

Advanced Corporate Finance B7307

Spring 2022

Syllabus

INSTRUCTOR

Professor: Neng Wang

E-mail: neng.wang@gsb.columbia.edu

Web: <http://www0.gsb.columbia.edu/faculty/nwang>

All course announcements will take place on Canvas. Please regularly check for Canvas announcements. Email is the best way to reach me and ask any course related questions.

COURSE DESCRIPTION

Our Course, Advanced Corporate Finance, develops the **art and science** of optimal strategic decision-making by applying corporate financial theory to cases of financial policy, financial instruments and valuation. This course takes the viewpoint of the CFO of a firm. The CFO's job is to maximize firm value and deal with three types of decisions: 1) which projects to invest in, 2) how to finance that investment, and 3) how to manage the liquidity of the firm. This is an applied course that will use a combination of lectures and case studies. This course is a continuation of the core course Corporate Finance.

The course consists of four main modules:

- 1) **Cash Management:** The course starts with the concept and tools of cash management. Cash management is necessary to forecast financing needs and to value assets. We will introduce the corporate liquidity and risk management framework. The main tools we will discuss include ratio analysis and pro forma statements.
- 2) **Financing:** The course continues with analyzing the factors that determine a company's need for external financing. We then move on to a consideration of the optimal mix of debt and equity, often referred to as capital structure. We will also discuss hybrid instruments (e.g., convertible debt).

- 3) **Investing and Valuation:** In the third module, we develop the framework and tools needed for valuing investment projects. We will discuss different valuation methods and learn how to use them to select investment projects and evaluate companies.
- 4) **Topics:** In the last module, we use the framework and tools learned in this course to explore some important topics in the real world, e.g., leveraged buyouts (LBOs), private equity, venture capital, and M&As.

I will revise and fine-tune the course plan as I learn more about how you learn and where the highest value-add for you may lie.

We integrate theory with practice by organically blending lectures with cases. For each case, I will assign case questions and you will submit a two-page memorandum with your proposed answers to these questions. The rules for writing memoranda are as follows:

- Each memorandum should be typed and not exceed two pages (double-spaced).
- The two-page limit is for text only; you may attach as many numerical calculations as you wish.
- Write these as if you were writing a recommendation to a CEO (or other major decision maker).

Corporate Finance and *Capital Markets & Investments* are prerequisites. I expect that students are comfortable with the following topics: time value of money, discounted cash flow analysis, risk-return trade-off, valuation of bonds and stocks, Capital Asset Pricing Model (CAPM). The course is designed to be self-contained.

Schedule and classroom: We follow the Sat EMBA schedule and class will take place on Zoom.

Teaching assistant: Nanyu Chen @ NChen25@gsb.columbia.edu

TEXTBOOKS AND MATERIALS

The following items are required:

- *Teaching notes.* They will be posted on Canvas. These are your primary reference materials for the class.
- *Case Materials and Assignments.* All case readings and assignments are posted on Canvas.

The two textbooks (in **bold**), references, and recommended regular readings are:

- **Brealey, Myers, and Allen, *Principles of Corporate Finance*, 13th ed., Irvin, McGraw-Hill, 2020**
- **Higgins, *Analysis for Financial Management*, 12th ed., Irvin, McGraw-Hill, 2018**
- Berk and DeMarzo, *Corporate Finance*, Pearson, 5th edition, 2020.
- McKinsey & Company Inc., Koller, Goedhart, and Wessels, *Valuation: Measuring and Managing the Value of Companies*, 7th edition, Wiley, 2020.
- The *Wall Street Journal* (or *Financial Times*) is important reading for business major students. I also recommend that you read *The Economist*.

REQUIREMENTS AND GRADING

Case Memoranda: 50%

- Students should form teams with 2 to 4 members, and hand in one memorandum per team. While in principle you can work on each assignment by yourself, I strongly encourage you to form a team and collaborate with others.
- Follow the rules for writing case memoranda outlined under Course Description.
- Case memoranda should be submitted electronically through Canvas strictly before the class time on the case analysis due date. Late submission will not be accepted.
- Each team is required to hand in all memoranda.
- Each group member must make a substantial contribution to each part of the assignment. You should not divide the assignments amongst the team members
- Each memorandum is graded on a 4-scale basis: H, HP, Pass, and Fail.
- All requests for re-grades should be submitted, in writing, within two weeks of my returning cases to you. You need to submit a detailed description of your request.
- A main goal of homework assignments is to prepare you for in-class discussions and participations. There is no need to shoot for perfect answers. The key is to understand core concepts and be able to use the tools intelligently.

Final Exam: 50%

- Take-home exam.
- Will be distributed on March 26th in class, due by April 9th midnight on Canvas

- The best way to prepare for the final exam is to prepare for the course every day, attend class, and actively participate.

All course requirements are subject to the CBS Honor Code. Violations of the CBS Honor Code may lead to failing the assignment, failing the course, suspension, and/or dismissal.

INCLUSION, ACCOMMODATIONS, AND SUPPORT FOR STUDENTS

At Columbia Business School, we believe that diversity strengthens any community or business model and brings it greater success. Columbia Business School is committed to providing all students with the equal opportunity to thrive in the classroom by providing a learning, living, and working environment free from discrimination, harassment, and bias on the basis of gender, sexual orientation, race, ethnicity, socioeconomic status, or ability.

Columbia Business School will make reasonable accommodations for persons with documented disabilities. Students are encouraged to contact the Columbia University's Office of Disability Services for information about registration. Students seeking accommodation in the classroom may obtain information on the services offered by Columbia University's Office of Disability Services online at www.health.columbia.edu/docs/services/ods/index.html or by contacting (212) 854-2388.

Columbia Business School is committed to maintaining a safe environment for students, staff and faculty. Because of this commitment and because of federal and state regulations, we must advise you that if you tell any of your instructors about sexual harassment or gender-based misconduct involving a member of the campus community, your instructor is required to report this information to a Title IX Coordinator. They will treat this information as private, but will need to follow up with you and possibly look into the matter. Counseling and Psychological Services, the Office of the University Chaplain, and the Ombuds Office for Gender-Based Misconduct are confidential resources available for students, staff and faculty. "Gender-based misconduct" includes sexual assault, stalking, sexual harassment, dating violence, domestic violence, sexual exploitation, and gender-based harassment. For more information, see <http://sexualrespect.columbia.edu/gender-based-misconduct-policy-students>.