

## **Advanced Corporate Finance FINCB8307**

**Spring 2024**

### **Syllabus**

#### **INSTRUCTOR**

Professor: Xavier Giroud  
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Communications from the professor and the teaching assistant about the course will take place through Courseworks. Students should make sure they regularly check for announcements and notifications.

#### **COURSE DESCRIPTION**

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 these investments, 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. The course also has a financial analytics component, in that we will often use spreadsheets to evaluate investment projects and run scenario analyses. This course will provide a toolbox—the “tools” of corporate finance—that are of relevance for any career path in corporate finance and investment banking. This course is a continuation of the core course Corporate Finance (B6300/B5300).

The course consists of three main modules:

- 1) **Cash Management:** The course starts with the tools of cash management. Cash management is necessary to forecast financing needs and to value assets. 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 instruments. We will also discuss hybrid instruments (e.g., convertible debt).
- 3) **Investing:** In the third module, we develop the 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 in the context of mergers and acquisitions (M&A), Leveraged Buyouts (LBO), and Private Equity (PE) deals.

## **ADMINISTRATION**

### Schedule and classroom:

- Section 1: M/W 9:00am – 10:30am, Kravis-870
- Section 2: M/W 10:50am – 12:20pm, Kravis-870

### Prerequisites:

Complete any of the following courses:

- B6300: Corporate Finance (Full-Term)
- or B6301: Foundations of Valuation
- or B5300: Corporate Finance

### Corequisites:

Must be enrolled in any of the following courses:

- B8306: Capital Markets & Investments
- or B7306: Capital Markets & Investments

### Teaching assistant:

- TBA

## **TEXTBOOKS AND MATERIALS**

The following items are required:

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

The (optional) textbooks are:

- R. Brealey, S.C. Myers, and F. Allen, *Principles of Corporate Finance*, 13th ed., Irvin, McGraw-Hill.
- R.C. Higgins, *Analysis for Financial Management*, 10th ed., Irvin, McGraw-Hill.

## **CLASS PROCEDURE**

This course consists of a combination of lectures and case studies. For each case, I will assign case questions and you will have to submit a two-page memorandum with your proposed answers to these questions. You are allowed and encouraged, but not required, to meet in groups outside of class to discuss and analyze the cases. If you choose to do so, the group cannot be larger than four students. I will accept one memorandum from the group and count it for all students in the group. Each group member must make a substantial contribution to each part of the assignment. It is not acceptable, e.g., to divide the assignments amongst the team members.

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).

Case memoranda should be submitted electronically through Courseworks strictly before 9:00am on the day in which they are due. Late submission will not be accepted.

## **REQUIREMENTS AND GRADING**

### **Case memoranda: 50%**

- Students should form teams of 1 to 4, and submit one memorandum per team.
- Follow the rules for writing case memoranda (see above).
- Memoranda should be submitted by 9:00am on the due date.
- Each team is required to hand in all memoranda.
- Each memorandum is graded on a 4-scale basis: Pass+, Pass, Pass-, and Fail.
- Grading of homework will be on the basis of *effort*, not correctness. My view is that if students can do the homework perfectly before class there is little reason to attend. The purpose of homework is to ensure preparation before class.

### **Final exam: 50%**

- Take-home exam.
- Will be distributed on April 24 at 9:00am, due by May 1 at 9:00am.
- 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](http://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>.

**COURSE SCHEDULE**

Class #	Day	Date	Topic	Assignments
<b>Part I: Cash Management</b>				
1	Monday	1/22	Lecture: Cash Management (Part I)	
2	Wednesday	1/24	Case Study: Wilson Lumber (Part I)	
3	Monday	1/29	Lecture: Cash Management (Part II)	
4	Wednesday	1/31	Case Study: Wilson Lumber (Part II)	Assignment #1
5	Monday	2/5	Case Study: Playtime Toy	Assignment #2
6	Wednesday	2/7	Case Study: SureCut Shears	Assignment #3
<b>Part II: Financing</b>				
7	Monday	2/12	Lecture: Capital Structure (Part I)	
8	Wednesday	2/14	Case Study: Massey-Ferguson	Assignment #4
9	Wednesday	2/21	Lecture: Capital Structure (Part II)	
10	Monday	2/26	Case Study: Intel	Assignment #5
11	Wednesday	2/28	Case Study: MCI	
<b>Part III: Investing</b>				
12	Monday	3/18	Lecture: Valuation (Part I)	
13	Wednesday	3/20	Lecture: Valuation (Part II)	
14	Monday	3/25	Case Study: Diamond	Assignment #6
15	Wednesday	3/27	Lecture: Real Options	
16	Monday	4/1	Lecture: Cost of Capital	
17	Wednesday	4/3	Case Studies: Arundel and Ameritrade	Assignment #7
18	Monday	4/8	Lecture: WACC and APV	
19	Wednesday	4/10	Lecture: Company Valuation	
20	Monday	4/15	Case Study: Cooper	Assignment #8
21	Wednesday	4/17	Case Study: Southland	Assignment #9
22	Monday	4/22	Review	
23	Wednesday	4/24	Final Exam	

## **COURSE OUTLINE**

### **Part I: Cash Management**

#### **1 – Lecture: Cash Management (Part I)**

- Reading:
  - Higgins, ch. 1: “Interpreting Financial Statements”
  - Brealey, Myers, Allen, ch. 14: “An Overview of Corporate Financing”

#### **2 – Case Study: Wilson Lumber (Part I)**

#### **3 – Lecture: Cash Management (Part II)**

- Reading:
  - Brealey, Myers, Allen, ch. 28: “Financial Analysis”
  - Higgins, ch. 2: “Evaluating Financial Performance”
  - Higgins, ch. 3: “Financial Forecasting”
  - Higgins, ch. 4: “Managing Growth”

#### **4 – Case Study: Wilson Lumber (Part II)**

#### **5 – Case Study: Playtime Toy**

#### **6 – Case Study: SureCut Shears**

### **Part II: Financing**

#### **7 – Lecture: Capital Structure (Part I)**

- Reading:
  - Brealey, Myers, Allen, ch. 17: “Does Debt Policy Matter?”
  - Brealey, Myers, Allen, ch. 18: “How Much Should a Firm Borrow?”
  - Higgins, ch. 5: “Financial Instruments and Markets”
  - Higgins, ch. 6: “The Financing Decision”

#### **8 – Case Study: Massey-Ferguson**

- Reading:
  - Myers: “The Search for Optimal Capital Structure”

#### **9 – Lecture: Capital Structure (Part II)**

**10 – Case Study: Intel**

- Reading:
  - Brealey, Myers, Allen, ch. 16: “Payout Policy”
  - Opler, Pinkowitz, Stulz, Williamson, “Corporate Cash Holdings”

**11 – Case Study: MCI**

- Reading:
  - Brealey, Myers, Allen, ch. 15: “How Corporations Issue Securities”
  - Brealey, Myers, Allen, ch. 24: “The Many Different Kinds of Debt”
  - Jen, Choi, Lee, “Some New Evidence on Why Companies Use Convertible Bonds”

**Part III: Investing****12 – Lecture: Valuation (Part I)**

- Reading:
  - Higgins, ch. 7: “Discounted Cash Flow Techniques”

**13 – Lecture: Valuation (Part II)****14 – Case Study: Diamond Chemicals****15 – Lecture: Real Options**

- Reading:
  - Brealey, Myers, Allen, ch. 22, “Real Options”
  - Luehrman, “Investment Opportunities as Real Options”

**16 – Lecture: Cost of Capital**

- Reading:
  - Brealey, Myers, Allen, ch. 9: “Risk and the Cost of Capital”

**17 – Case Study: Arundel Partners and Ameritrade****18 – Lecture: WACC and APV**

- Reading:
  - Brealey, Myers, Allen, ch. 19: “Financing and Valuation”
  - Higgins, ch. 8: “Risk Analysis in Investment Decisions”

**19 – Lecture: Company Valuation**

- Reading:
  - Higgins, ch. 9: “Business Valuation and Corporate Restructuring”
  - Brealey, Myers, Allen, ch. 31: “Mergers”

**20 – Case Study: Cooper****21 – Case Study: Southland****22 – Review****23 – Final Exam**