Class Syllabus

Financial Modeling is designed to give students practical corporate finance analysis, applying finance and accounting skills learned in prior classes. Fordham participants will have completed Financial Accounting I and II, Financial Management and Investment and Securities (or currently be enrolled) prior to enrolling in this class. **This class will emphasize “hands-on” modeling, via in-class and homework assignments. Knowledge of how to build and analyze financial models is an essential skill in today’s world.**

Depending on the pace of the class, we will follow the following framework:

- **Introduction to Financial Statement Modeling**
  We will review basic finance and accounting as an introduction to the class and various types of financial modeling

- **Pro Forma Financial Statement Modeling**
  - Income Statement – create a fully functional Income Statement modeling in key drivers
  - Balance Sheet / Working Capital Schedule / Depreciation Schedule - create a fully functional Balance Sheet and supportive schedules modeling in key drivers
  - Cash Flow Statement / Debt Schedule – create a fully functional Cash Flow Statement and Debt Schedule modeling in key drivers
  - Financial Ratio Analysis

- **Valuation**
  - Discounted Cash Flow Analysis
  - Comparable Company Analysis
  - Precedent Transaction Analysis

- **Advanced Microsoft Excel Understanding**
  We will devote classes dedicated to more advanced excel modeling and functionality. We will analyze numerous financial problems, including:
  - Valuation Risk – sensitivity testing using Excel “What If” functionality.
  - Capital Budgeting – evaluating and ranking potential investment projects; Excel NPV, IRR, MIRR, Data Tables, Goal Seek. Optimal budgeting under resource constraints.
  - Cost of Equity – understanding, using and comparing the single factor capital asset pricing model (CAPM) the three factor Fama-French model and the Gordon Growth Model
  - Forecasting Key Drivers - modeling key drivers using linear regression; e.g., cost of goods sold vs. sales; Excel TREND, FORECAST, LINEST, Data Analysis ToolPak
  - Portfolio Optimization – an introduction to bootstrapping (statistical resampling); various objective functions examined; Sharpe ratio, Downside Risk, VAR; Excel Solver
  - Financial Statement Simulation – an introduction to Monte Carlo using Excel; e.g., maximize expected profit, determine production quantity, when demand has a discrete probability distribution; Excel RAND(), VLOOKUP, Data Table


- **Final Project:** Creation of a Fully Functional Model with DCF and Comps Analysis

- **Grade is** 40% Midterm Exam; 40% Final Exam OR Final Project; 20% Homework, Participation, and Contribution.