

## Corporate Finance

Department: Fudan International Summer Session

<b>Course Code</b>	MANA170009		
<b>Course Title</b>	Corporate Finance		
<b>Credit</b>	2	<b>Credit Hours</b>	36+3 tutorial hours (one credit hour is 45 minutes)
<b>Course Nature</b>	<input type="checkbox"/> Specific General Education Courses <input type="checkbox"/> Core Courses <input checked="" type="checkbox"/> General Education Elective Courses <input type="checkbox"/> Basic Courses in General Discipline <input type="checkbox"/> Professional Compulsory Courses <input type="checkbox"/> Professional Elective Courses <input type="checkbox"/> Others		
<b>Course Objectives</b>	<p>After you finish the course, you are supposed to</p> <ul style="list-style-type: none"> <li>● Understand the basic concepts in finance, such as discounting, present value, future value, annuities, net present value and compound interest.</li> <li>● Calculate project NPV, Payback Period and IRR based on the <i>pro forma</i> financial statements.</li> <li>● Make typical investment decision in firms with the NPV rule.</li> <li>● Calculate WACC with proper estimation of cost of debt, cost of equity and the debt and equity ratio.</li> <li>● Understand the implicit costs in debt and equity financing and the factors that would affect a company's capital structure decisions.</li> </ul>		
<b>Course Description</b>	<p>This is a preliminary course in finance major. The objective is to provide students with fundamental financial concepts and theories as well as the applications in making corporate financial decisions. It is also a precedent of many advanced courses in the finance track, including Financial Markets and Institutions, Investments, Futures and Options, and Multinational Business Finance.</p> <p>The teaching content is composed of four parts. Part I introduces basic concepts in finance such as financial assets, opportunity cost, PVs, FVs, and NPVs. Part II demonstrates how to make firm investment decisions based on the calculation of project PV and other criteria. Part III explains why the opportunity cost of capital (the required rate of return, or the discount rate) is determined in the security market, or, the CAPM. Part IV discusses financing decisions, mainly how to financing with debt and equity and decide the optimal capital structure. Short-term financial decisions, financial statements analysis and other advanced topics in corporate finance will <b>NOT</b> be covered.</p>		

<p><b>Course Requirements:</b> Prerequisite courses include Introductory Micro Economic/Managerial Economics and Introductory Accounting. Students are required to attend each class, complete the take-home assignments and take the examinations. Raising questions and discussions in the class are greatly encouraged.</p>	
<p><b>Teaching Methods:</b> 75% lecturing, 15% class exercises, 10% class discussion</p>	
<p><b>Instructor's Academic Background:</b> Dr. ZHANG is currently an associate professor in the Department of Finance, School of Management, Fudan University. She got her PhD in Management Science and Engineering in Fudan University, her master's degree in Computer Science and Engineering at Southeast University, and her bachelor's degree in Computer Science in East China Normal University. She has worked as a visiting scholar in Columbia University (2008-2009) and MIT Sloan School of Management (2000). Email: xrzhang@fudan.edu.cn</p>	
<p><b>Course Schedule:</b></p> <p>Class 1 Introduction to Corporate Finance</p> <ol style="list-style-type: none"> <li>1. Course Information</li> <li>2. What is Corporate Finance/Financial Management?</li> <li>3. Financial Management Environment: Financial Assets and Financial Markets</li> <li>4. Financial Decisions: Investment vs. Financing</li> </ol> <p>READING: BMA Chapter 1, 14-4</p> <p>Class 2 How to Calculate Present Values (1)</p> <ol style="list-style-type: none"> <li>1. Corporate Structure and Corporate Governance</li> <li>2. Review of Financial Statements (B/S and I/S)</li> <li>3. Discount and Present Value, Net Present Values</li> </ol> <p>READING: BMA Chapter 2-1, 2-2 ASSIGNMENTS: Chapter 2-13, 15, 19(a)(b),</p> <p>Class 3 How to Calculate Present Values (2)</p> <ol style="list-style-type: none"> <li>1. Discount rate and Opportunity Cost of Capital</li> </ol>	

2. PV Calculation Short Cuts

3. Compound Interest

READING: BMA Chapter 2-3, 2-4

ASSIGNMENTS: Chapter 2-19(c)(d)(e), 22, 25(a)(b)(c)

Class 4 NPV and Other Investment Criteria

1. Payback, IRR, PI

2. Class Quiz 1

READING: BMA Chapter 5-1, 5-2, 5-3, 5-4

ASSIGNMENTS: Chapter 2-28(a)(b), 29; Chapter 5-8, 10, 12, 14

Class 5 Making Investment Decisions with the NPV Rule (1)

1. Comparing the Criteria

2. Illustrative Case: Investment Criteria Do Not Solve All Your Problems

3. Four Rules in Estimating CFs

4. Cash Flow Analysis: Investment CF, Salvage CF, OCF and  $\Delta$ NWC

READING: BMA Chapter 6-1, 6-2, 6-3

ASSIGNMENTS: Chapter 6-5, 15, 16

Class 6 (July 18th, 2019) Making Investment Decisions with the NPV Rule (2)

1. Project Uncertainty: the "Expected" is Not Necessarily the Result

2. Choice between Long- and Short-Lived Equipment

➤ Equivalent Annual Cost (EAC)

➤ Equivalent Annual Cash Flow (EACF)

3. Problem Solving in Class

READING: BMA Chapter 6-3, 6-4, 10-1

ASSIGNMENTS: Chapter 6-8, 29(a)(b)

Class 7 Valuing Bonds

1. Using PV Formulas to Value Bonds

2. How Bond Prices Vary With Interest Rates

3. Class Quiz 2

READING: BMA Chapter 3-1, 3-2, 3-6

ASSIGNMENTS: Chapter 3-4, 10, 16, 17

Class 8 Valuing Common Stocks

1. DDM Model: Stock Prices and Dividends

2. Capitalization Rates and the Cost of Equity Capital
  3. PVGO: Valuing Growth
  4. Link between Stock Price and EPS
- READING: BMA Chapter 4-1, 4-2, 4-3, 4-4, 4-5  
ASSIGNMENTS: Chapter 4-18, 20, 23, 28

Class 9 How Firms Issue Securities

1. External Financing vs. Internal Funds
  2. Debt Types
  3. Financing with Equity Capital: VC, IPO and Seasoned Offerings
  4. Understanding WACC with CAPM
- READING: BMA Chapter-14-1, 14-2, 14-3, 15-1, 15-2, 15-4, 15-5; 9-1, 9-2  
ASSIGNMENTS: Chapter 15-14,15; Chapter 9-11, 14

Class 10 WACC and Financial Leverage

1. How Debt Affects Equity Beta
  2. How Debt Affects After-tax WACC
  3. Class Quiz 3
- READING: BMA Chapter 17-1, 17-2, 17-3, 17-4  
ASSIGNMENTS: Chapter 17-11, 12, 13, 19

Class 11 Trade-off Theory in Borrowing

1. Benefit from Borrowing: Interest Tax-shield
  2. Implicit Costs in Borrowing: Cost of Financial Distress
  3. Course Wrap-up and Problem Solving
- READING: BMA Chapter 18-1, 18-3  
ASSIGNMENTS: Chapter 18-12, 15

Class 12 Final Exam (individual, with one cheating sheet)

**The design of class discussion or exercise, practice, experience and so on:**

I encourage students to attend my tutorial hours to discuss questions either on class material, problems on exams or related subject matter. This course is very comprehensive and requires a lot of exercise.

**Grading & Evaluation:**

Class Attendance: 10%

5 take-home assignments: 20% (4 submissions, 5% each, Will be checked by the TA)

Class quizzes: 20% (choose best 2 out of 3, 10% each)

Final: 50% (Cumulative, closed-book with one cheating sheet)

Passing grade: 60, below 60 = fail

No make-up exam

**Teaching Materials & References:**

Richard A. Brealey, Stewart C. Myers, Franklin Allen, *Principles of Corporate Finance*, McGraw Hill, 12th Edition, McGraw-Hill International Edition, 2018 (BMA)