuation, and perform financial statement analysis based on reformulated statements;
- *ILO2*. Comprehend knowledge on basic valuation principles; apply the accounting-based equity valuation and other valuation technologies in valuing a company with publicly available information;
- *ILO3*. Prepare the pro-forma financial statements based on financial statement analysis, and value a company with full-forecasted financial information as inputs.
- *ILO4*. Understand the limitation and flexibility in the application of valuation models, use professional judgment in dealing with complicated issues in evaluating a real-company.

| Programme ILOs   | Course ILOs    |  |  |
|--|----------------|--|--|
| 1. Acquisition and internalization of knowledge of accounting, | ILOs 1 & 2 & 3 |  |  |
| business and economics   |                |  |  |
| 2. Application and integration of knowledge                    | ILOs 1 & 2 & 3 |  |  |
| 3. Inculcating professionalism                                 | ILOs 4         |  |  |
| 4. Developing global outlook                                   | ILOs 3 &4      |  |  |
| 5. Mastering communication skills                              | ILO 1 &3       |  |  |
| 6. Cultivating leadership                                      | ILOs 4         |  |  |

# 3. TEACHING AND LEARNING ACTIVITIES (TLAs)

# TLA1. Situation: Interactive lectures

- Lectures: basic knowledge of financial accounting is discussed using PowerPoint slides.
- In-class mini-cases: basic concepts and techniques are illustrated using mini-cases and real company examples. In order to follow the lectures closely, students are encouraged to work along with the instructor on these exercises.
- In-class discussions: students are encouraged to raise questions, participate in discussions and share ideas with their peers. These discussions help students formulate their own opinions on controversial issues.

Major focus: ILOs 1, &2, &3.

TLA2. Situation: Group project, presentation and outside-classroom activities

- Group discussions and presentation: Students are required to apply the knowledge learned from this course to perform financial statement analysis of two real public companies. Group members are to meet, work on the questions together and contribute jointly to ensure that the project is completed for timely submission. Group members are to present the project in class as well.
- Instructor and tutor consultations: Consultation hours will be provided by the instructor and tutor to address students' questions related to the course.

Major focus: ILOs 1 &2 & 3.

### 4. GRADING CRITERIA

AT1. Homework Assignments (10%) Major focus: ILOs 1, 2, 3.

| A+ A A-            | B+ B B-            | C+ C C-            | D+D                | F                 |
|--------------------|--------------------|--------------------|--------------------|-------------------|
| Extremely well     | Partially prepared | Not well           | Not well           | Poorly prepared   |
| prepared for class | for class          | prepared for       | prepared for       | for class         |
| discussion, active | discussion, quite  | class discussion,  | class discussion,  | discussion and no |
| in sharing views   | active in sharing  | limited active in  | no sharing of      | sharing of views  |
| and attended at    | views and          | sharing views      | views and          | and experience    |
| least 90% of       | attended at least  | and attended at    | attended at least  | and attended less |
| classes.           | 80% of classes.    | least 70% of       | 60% of classes.    | than 60% of       |
| Submitted all      | Submitted at least | classes.           | Submitted at least | classes.          |
| assignments with   | 80% of             | Submitted at least | 60% of             | Submitted less    |
| more than 90%      | assignments with   | 70% of             | assignments with   | than 60% of       |
| accuracy.          | more than 80%      | assignments with   | more than 60%      | assignments with  |
|                    | accuracy.          | more than 70%      | accuracy.          | less than 60%     |
|                    |                    | accuracy.          |                    | accuracy.         |

#### AT2. Final Test (50%)

Mid-term test mainly includes three types of questions: multiple choice questions, problem solving and essay questions.

Major focus: ILOs 1, 2, 3.

| A+ A A-           | B+ B B-          | C+ C C-           | D+D              | F                 |
|-------------------|------------------|-------------------|------------------|-------------------|
| Provided accurate | Provided         | Provided          | Provided         | Skipped some      |
| solutions to all  | accurate         | accurate          | accurate         | problems or       |
| problems, gave    | solutions to     | solutions to some | solutions to a   | provided          |
| detailed and      | most problems,   | problems, gave    | few problems,    | inaccurate        |
| insightful        | gave detailed    | limited responses | gave unclear     | solutions to most |
| responses to all  | responses to     | to some essay     | responses to     | problems, gave    |
| essay questions   | most essay       | questions and     | most essay       | poor responses to |
| and scored        | questions and    | scored correctly  | questions and    | most essay        |
| correctly on more | scored correctly | on more than      | scored correctly | questions and     |
| than 90% of the   | on more than     | 70% of the        | on more than     | scored correctly  |
| multiple choice   | 80% of the       | multiple choice   | 60% of the       | on less than 60%  |
| questions         | multiple choice  | questions         | multiple choice  | of the multiple   |
|                   | questions        |                   | questions        | choice questions  |
|                   |                  |                   |                  |                   |

Grading criteria for calculation problems and multiple choice questions:

Grading criteria for essay questions:

| A+ A A-           | B+ B B-          | C+ C C-           | D+D                | F                 |
|-------------------|------------------|-------------------|--------------------|-------------------|
| Idea development  | Idea development | Idea development  | Idea development   | Idea development  |
| is insightful and | is clear and     | is simplistic and | is superficial and | is absent;        |
| sophisticated;    | thoughtful;      | lacking in        | ineffective;       | Supporting        |
| Supporting        | Supporting       | relevance;        | Supporting         | evidence is vague |
| evidence is       | evidence is      | Supporting        | evidence is        | or missing.       |
| convincing,       | sufficient and   | evidence is       | insufficient and   | Poorly written.   |
| accurate and      | accurate.        | insufficient but  | inaccurate.        |                   |
| detailed.         | Well written.    | accurate.         | Writing is         |                   |
| Well written      |                  | Somewhat well     | unclear.           |                   |
| with clear        |                  | written.          |                    |                   |
| focus.            |                  |                   |                    |                   |
|                   |                  |                   |                    |                   |

# AT3. Group Project and Presentation (35%) Major focus: ILOs **1 & 3.** Grading Criteria

|           | Depth and breadth of Coverage, critical elements, structure, language and conventions   |
|-----------|---|
| A+, A, A- | All aspects were addressed and researched in great depth.   |
|           | Demonstrated a clear understanding of and the ability to apply the theory, concepts and issues relating to the topic.                     |
|           | Clearly identified the most critical aspects of the task and adopted a critical perspective.  |
|           | Developed excellent argument and offered a logically consistent and well-articulated analysis and insight into the subject.               |
|           | Drew widely from the academic literature and elsewhere whilst maintaining relevance.  |
|           | All aspects conformed to a high academic / professional standard.   |
| B+, B, B- | Most aspects were addressed and researched in depth.  |
|           | Demonstrated a good understanding and some application of the theory and issues relating to the topic.                                    |
|           | Identified critical aspects of the task and adopted a critical perspective.   |
|           | Showed some evidence of analysis, supported by logical argument and insight into the subject.   |
|           | Drew on relevant academic and other material.   |
|           | Most aspects conformed to a high academic / professional standard.  |
| C+, C, C- | Most aspects were addressed and researched adequately.  |
|           | Demonstrated a good understanding of the theory, concepts and issues relating to the topic but limited application relating to the topic. |
|           | Some presented argument showed some insight but not always consistent and logical.  |
|           | Drew upon an adequate range of academic and other material.   |
|           | Most aspects conformed to an acceptable academic / professional standard.   |

| D+, D | Basic aspects were addressed and researched adequately.                                       |
|-------|---|
|       | Demonstrated mainly description, showing basic understanding of the topic but no application. |
|       | Showed little evidence of analysis but no clear and logical argument relating to the subject. |
|       | Drew primarily upon course materials.   |
|       | Limited aspects conformed to academic / professional standards.                               |
| F     | Basic aspects were superficial, inadequate or absent.   |
| Fail  | Demonstrated limited understanding of the topic and drew conclusions unrelated to the topic.  |
|       | The written work was not of an academic / professional standard.                              |
|       | topic.  |

# VI. STUDY LOAD

### **Study load**

| Course Teaching and Learning Activities | Expected<br>Contact Hour | Study Load<br>(% of study) |
|---|--------------------------|----------------------------|
| T&L1. Interactive Lectures              | 36                       | 30%                        |
| T&L2. Group Project and Presentation    | 48                       | 40%                        |
| T&L3. Assignments and Self-study        | 36                       | 30%                        |
| Total                                   | 120                      | 100%                       |

## VII. ACADEMIC CONDUCT

- Plagiarism and copying of copyright materials are serious offences and may lead to disciplinary actions. You should read the chapters on "Plagiarism" and "Copyright" in the Undergraduate/Postgraduate Handbook for details. You are strongly advised to read the booklet entitled "What is Plagiarism?" which was distributed to you upon your admission into the University, a copy of which can be found at www.hku.hk/plagiarism. A booklet entitled "Plagiarism and How to Avoid it" is also available from the Main Library.
- You are required to attend all the classes on time. In case you cannot attend a class you should inform the instructor beforehand.

# **VIII. COURSE SCHEDULE**

| Week | Dates   | Topics   | IHA   | Chapters         |
|------|---------|--|-------|------------------|
| 1    | Sep.1   | Introduction and Overview                          |       | Ch 1,2           |
| 2    | Sep.8   | A Framework of Financial Statement Analysis        | IHA 1 | Ch 8             |
| 3    | Sep.15  | Reformulation of Balance Sheet                     | IHA 2 | Ch 10            |
| 4    | Sep.22  | No class, Public Holiday                           |       |                  |
| 5    | Sep.29  | Reformulation of Income Statement                  |       | Ch 10<br>(con't) |
| 6    | Oct. 6  | Analysis of Profitability/Growth                   | IHA 3 | Ch 12, 13        |
| 7    | Oct.13  | Reading Week                                       |       |                  |
| 8    | Oct.20  | Additional accounting issues                       |       |                  |
| 9    | Oct. 27 | Basic Valuation Concepts and Residual Income Model | IHA 4 | Ch 3/5           |
| 10   | Nov. 3  | Modified Accounting-based Valuation Model: ReOI    | IHA 5 | Ch 14            |
| 11   | Nov. 10 | Pro-forma Statements and ReOI valuation            | IHA 6 | Ch 15/16         |
| 12   | Nov. 17 | Group Presentation                                 |       |                  |
| 13   | Nov. 24 | Final Test   |       |                  |