

York University
School of Administrative Studies
ADMS 4536 A
Security Valuation
Fall 2022

Instructor: Charles A. Dreezer, BCom, CFA

Class Live Sessions: Tuesdays 7:00-10:00 pm. First class: Tuesday Sept. 13th

Location: YK HNE 036

Course website: eclass.yorku.ca [If you are registered, you will be able to log in to all your courses from this general website using Passport York].

Technology Requirements

As of now, all classes are in-person. For classes that are online due to the school cancelling in-person instruction, you will be required have a computer with a front-facing camera. This may include the oral presentation component of this course.

Access to the Microsoft Office Suite™, including Excel™, Word™, and PowerPoint™ will be required in order to complete the course work. Ideally, you will have Microsoft Windows™ installed. I understand some of you are using MacOS™ and some of the instruction (shortcuts, etc.) will not apply to you. If there's

something you're not sure how to do, please google it. I will not be providing IT support to students having issues with MacOS™. It is possible to install Windows™ on a Mac computer using a virtual machine, and I highly recommend this option if you are using a Mac.

It is recommended to download and install the Macabacus™ macros, which will help you in preparing, auditing, navigating, and formatting spreadsheets and presentations. The course instructor uses the Pro version. You can get by without it but I find it very useful. The software can be downloaded at the following link: <https://macabacus.com/downloads>

Excel™ is an essential tool for completing the assignments in this course and for working in any analyst / corporate finance role. It is recommended that you bring your Excel™ skills up to speed using courses available on LinkedIn Learning™. LinkedIn Learning™ can be accessed via the York Libraries website at the following link:

<https://lil-info-yorku-ca.ezproxy.library.yorku.ca/> and then clicking “Login” on the right hand side of the page. More information can be found on the course website regarding recommended Excel™ courses. You can also look into a non-affiliated course called Breaking Into Wall Street, which I and many of my students have found extremely helpful both in school and in our careers.

Communication with the Course Instructor

Please ask questions about the course material in the general discussion forum on the course website. Your peers may be able to answer your questions. We will consider whether you have engaged constructively in answering your peers' questions when assessing participation marks.

Please be courteous and professional when communicating with other students in person, via Zoom™ or on the forums.

You may also email the instructor at cdreezer@yorku.ca All email communication must follow these guidelines to ensure prompt and accurate responses:

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- Subject heading begins with “ADMS 4536”
- Clearly identify who you are.
- For reasons of privacy and confidentiality, please email from your @yorku.ca account.

The instructor will try to respond within three days but cannot guarantee it. Usually, you will receive a response within a day.

Learning Outcomes

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The following learning outcomes are general goals for the course. These learning outcomes are divided into individual outcomes in the schedule below. Students will learn to:

1. Create basic corporate financial models using Excel™ and present results in PowerPoint.™
2. Understand the principles and practical application of the most commonly-used valuation models: discounted dividend, free cash flow and market-based relative value models (commonly called market multiples or comps).
3. Apply basic industry and corporate financial statement analysis to equity valuation.
4. Apply the valuation models to a comprehensive valuation of the traded common shares of a Canadian or U.S. company, using the company's public disclosures.
5. Present an oral investment presentation (stock pitch).
6. Write a professional business valuation report.

Financial Modelling

We are going to teach you financial modelling in an organized, step by step process. Financial modelling is an essential skill for anyone who wants to work in any analytical job in the investment industry, in lending, in preparing business plans and in all areas of treasury management and corporate finance.

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Textbooks

The three textbooks for this course are:

Jerald Pinto, Elaine Henry, Thomas Robinson and John Stowe, *Equity Asset Valuation 3rd ed.*, 2014. Wiley is the publisher, but copyright holder is the CFA Institute. Shrink-wrapped single package: ISBN 978-1-119-10426-1.

Joshua Pearl and Joshua Rosenbaum, *Investment Banking: Valuation, Leveraged Buyouts, and Mergers and Acquisitions, 2013 (Second Edition)*. Published by Wiley. ISBN 978-1-118-65621-1.

Joshua Pearl and Joshua Rosenbaum, *Investment Banking: Workbook, 2013 (to complement Investment Banking 2e)*. Published by Wiley. ISBN 978-1-118-71570-3.

Grading

A1 Key Industry factors, company analysis, comps	20%
A2 Three Statement Operating Model	20
Oral Presentation	15
Participation (incl. homework as assigned)	10
A3 Valuation Report (take home exam)	<u>35</u>

100%

Prerequisite

ADMS 4501. We check the pre-requisite and if you don't have it, the registrar's office will remove you from the course. We accept successful completion of CFA Level 1 exam as a substitute, but you must provide evidence of this or any other substitute to the course director along with a completed Prerequisite Waiver form.

Submitting Assignments

Submit your assignments through the eClass course website as described in the full assignment instructions.

The file name for submitted assignments must be:

lastname [all lastnames if a group] Assignment # or identifier ADMS 4536 A

e.g., "Rusetski Wong A2 ADMS 4536A"

If an assignment requires multiple documents to be submitted, include them all in a zip or rar file and make sure the PDF that includes your actual main assignment follows the naming convention above. Failure to follow the above format will cost you ten percentage points.

More detailed instructions for each assignment will be provided separately. Please note that assignments submitted after the deadline will lose five percentage points, and if they are very late, penalties will be higher and compound daily!

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A1 Comparable Company Analysis

The company or companies for Assignments in the course ("TargetCo") will be announced in class.

You will do four things in this first assignment:

- *Competitive environs*: Define the industry TargetCo is in and write an industry analysis.

- *Spread comparables:* Identify the appropriate peers, spread historical data for TargetCo and peers, and calculate appropriate performance and valuation metrics and multiples;
- *Relative performance analysis:* Explain concisely whether the company is over- or underperforming relative to its peer group and discuss possible reasons for this, including identification of key competitive factors or issues in the company;
- *Argue whether the company is over- or -undervalued:* Use prior analysis to justify a target range of multiples. Then use forward metrics to estimate current stock price.

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A2 Three Statement Operating Model

You will produce a complete operating model of TargetCo with balance sheet, income statement and statement of cash flows, a forecast of at least the next five years' results, supporting schedules as demonstrated in lecture and perform scenario analysis on the forecasts.

Oral Presentation (Week 12)

You will give a stock pitch, presenting either a strong buy or strong sell recommendation for a company of your choosing. You must get the company approved by the course instructor. We will be marking the presentation quality and reasonableness of your work as well as the quality of your analysis, but the focus will be on presentation skills.

Presentations will be made to the entire class. You will present within a fixed time limit of five to six minutes. We will plan to have time to debrief after everyone has finished presenting, and we will email you written comments with your marks.

A3 Valuation Report (Solo, this is like a take home exam)

1 This assignment replaces the final exam and will be treated like a take-home exam.

- 2 You will do it as a solo assignment. No consultation allowed.
- 3 The assignment will be a comprehensive valuation report of the company you used in your oral presentation, using several valuation techniques, and making a strong buy or strong sell recommendation.
- 4 Your final written report does not have to match the recommendation and the detailed prices you presented orally; you may change any of it based on your subsequent work or even what you heard during the oral presentations.

Participation

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Grades for participation will be assigned subjectively and can be earned in the following ways:

- During the weekly live sessions by being an active participant in group discussion.
- Complete weekly quizzes on the course website.
- Post in the forums as required and as instructed on the course website and attempt to answer your peers' questions on the forums.

In addition to the textbook readings referenced below, there are review notes and videos available on the course website for each week. Please make sure you review at least the material on the course website prior to each lecture. Textbook readings are optional and provide more background and color on the topic being taught.

Course Schedule		Readings
Week 1	<u>Introduction to Valuation</u>	Pinto Ch 1
Sept 13 at 7pm		

	<i>Learning Outcomes – students will be able to:</i> • Explain the general learning outcomes of the course. • Explain the different definitions of valuation and sources of perceived mispricing. • Describe the applications of equity valuation. • Describe the major methods of equity valuation, differentiating between absolute and relative. • Describe the major steps involved in the typical valuation process. • Describe sum-of-the parts valuation analysis, scenario analysis and the various discounts that can be applied at the end of the valuation process. • Introduce a company that you haven't analyzed in the past. • Perform a basic dividend discount method valuation analysis. • Install the Macabacus set of macros for Excel.	
2 Sept 20 at 7pm	<u>Understanding the Business, Historical Analysis and Practice with Excel</u> <i>Learning Outcomes – students will be able to:</i> • Explain the importance of company and industry analysis to the valuation process. • Explain the core components of industry analysis.	Pinto Ch 3

	- Describe the core sources of information for financial analysis and retrieve financial statements, filings and equity research reports. - Program in Excel™ a full set of standardized financial statements. - Use Excel™ shortcuts to format a spreadsheet, using the Macabacus™ macros. - Perform basic financial statement analysis using common sized and year-over-year analyses. - Analyze and assess the historical financial performance of a company. - Determine an appropriate peer group (i.e., comparable companies) for a given target company (this is prep for unit 3).	
3 Sept 27 at 7pm	<u>Market-based Valuation: Multiples Part I</u> <i>Learning Outcomes – students will be able to:</i> - Define relative value. - Explain the applications of comparable companies analysis. - Calculate and understand the difference between equity value and enterprise value using the treasury stock method. - Describe rationales for and possible drawbacks to using alternative price and EV multiples, and dividend yield in valuation. - Identify one-time or non-recurring items and calculate normalized earnings and EBITDA.	Pinto Ch 7

	- Calculate and interpret price multiples and EV multiples. - Identify and explain whether a stock is overvalued, undervalued or fairly valued based on comparisons of multiples.	
4 Oct 4 at 7pm	<u>Market-based Valuation: Multiples Part II</u> <i>Learning Outcomes – students will be able to:</i> - Describe and perform the process for comparable companies analysis, including selecting a universe, locating necessary financial information, spreading key statistics, ratios and trading multiples, benchmarking, and determining valuation. - Explain the reason and process for using calendarization to obtain LTM and NTM metrics for use in comparable companies analysis. - Use the R&P comps Excel workbook template to perform comparable companies analysis. - Identify the most relevant multiples for a given company. - Calculate a share price given a multiple. - Explain the difference between trading and transaction multiples. - Describe the rationale for the control premium. - Format the output of a relative value analysis for a written report or presentation.	R&P Ch 1 and 2 s

	- Copy and paste analysis from Excel™ into Word™ and PowerPoint™. - Use the Bloomberg Terminal™ to run comparable companies analysis. - Use the Bloomberg Terminal™ to run an equity screen.	
	<i>FALL READING WEEK OCT 8-14</i>	
5 Oct 18 at 7pm	<u>Rate of Return and Cost of Capital</u> <i>Learning Outcomes – students will be able to:</i> - Distinguish among realized holding period return, required return, discount rate and internal rate of return. - Explain when to use the required return on equity or the weighted average cost of capital. - Explain the reason for tax effecting the cost of debt in the WACC calculation. - Estimate the required return on equity using the capital asset pricing model. - Estimate beta using Google Finance™, Bloomberg™ and the comparables method (including calculating unlevered and relevered beta). - Calculate the weighted average cost of capital by determining target capital structure, estimating the cost of debt, and estimating the cost of equity. - Use the provided template to calculate WACC.	Pinto Ch 2_(skip sections 2.6, 3.2, 3.2.1, 3.2.2, 3.2.3, 4.2.3)

Calculate IRR in Excel given a stream of cash flows.

Assignment 1 due 5 pm Oct 18 electronic submission on eClass

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Oct 25 at 7pm

Building a Three Statement Operating Model Part I Pinto Ch 4

Learning Outcomes – students will be able to:

- Explain the applications of financial modelling, specifically as it relates to three statement operating models.

- List the components of a basic operating model.

- List the points of interrelation between the income statement, balance sheet, and cash flow statement.

- Describe the supporting schedules and explain why they are needed.

- Describe the process for building a three statement operating model in Excel™, including percentage growth-based forecasts.

- Build the historical, income statement and cash flow statement portions of a three-statement operating model in Excel.

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Nov 1 at 7pm

Building a Three Statement Operating Model Part II

Learning Outcomes – students will be able to:

	- Explain the different types of debt, and why and how they are used. - Build the following components of the operating model: balance sheet, debt schedules, balancing the balance sheet, depreciation schedules.	
8 Nov 8 at 7pm	<u>Building a Three Statement Operating Model Part III</u> <i>Learning Outcomes – students will be able to:</i> - Explain the difference between top-down and bottom-up forecasting methods. - Apply both forecasting methodologies using information available in the public filings and reasonable assumptions to supplement management's outlook. - Apply the methods specific to projecting revenue of retail businesses to an existing percentage driven revenue forecast.	Pinto Ch 6
Assignment 2 due by 5 pm Nov 15 electronic submission via eClass		
9 Nov 15 at 7pm	<u>Free Cash Flow Valuation Part I</u> <i>Learning Outcomes – students will be able to:</i> Define FCFE and FCFF and compare the two approaches to valuation. Explain the pros and cons of various cash flow measures.	R&P Ch 3

Explain the use of sensitivity analysis in FCFE and FCFF valuations.

Calculate FCFE and FCFF starting with EBIT, EBITDA, net earnings, and CFO.

Forecast FCFE and FCFF using a three-statement operating model.

Describe the two main methods for calculating terminal value.

Calculate terminal value in Excel™.

Use the provided Excel™ template to estimate a company's value using the appropriate free cash flow model(s).

Evaluate whether a stock is overvalued, fairly valued, or undervalued based on a free cash flow valuation model.

Create data tables in Excel™ to perform sensitivity analysis.

Last day to drop the course without receiving a grade – Nov 11

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Free Cash Flow Valuation Part II

Nov 22 at 7pm

Learning Outcomes – students will be able to:

Explain the core issues in valuing FCF, especially with respect to terminal value.

Use a DCF model in Excel™ to determine the market scenario.

	• Use scenario analysis to calculate a range of values. • Present the results of scenario analysis using a valuation bridge chart. • Present the results of multiple valuation methodologies using a football field chart and indicate a selected range of values.	
11	<u>Presenting Your Analysis</u>	
Nov 29 at 7pm	<i>Note: This material will be available in advance to allow students enough time to prepare their stock pitches by December 6. This week's live session will be dedicated Q&A for students on completing their stock pitches.</i> — <i>Learning Outcomes – students will be able to:</i> • Explain the methods for finding potentially attractive targets. • Perform a stock screen using the Bloomberg Terminal™. • Explain the core components of a good presentation. • Explain the importance of a good story and distinguish between the ideas of truth and argument. • Critique stock pitches from professional hedge fund managers, pointing out ways in which they depart from the core components. • Use PowerPoint™ to create a stock pitch presentation, based on the provided template.	

	Explain the components of a written valuation report.	
12	<i>Oral Presentations</i>	
Dec 6 at 7pm	Presentation slides are due by 5pm two days prior to your presentation date. Penalty for late submission.	
<i>Assignment 3 will be due on Dec 18th at midnight.</i>		

Finance Area policy on DSA (Deferred Standing Agreement)

It is the policy of the Admin Studies Finance Area that the Area Coordinator will NOT approve a DSA form if you miss both the midterm and final exams. Students in this situation will need to petition for a deferred exam, late withdrawal, or a remedy appropriate to their circumstances.

RELEVANT UNIVERSITY/LA&PS/SCHOOL REGULATIONS

Many of the regulations that apply to course work are on:

<https://sas.laps.yorku.ca/students/school-policies/>

You are responsible for understanding and following these regulations.

Academic Honesty

We take academic honesty seriously in our School. You must follow the policies laid out in the Senate rules, which you will find at:

<https://secretariat-policies.info.yorku.ca/policies/academic-honesty-senate-policy-on/>

There are some criminal organizations operating at York who will offer to write your assignments and exams for you, for a price. They will offer to teach you the course using copyright materials that they have stolen from us. They are not competent and the assignments that they did for dishonest students are poor quality, sometimes so bad that they would fail even if we had not identified them as dishonest work.