

FNCE 100: Financial Decision-Making
(a.k.a., Corporate Finance)
Syllabus
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Overview: This course introduces students to the practice of finance by applying finance theory to a wide range of applications in personal finance, corporate finance, banking, and asset management. The emphasis on real-world applications makes this course challenging, but hopefully more rewarding as students work on financial challenges relevant for their personal and professional lives. The key to success in the course is effort. There are ample resources and opportunities to ensure students master the material if they choose to do so.

Objectives:

1. Improve decision-making in personal and professional lives by equipping students with the knowledge and tools needed to tackle financial challenges.
2. Develop financial communication skills to better engage with senior leadership and finance professionals.
3. Provide a foundation for advanced coursework and practice.

Classroom: Class time will be spent reinforcing concepts from the readings with practical applications. As such, you are expected to come to class having completed the required reading so you can understand and participate in the discussion.

Assessment: Your course grade is based on two components:

1. Engagement (10%):
 - There are three channels through which you may participate in the course by asking and answering questions, making comments, and sharing personal and professional experiences.
 - In-class: Ask questions, share experiences.
 - Office hours: We can discuss anything you like – class related or otherwise (e.g., work or current events).
 - Email: Send me corrections/suggestions for the textbook.
2. Exams (90%):
 - Exam dates and their subject matter are detailed in the schedule below.
 - You may use any resource – books, notes, the web, AI, Excel, Sheets, calculators, etc. – to solve the exams except help from another human.
You must solve your exam by yourself.

- You may submit *one* electronic file to Canvas containing your exam answers. Excel is preferred, but other formats (Word, PDF, etc.) are perfectly acceptable.
- To receive any credit for an answer, you must show sufficient work so that we may replicate your answer.
- Each of the four exams accounts for 22.5% of your class grade. I will drop your lowest score after converting the exams to Z-scores.
- **Note:** Exam questions, like end-of-chapter questions, are based on real-world problems, which occasionally allow for more than one interpretation/answer. If you clearly state your assumptions and show all work so that we may replicate your answer, you will receive full credit for reasonable interpretations and answers consistent with financial principles.
- **Note:** You have exactly one week from the date on which the grades are made available to request a regrade. You may do so by emailing me and detailing the grading mistake. I will then regrade the *entire* exam in which case your score may go up, down, or stay the same. **The only acceptable regrade request is because of an objective error in grading.** Requests concerning point allocations (e.g., more partial credit) are invalid requests.

Resources:

- *Canvas:* All course materials are available on [Canvas](#) including the text, *Financial Decision Making (FDM)*. If you find any errors with the text or its accompanying materials, or have suggestions for improvement, please notify me. Doing so counts towards engagement and your course grade, as noted above.
- *Office hours:* Office hours are 3:30 – 4:30 PM on Mondays.
- *Classmates:* I strongly encourage you to work and study in teams to take advantage of your classmates' experience and knowledge.

Expectations:

- *Excel.* You must get comfortable using Excel on which I rely extensively. An appendix in the text contains discussion and illustrations of Excel examples from the body of the text. Additional resources are available on Canvas, and countless others on YouTube and the web. Get comfortable with this tool.
- *Prepared.* You must be prepared to engage in every class by completing the required readings. You should read to familiarize yourself with concepts, not master.

- *Communicate.* Please email me if you are having any trouble or concerns regarding the course, which while challenging should *not* be stressful.
- *Equality and Respect.* Everyone is treated equally and with respect in and out of the classroom.
- *Intellectual Property.* All content and materials (slides, cases, exams, book, etc.) used in this class are under copyright. No part of any material may be reproduced, digitized, photocopied, stored in a retrieval system, used in a spreadsheet, or otherwise reproduced, posted, or transmitted in any form or by any means without my written permission.
- *Conduct.* Your enrolment in the course signifies your agreement with the course expectations and to the [University of Pennsylvania Code of Student Conduct](#).

Schedule: Exam dates are fixed and non-negotiable. (See schedule below.) Topic dates are approximate – subject to variation in the pace of class. Our goal is to master material, not cram as much material as possible into the course.

Date	Application	Concepts	FDM* Chapters
28-Aug	Saving for retirement - Start yesterday	Time value of money, annuity, perpetuity, inflation, taxes	1; 2.1-2.4
2-Sep	Value of education - Majors matter	Opportunity cost, Net present value	2.5-2.7
4-Sep	Financing an education - students loans	Compound interest, amortization table, opportunity cost	3.1-3.4
9-Sep	Financing a home - mortgages	Shopping for a mortgage, refinancing a mortgage, paying down a mortgage early	3.6-3.9
11-Sep	MSFT Analysis and Dell FCF	Decision criteria (NPV, IRR, Payback, Money Multiples), free cash flow, DCF analysis	4; 5.1-5.3
16-Sep Exam 1 (Ch. 1 - 3)			
18-Sep	Callaway FX-1 - Baseline analysis	Decision criteria (NPV, IRR, Payback, Money Multiples), free cash flow, DCF analysis	5.4-5.5
23-Sep	Callaway FX-1 - Sensitivity analysis	Sensitivity analysis, risk exposure, goal attainment, key value drivers	6.1
25-Sep	Vanguard IT overhaul	Project selection (mutually exclusive projects)	6.2-6.3
30-Sep	Cypress Technologies Projects with different lives	Project selection with constraints Projects with different lifetimes	
2-Oct	Trading Treasuries	Fixed income, bank products, FDIC, zero coupon and coupon bonds, price quotes, yield to maturity, term structures, yield curves, returns, bond taxes, T-bills, -notes, -bonds, STRIPS	7.1-7.4
7-Oct Exam 2 (Ch. 1 - 6)			
9-Oct	Bond arbitrage and forward rates	Arbitrage, replication, forward rates, interpretations of the yield curve	7.5
14-Oct	Asset-Liability Management	Interest rate risk, duration, hedging, liability driven investment (LDI), immunization	7.6-7.10
16-Oct	Trading stock	Stock types and rights, price quotes, order types, returns, dividends, splits, expected returns, volatility	8.1-8.4
21-Oct	Valuing MSFT & EXC and analyzing the tech sector	Dividend discount, Gordon growth, total payout, and multistage models, P/E and PEG ratios	8.5-8.9
23-Oct	The Layman Dental Offer	Corporate valuation, terminal values, flow to equity method	
28-Oct	The Ferrari IPO	Market multiples, comps	
30-Oct	Portfolios - MSFT & RACE	Portfolio returns, risk - systematic and idiosyncratic, mean variance frontier	9.1-9.3
4-Nov Exam 3 (Ch. 1 - 8)			
6-Nov	Capital market line & optimal diversification	Efficient vs. inefficient portfolios, minimum variance portfolio, effect of risk-free asset	9.4-9.7
11-Nov	Where should I invest? Apple's equity cost of capital	CAPM, Market-tangency portfolio, beta, market risk premium, capital market line, security market line, idiosyncratic risk	10.1-10.4
13-Nov	alpha vs. beta and performance assessment	CAPM, beta, market risk premium, systematic risk, capital market line, security market line, idiosyncratic risk, Jensen's alpha	10.5-10.7
18-Nov	Financing an asset	Market value balance sheet, Modigliani and Miller Propositions, unlevered and levered cost of capital, weighted average cost of capital (WACC)	11.1-11.3
20-Nov	Project finance	WACC valuation, adjusted present value (APV), target leverage, predetermined debt	11.5-11.6
25-Nov	Bidding for Carter's	Leverage buyout (LBO), private equity, complex capital structures	12
27-Nov	<i>Thanksgiving - no class</i>		
2-Dec	Guest speaker	<i>Attendance is mandatory</i>	
4-Dec	Guest speaker	<i>Attendance is mandatory</i>	
9-Dec Exam 4 (Ch. 1 - 12)			