Class timings: Thursdays 2 PM – 4:30 PM in Room RH 214.

Office Hours: Flexible office hours, held online via Zoom.

e-mail: tp55@nyu.edu

Objectives: To study Corporate Valuation in sufficient breadth to allow one to value a wide range of businesses, ranging from startups to mature businesses. We will study financial accounting and modeling, use it to build financial models for businesses, and then go on cover deterministic valuation approaches such as the DCF Model and its many variants, as well as the use of multiples for relative valuation, with a particular focus on the use of robust statistical and probabilistic methods. Finally, we will study the venture capital cycle and work with entrepreneurs and venture capitalists to model and value their venture backed start-up businesses.

Class Structure: Each 2 hr. 30 minute class will be broken up into three segments. We will start by going over any difficulties that students are having with the material, and then have two one-hour lectures, with a short break in between, followed by a discussion. We will have some guest speakers as well, to give us their perspective on valuation. We will also have at least one entrepreneur describe their startup, and value it using the techniques taught in class

Preparatory work: I will provide materials that should be read ahead of each class, and you will get extra credit for completing a short feedback form each week that lets me know what parts of the lecture you had difficulty with.

Homework, project and exams: There will be a homework assignment following each class which must be prior to the next class. There will be a final exam, as well as a valuation project. The class will be broken up into a set of teams, each of which will be tasked with creating an equity research report with its accompanying valuation model for a company of their choice. The reports will be presented at a competition at the end of the course, and the best team will win a prize.

Grades: 40% Homework, 20% Mid-term exam, 20% Final exam, 20% Group Project.

Textbooks: Holthausen and Zmijewski (2020), *Corporate Valuation: Theory, Evidence and Practice*, 2nd Ed.

Software: Calcbench is absolutely essential to obtain corporate financial statements, as is Excel, and Python (get the WinPython distribution at https://winpython.github.io/ as it is portable) is perfectly viable as Calcbench has a Python module (https://www.calcbench.com/api). Use what you are most comfortable using, but document your code extensively so that I can read it.

Prerequisites: Junior, senior or graduate standing (I will teach the accounting required for the course). I would also encourage you to take Professor Dan Gode's classes on Financial Modeling and Business Drivers.

Moses Center Statement of Disability

If you are student with a disability who is requesting accommodations, please contact New York University's Moses Center for Students with Disabilities (CSD) at 212-998-4980 or mosescsd@nyu.edu. You must be registered with CSD to receive accommodations. Information about the Moses Center can be found at www.nyu.edu/csd. The Moses Center is located at 726 Broadway on the 3rd floor.

NYU School of Engineering Policies and Procedures on Academic Misconduct

A. Introduction: The School of Engineering encourages academic excellence in an environment that promotes honesty, integrity, and fairness, and students at the School of Engineering are expected to exhibit those qualities in their academic work. It is through the process of submitting their own work and receiving honest feedback on that work that students may progress academically. Any act of academic dishonesty is seen as an attack upon the School and will not be tolerated. Furthermore, those who breach the School's rules on academic integrity will be sanctioned under this Policy. Students are responsible for familiarizing themselves with the School's Policy on Academic Misconduct.

B. Definition: Academic dishonesty may include misrepresentation, deception, dishonesty, or any act of falsification committed by a student to influence a grade or other academic evaluation. Academic dishonesty also includes intentionally damaging the academic work of others or assisting other students in acts of dishonesty. Common examples of academically dishonest behavior include, but are not limited to, the following:

   1. Cheating: intentionally using or attempting to use unauthorized notes, books, electronic media, or electronic communications in an exam; talking with fellow students or looking at another person's work during an exam; submitting work prepared in advance for an in-class examination; having someone take an exam for you or taking an exam for someone else; violating other rules governing the administration of examinations.
   2. Fabrication: including but not limited to, falsifying experimental data and/or citations.
   3. Plagiarism: intentionally or knowingly representing the words or ideas of another as one's own in any academic exercise; failure to attribute direct quotations, paraphrases, or borrowed facts or information.
   4. Unauthorized collaboration: working together on work that was meant to be done individually.
   5. Duplicating work: presenting for grading the same work for more than one project or in more than one class, unless express and prior permission has been received from the course instructor(s) or research adviser involved.
   6. Forgery: altering any academic document, including, but not limited to, academic records, admissions materials, or medical excuses.

Module 1: Overview of Valuation and Accounting
    a. Approaches to valuation and their zones of relevance
    b. Introduction to Accounting
    c. Financial Statement Analysis and its use in valuation

Module 2: Building Financial Models for Valuation
    a. Business Drivers: The key drivers of firm value
    b. Financial modeling: Turning operating decisions into financial forecasts

Module 3: Estimating Discount Rates and the Cost of Capital
    a. The central role of discounting in valuation
    b. Estimating the cost of debt, equity and assets.
    c. The weighted average cost of capital

Module 4: Valuing Mature Businesses
    a. Equity vs. enterprise value
    b. DCF, ECF, CCF, APV and LBO approaches to valuation
    c. Relative Valuation and pricing using multiples
    d. Robust statistical estimators and their application to valuation

Midterm Exam

Module 5: Accounting-based Valuation
    a. Reconceptualizing valuation using the Edwards-Bell-Ohlson Equation
    b. Modeling intangible assets
    c. The EBO equation as a source of relative valuation shortcuts

Module 6: Valuation in Multiple Currencies and in Inflationary Environments
    a. The impact of inflation: The Modigliani-Cohn framework
    b. Restating financial statements in a hard currency
    c. Valuing foreign firms and multinationals

Module 7: Venture Capital and Private Equity (with case studies)
    a. Venture Capital: Valuing young firms while they are still private
    b. Private Equity: Modeling value creation in Mergers and Acquisitions
    c. Class discussion with Venture Capitalists and entrepreneurs

Project Presentations

Final Exam