**NEW YORK UNIVERSITY**

Stern School of Business

Financial Modeling & Analysis

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| **Professor:** David M. Perkal | **E-mail:** dmp222@stern.nyu.edu |
| **Office:** 10-87 | **Office Hours:** By Appointment Only |

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| **Lectures:** M & W 9:30 – 12:25 pm (Tisch xxx) |
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| **Teaching Assistant:** TBD (xxx@stern.nyu.edu) |

**Course Overview**

The goal of this course is to instruct step-by-step how to prepare a comprehensive, multi-purpose, normalized projection model in Excel, which is pro forma for a contemplated acquisition and recapitalization of the company. You will subsequently interpret selective operating, credit and equity valuation data. Based on this information, you will learn how to (i) evaluate a company’s operating and financial performance, (ii) develop an appropriate capital structure by structuring debt and equity transactions which not only protect both the creditors and shareholders, but also create an appropriate risk and reward equilibrium, and (iii) formulate an educated investment opinion and propitiously time entry and exit trading points.

**Task**

By the first lecture, you will select a publicly-traded company listed on either the NYSE or NASDAQ. A list of all of the companies comprising the primary S&P indexes, i.e. S&P 500 (large cap), S&P 400 (mid cap) and S&P 600 (small cap) is posted on the course website to assist in your selection. However, you should neither select a financial services company nor a company with a financial services division to analyze as it can be difficult to navigate. You will print the most recent 10-K, 10-Q and any other relevant SEC filings such as an 8-K from www.sec.gov. These filings will serve as primary source documents for the project and provide the requisite foundation for building your assumptions embedded in your financial model. You should also avail yourself of recent press releases, news stories and any other pertinent information, which will ultimately deepen your knowledge of the company.

We will embark on the endeavor by introducing an acquisition and recapitalization transaction, which you will include in your model. You will then input into Excel three years of normalized historical and LTM financial information, i.e. income statements, balance sheets and statements of cash flows. You will then begin to build a five-year projection model similar to the one we will be utilizing in class, which entails developing three case scenarios, i.e., downside, base and upside, and generating summary operating, credit and equity valuation data. The summary operating data will include profitability and liquidity statistics. The summary credit data will include capital structure and solvency statistics. The summary equity valuation data will include a discounted cash flow (DCF) valuation and several relative valuation multiples such as Price/Earnings, Price/Sales, Enterprise Value/EBITDA, Enterprise Value/Sales and Free Cash Flow Yield.

**Course Materials**

There is no textbook for the course. During the lectures, we will be utilizing a projection model in Excel to which you will have access via the course website. Each class you will need to bring your company 10-K, most recent 10-Q and a laptop with any version of Excel with sufficient battery power to last throughout the class session as you will be required to replicate the techniques learned to build your own financial model.

**Grading**

On or before the last day of class, you will print your financial model and append it to your written report, which should not exceed 30 pages. Late submissions will receive a grade of zero. Your report should contain:

* A brief introduction to the company, its products and/or services, locations, competitive advantages, major customers, major suppliers, senior management, board of directors, auditing firm, and any major changes including acquisitions, divestitures or lawsuits.
* A brief discussion of and rationale for each assumption in the income statement and balance sheet for the three scenarios corroborated by historical performance, recent developments and anticipated results.
* A brief analysis of the profitability, liquidity and solvency statistics in the downside scenario only as the goal is to assess the company’s ability to generate cash flow and manage leverage in a challenging operating environment.
* A brief discussion of the equity valuation attained with the DCF and relative value multiples, your investment opinion, and technical indicators.

The total number of points a student can attain is one hundred. *There is no curve*, and the letter grade assigned is based on the following scoring system:

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| 94 and above: | A |
| 90 to 93.75: | A- |
| 87 to 89.75: | B+ |
| 84 to 86.75: | B |
| 80 to 83.75: | B- |
| 77 to 79.75: | C+ |
| 74 to 76.75: | C |
| 70 to 73.75: | C- |
| 67 to 69.75: | D+ |
| 64 to 66.75: | D |
| 60 to 63.75: | D- |
| 59.75 and below: | F |

**Academic Integrity**

Our undergraduate [Academics Pillar](https://www.stern.nyu.edu/programs-admissions/undergraduate/why-stern/our-pillars) states that ***we take pride in our well-rounded education and approach our academics with honesty and integrity***. Indeed, integrity is critical to all that we do here at NYU Stern. As members of our community, all students agree to abide by the NYU Stern Student Code of Conduct, which includes a commitment to:

* Exercise integrity in all aspects of one's academic work including, but not limited to, the preparation and completion of exams, papers and all other course requirements by not engaging in any method or means that provides an unfair advantage.
* Clearly acknowledge the work and efforts of others when submitting written work as one’s own. Ideas, data, direct quotations (which should be designated with quotation marks), paraphrasing, creative expression, or any other incorporation of the work of others should be fully referenced.
* Refrain from behaving in ways that knowingly support, assist, or in any way attempt to enable another person to engage in any violation of the Code of Conduct. Our support also includes reporting any observed violations of this Code of Conduct or other School and University policies that are deemed to adversely affect the NYU Stern community.

The Stern Code of Conduct and Judiciary Process applies to all students enrolled in Stern courses and can be found here: <https://www.stern.nyu.edu/uc/codeofconduct>.

To help ensure the integrity of our learning community, prose assignments you submit to Brightspace will be submitted to Turnitin. Turnitin will compare your submission to a database of prior submissions to Turnitin, current and archived Web pages, periodicals, journals, and publications. Additionally, your document will become part of the Turnitin database.

**General Conduct & Behavior**

Students are also expected to maintain and abide by the highest standards of professional conduct and behavior.  Please familiarize yourself with Stern's Policy in Regard to In-Class Behavior & Expectations (<http://www.stern.nyu.edu/portal-partners/current-students/undergraduate/resources-policies/academic-policies/index.htm>) and the NYU Student Conduct Policy (<https://www.nyu.edu/about/policies-guidelines-compliance/policies-and-guidelines/university-student-conduct-policy.html>).

**Grading Guidelines**

At NYU Stern, we strive to create courses that challenge students intellectually and that meet the Stern standards of academic excellence. To ensure fairness and clarity of grading, the Stern faculty have agreed that for elective courses the individual instructor or department is responsible for determining reasonable grading guidelines.

**Student Accessibility**

If you will require academic accommodation of any kind during this course, you must notify me at the beginning of the course and provide a letter from the Moses Center for Student Accessibility (212-998-4980, [mosescsa@nyu.edu](mailto:mosescsd@nyu.edua)) verifying your registration and outlining the accommodations they recommend. For more information, visit the CSA website: <https://www.nyu.edu/students/communities-and-groups/student-accessibility.html>.

**Student Wellness**

Our aim is for students to be as successful academically as they can, and to help them overcome any impediments to that. Bookmark the NYU Stern Well-being Resource Hub (https://www.stern.nyu.edu/wellbeing) for existing services at NYU and Stern covering a wide variety of topics including financial well-being, relationship well-being, mental well-being, and more. Any student who may be struggling and believes this may affect their performance in this course is urged to contact the Moses Center for Student Accessibility (see also the Student Accessibility section of this syllabus) at 212-998-4980 to discuss academic accommodations. If mental health assistance is needed, call the NYU’s 24/7 Wellness Exchange hotline at 212-443-9999. Furthermore, please approach me if you feel comfortable doing so. This will enable me to provide relevant resources or referrals. There are also drop-in hours and appointments. Find out more at

<http://www.nyu.edu/students/health-and-wellness/counseling-services.html.>

**Name Pronunciation and Pronouns**

NYU Stern students now have the ability to include their pronouns and name pronunciation in Albert. I encourage you to share your name pronunciation and preferred pronouns this way. Please utilize this link for additional information: [Pronouns & Name Pronunciation](https://www.nyu.edu/students/student-information-and-resources/registration-records-and-graduation/forms-policies-procedures/pronouns-and-name-pronunciation.html).

**Religious Observances and Other Unique Situations**

NYU Stern is committed to ensuring an equitable educational experience for all students regardless of identity or religious/cultural background. The observance of religious and cultural holidays/traditions and the recognition of unique circumstances - such as serving as a caregiver - are important aspects of this commitment. Please review all class dates at the start of the semester and review all course requirements to identify any foreseeable conflicts with exams, course assignments, projects, or other items required for participation and attendance. Please contact me within the first two weeks of the class semester to discuss any potential conflicts.

***\*Or if full attendance is required in your class as long as the university is holding classes:***

While NYU Stern is committed to ensuring an equitable educational experience for all students regardless of identity or religious/cultural background, New York University determines when the institution is open for classes. If the observance of religious and cultural holidays/traditions and/or the recognition of unique circumstances - such as serving as a caregiver will prevent you from attending class, please be aware that this particular course requires 100% attendance. Please review all class dates to ensure you can attend all of them. If you identify any foreseeable conflicts with class attendance, exams, or other items required for participation and attendance, it is strongly recommended that you do not take this class.