

Wisconsin School of Business Fall session - 2023 Finance 325, Corporation Finance

Instructor

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Piazza

Please use the class's Piazza page via Canvas to post your questions, so that all can benefit from them. I will be monitoring questions and providing answers. Please keep the forum professional.

Class times and location

Section 1: M-W 11am - 12:15pm, grainger 1175 Section 2: M-W 1pm - 2:30pm, grainger 1175

Instruction mode

Face-to-face

Office hours

Mondays, 3pm-5pm, in person in Grainger 3115 Wednesdays, 3pm-5pm, in person in Grainger 3115 Fridays, 8am-10am, online (link on Canvas)

Course objective

This course covers the fundamentals and goals of corporate finance and describes how

those fundamentals are applied in practice. This is a hands-on class with a heavy emphasis on quantitative applications.

Offical course description and requisites

Development of the theory, method and analytical techniques of financial management. Techniques of capital budgeting; valuation of projects and firms; theory of capital structure; dividend policy; cost of capital; mergers and acquisitions. Requisites: FINANCE/ECON 300 and ACCT I S 301 and (MATH 213, 222, or 276) and (GEN BUS 307, ACT SCI 654, ECON 400, 410, STAT/MATH 310, STAT 312, or 333 or concurrent enrollment), or declared in undergraduate Business Exchange program.

Resources

The main source of material for this course are my notes and my power point slides, all of which you can download from Canvas. No textbook is required.

I will expect you to become proficient with some advanced features of Excel. Online resources in this respect are ubiquitous but feel free to ask me if you want specific recommendations. Please bring your own laptop to class in order to perform all quantitative calculations at the same time as I do. I will post all the calculations we carry out in class to Canvas.

A significant part of the data we use in this class will come from FactSet. Please make sure your FactSet account is activated and ready to go.

On Canvas you will also find a Python notebook that replicates most of our excel calculations, and videos that show you, step by step, how the notebook was built. This is an opportunity for you to learn Python – you should take advantage of it given how valued those skills are in Finance these days. But that is entirely optional. You will not be tested in any way on the Python parts of the class.

Grading

Your numerical course grade is a weighted average of homework score (15%), score on two in-class quizzes (15%), midterm score (30%), final score (40%). I want quizzes to be low-stake opportunities to practice answering exam-like questions under timepressure. So I will only count your quizz scores if they improve your overall grade. If they don't, your couse grade will be computed as a weighted average of homework score (15%), midterm score (35%), and final score (50%). As per Wisconsin School of Business rules, the target GPA for the class will be 3.3. I will implement this objective roughly as follows:

A Top 20-25% of course grades
AB 20-25%
B 0-30%
BC 0-20%
C 0-20%
D/F 0-5%

Homework problem sets will be assigned more or less on a weekly basis. The problems are meant to make you practice/replicate what I will show you in class. Being ready for my exams means first and foremost understanding the homework fully. You will need to upload your homework in a pdf form to Canvas. You cannot upload any excel file. Your pdf should provide answers to each of my questions and a short explanation of how you reached that answer, an explanation that can include images of partial excel tables. What you turn in should be 4 pages long or less.

I encourage you to work in groups. However, each student must turn in their own write-up of answers. (Given that you will be working in groups I understand and accept that many answers will be identical to one another.)

No late assignment will be accepted, barring a documented emergency or an exception within the University's guidelines.

The midterm will take place on Thursday, November 9th, from 6:00pm to 7:45pm, and you will take it remotely. Our class meeting on Monday, November 6th will be a review session. On Wednesday, November 8th, I will hold extra office hours in our standard classroom (1175), but I will not advance the material on that day.

The final will be on Saturday 12/16/2023 from 12:25pm to 2:25pm and you will take it remotely as well.

Exams are open books and open internet. You are allowed to use any resource you want and you will perform all calculations on your own laptop. The only rule is that you cannot communicate with one another.

Make sure that your laptop is powered up and ready to go. Under no circumstances will I take computer malfunction into account in my grading. There is no exception.

Academic misconduct

Academic misconduct of any sort will result in a failing grade, as a minimum consequence, but I will also pursue all appropriate and commensurate remedies under the rules imposed by the University.

Now for the formal version: By virtue of enrollment, each student agrees to uphold the high academic standards of the University of Wisconsin-Madison; academic misconduct is behavior that negatively impacts the integrity of the institution. Cheating, fabrication, plagiarism, unauthorized collaboration, and helping others commit these previously listed acts are examples of misconduct which may result in disciplinary action. Examples of disciplinary action include, but is not limited to, failure on the assignment/course, written reprimand, disciplinary probation, suspension, or expulsion. https://conduct.students.wisc.edu/syllabus-statement/

Students who require testing accomodations

Students who qualify for testing accomodations must schedule an appointment with testing and evaluation services (please go to https://testing.wisc.edu/) who will administer the exams and enforce the appropriate time limitations. Exam appointments cannot be made prior to the official start of the exam. All exams must be completed within 24 hours of the official starting time.

Course learning outcomes

Students will:

- 1. Understand the fundamentals of capital budgeting, capital structure management, and payout policy
- 2. Be able to describe financial uncertainty and risk using the language of probability theory
- 3. Calculate the market value of options embedded in the firm and in investment projects

COVID protocols

Please follow all University rules fully and strictly when it comes to respecting the health and safety of those who are in the same classroom as you.

Credit hours

This is a 3-credit class. These are met according to the traditional Carnegie Definition: 3 times 75 minutes of classroom time and a minimum of two hours of out of class student work per hour of class over approximately 8 weeks.

Regular and substantive interaction

Students have ample opportunity for substantive interactions with the instructors on a predictable and scheduled basis commensurate with the length of time and the amount of content in the course or competency via, inter alia, both in person and virtual office hours, ample exchanges during class time, and can also request meetings with the instructor as and when needed.

List of topics and associated resources

- 1. Preliminaries
 - (a) Corporate Finance defined
 - (b) Assets and liabilities: a taxonomy
 - (c) Reading financial statements
 - (d) Valuation primer
 - (e) Fundamentals of capital budgeting
 - (f) Fundamentals of capital structure management
- 2. Risk and return
 - (a) IRR and YTM
 - (b) Notions of probability
 - (c) Diversification
 - (d) CAPM
 - (e) Factor models
- 3. The cost of capital

- (a) WACC
- (b) Corporate debt
- (c) Fundamental equation of debt design
- (d) The market value of debt
- (e) Hybrids
- (f) The cost of equity
- (g) Buiding WACC in practice
- 4. Capital budgeting
 - (a) Cash flow
 - (b) Capital budgeting credo
 - (c) Detailed case: Investing in a plastic injection plant
 - (d) Build or rent?
 - (e) WACC circularities
 - (f) Company WACC vs project WACC
 - (g) Target WACC
- 5. Capital structure management
 - (a) Modigliani-Miller
 - (b) Trade-off theory
 - (c) Other consequences of capital policy
 - (d) The case of mezzanine finance
- 6. Payout policies
 - (a) Dividends vs. buy-backs
 - (b) Dividend dates and types
 - (c) Irrelevance results
 - (d) Optimal payout policy with frictions
- 7. The value of flexibility
 - (a) Optionality and capital budgeting
 - (b) The option to abandon
 - (c) The option to delay refinancing
 - (d) Equity as a call option