

Principles of Finance

Core course · MBA and undergraduate students · Sample syllabus

Course number	TBD — 3 credit hours
Term	TBD
Meeting time	TBD
Location	TBD
Instructor	Yichen Wang
Office	TBD
Office hours	TBD, and by appointment
Email	TBD — replies within one business day
Course site	TBD (learning management system)

COURSE DESCRIPTION

Principles of Finance is a core course for MBA and undergraduate students and assumes no prior coursework in finance. Finance is the study of how firms and investors allocate scarce capital across competing uses and over time. This course develops a single organizing idea, that a decision creates value only when the cash it generates is worth more than the cash it consumes, and equips students to apply that idea rigorously. We begin with the mechanics of discounting, move to capital budgeting and the valuation of bonds and equities, and then turn to the pricing of risk, the cost of capital, and the financing decisions that determine how a firm funds itself.

The emphasis throughout is on judgment as much as technique. Students will build valuation models, but they will also be asked repeatedly what the model assumes, where the estimates come from, and how much the answer moves when those estimates are wrong. By the end of the term, students should be able to read a set of financial statements, construct a defensible valuation, and explain a recommendation to a decision maker who is not a finance specialist.

PREREQUISITES

Introductory financial accounting, or permission of the instructor. Working familiarity with basic statistics and with spreadsheet software is assumed. No prior finance coursework is required.

REQUIRED MATERIALS

- Ross, Westerfield, Jaffe, and Jordan, *Corporate Finance*, 12th edition or later. Earlier editions are acceptable; chapter numbers in the schedule follow the 12th edition.
- A financial calculator (Texas Instruments BA II Plus or Hewlett-Packard 12C recommended) or a scientific calculator with exponent functions.
- Spreadsheet software. Several sessions are conducted as modeling workshops, and students should bring a laptop to those sessions.

- Cases, data extracts, and supplementary readings distributed through the course site. No coursepack purchase is required.

LEARNING OUTCOMES

On successful completion of this course, students will be able to:

- LO1. Value streams of risky cash flows using discounting, and explain the economic meaning of present value.
- LO2. Evaluate capital investment decisions using net present value and alternative criteria, and articulate why net present value is the appropriate decision rule.
- LO3. Construct free cash flow forecasts from financial statements and build a discounted cash flow valuation in a spreadsheet.
- LO4. Measure risk and return, apply diversification and the Capital Asset Pricing Model to estimate the cost of equity, and compute a weighted average cost of capital.
- LO5. Assess how capital structure and payout decisions affect firm value under realistic frictions, including taxes, distress costs, and conflicts among claimholders.
- LO6. Communicate a financial recommendation clearly in writing and orally, stating assumptions, quantifying uncertainty, and defending the analysis under questioning.

COURSE SCHEDULE

The schedule is tentative. Adjustments may be made as the term proceeds, and any changes will be announced in class and posted to the course site. The Outcomes column maps each session to the learning outcomes above.

Week	Topic	Reading	Outcomes	Due
1	Introduction: goals of financial management	Ch. 1	—	—
2	Financial statements and cash flow	Ch. 2	LO3	—
3	Time value of money and discounted cash flow valuation	Ch. 4	LO1	<i>Problem Set 1</i>
4	Net present value and alternative investment rules	Ch. 5	LO2	—
5	Capital budgeting I: incremental free cash flows	Ch. 6	LO2, LO3	<i>Problem Set 2</i>
6	Capital budgeting II: scenario analysis and real options	Ch. 7	LO2	<i>Teams formed</i>
7	Interest rates and bond valuation	Ch. 8	LO1	<i>Problem Set 3</i>
8	Equity valuation and market multiples	Ch. 9	LO3	<i>Project proposal</i>
9	Midterm examination	—	LO1–LO3	<i>Midterm</i>
10	Risk and return: the historical record	Ch. 10	LO4	—
11	Diversification, portfolio theory, and the CAPM	Ch. 11–12	LO4	<i>Problem Set 4</i>
12	Market efficiency and its corporate implications	Ch. 14	LO4	—
13	Cost of capital: cost of equity, cost of debt, WACC	Ch. 13	LO4	<i>Problem Set 5</i>
14	Capital structure: leverage, taxes, and distress costs	Ch. 15–16	LO5	—

Week	Topic	Reading	Outcomes	Due
15	Payout policy; presentations and course synthesis	Ch. 19	LO5, LO6	<i>Report, presentation</i>
Finals	Cumulative final examination	—	LO1–LO5	<i>Final exam</i>

INSTRUCTIONAL APPROACH

Sessions combine short lectures with worked problems, case discussion, and hands-on modeling. Most classes introduce a concept and then immediately apply it to a numerical problem, a mini-case, or a live data set, with students working individually or in small groups and presenting their reasoning to the class.

Preparation is not optional. The reading is assigned before the session that covers it, and class time is used to work with the material rather than to summarize it. Students who arrive unprepared will find the sessions difficult to follow and will contribute little to their groups.

ASSESSMENT

Component	Weight	Outcomes assessed
Participation and preparation	10%	LO6
Problem sets (five, lowest dropped)	20%	LO1–LO5
Midterm examination	20%	LO1–LO3
Valuation project (team)	20%	LO3, LO4, LO6
Final examination (cumulative)	30%	LO1–LO5
Total	100%	

Participation and preparation (10%)

Participation is assessed on the quality of contribution, not the volume. Thoughtful questions, careful disagreement, and useful responses to cold calls all count. Attendance alone does not.

Problem sets (20%)

Five problem sets are assigned across the term. Students may discuss problems with classmates but must write up and submit their own solutions independently. The lowest score is dropped, which is the accommodation for illness, travel, and ordinary life; there are no separate extensions.

Examinations (50%)

The midterm covers discounting, capital budgeting, and security valuation. The final is cumulative with emphasis on the second half of the course. Both are closed book. Students may bring a calculator and one single-sided sheet of handwritten notes, which is collected with the exam.

Valuation project (20%)

Teams of three to four students select a publicly traded firm, build a discounted cash flow valuation from public filings, and defend a buy, hold, or sell recommendation in a written report and a fifteen-minute presentation. The report is assessed on the defensibility of the assumptions and the treatment of uncertainty, not on how close the estimate lands to the market price. Individual contribution is captured through a confidential peer evaluation that adjusts individual grades within the team.

GRADING SCALE

A	93–100	B	83–86.9	C	73–76.9
A–	90–92.9	B–	80–82.9	C–	70–72.9
B+	87–89.9	C+	77–79.9	F	Below 70

Final grades are not curved. Grade appeals must be submitted in writing within one week of the grade being posted and must state the specific basis for the appeal.

COURSE POLICIES

Attendance

Regular attendance is expected. Because graded work is completed during class sessions, an absence forfeits that day's in-class credit regardless of the reason. Students who anticipate missing more than two sessions should speak with the instructor early in the term.

Late work

Problem sets are due at the start of class. Late submissions receive a 20 percent deduction per calendar day. Make-up examinations are granted only for documented medical or family emergencies and require notice before the scheduled exam whenever that is possible.

Academic integrity

All work submitted must be the student's own, prepared for this course. Presenting another person's work as one's own, unauthorized collaboration, and unauthorized aid during an examination violate the University's academic integrity policy and will be reported. Sanctions range from failure of the assignment to failure of the course.

Use of generative artificial intelligence

Generative AI tools are part of professional financial analysis and are permitted in this course under two conditions. First, disclosure: any submission that used an AI tool must include a short appendix stating which tool was used, for what, and what the student changed. Second, verification: the student is responsible for every number and every claim submitted, and "the model produced it" is not a defense for an error. AI tools may not be used during examinations or on any assignment where the syllabus or the assignment sheet states otherwise.

Accessibility and accommodations

The University provides reasonable accommodations to students with documented disabilities. Students seeking accommodations should register with the disability services office and provide the instructor with their accommodation letter early in the term so that arrangements can be made in advance.

Classroom conduct

Phones are silenced and stowed. Laptops and tablets are used during modeling sessions and when the assignment calls for them, and are closed otherwise. Sessions begin on time.

Communication

Email is the primary channel outside of class, with replies within one business day on weekdays. Substantive questions about course content are better raised in class or in office hours, where other students benefit from the answer.