

## Corporate Finance (BusFin 4211)<sup>1</sup> Spring 2016

## 1 Instructor

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#### 1.1 Sections

Section	Days	Time	Location
4460	Tuesday/Thursday	8:00am-9:20am	Schoenbaum 205
4459	Tuesday/Thursday	9:35am-10:55am	Schoenbaum 205
4462	Tuesday/Thursday	11:10am-12:30pm	Schoenbaum 205

#### 1.2 Office Hours

My office hours are Tuesday and Thursday 2:30–3:30pm.

## 2 Course Description

This course has two main goals. The first one is to deepen students' understanding of the capital budgeting, cost of capital, and valuation concepts introduced in BusFin 3220, and to give students an opportunity to practice applying these concepts to real world companies and situations. The second main goal is to develop students' understanding of how capital structure and payout policy choices affect firm value. A list of specific learning objectives is provided at the end of this syllabus.

#### 2.1 Course Format

We will spend most of our class time solving problems, applying course concepts to real world companies and situations, and discussing current business events. Students are therefore

<sup>&</sup>lt;sup>1</sup>Syllabus subject to change. Draft version January 6, 2016.

expected to come to class having a) read the assigned material and b) attempted to solve the assigned practice problems.

# 3 Grading

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Your course g	grade will be dete	ermined based on the	he following comp	oonents:

Item	Individual/group	% of course grade
Class participation	individual/group	15%
Quizzes	group	15%
In-class projects	group	35%
Final exam	individual	35%

### 3.1 Class participation

Class participation will account for 15% of the course grade. Note that attendance  $\neq$  class participation: coming to class to simply occupy a seat does not contribute to creating a positive learning environment. There is a number of ways to earn participation credit:

- Ask clarifying questions.
- Talk briefly at the beginning of class about a current business event that has some connection to the course.
- Volunteer as a group to present your analysis of one of the cases. I will accept the first two groups to volunteer for a given case. Both groups will submit their analysis in Excel and presentation in Powerpoint. At the beginning of class, I will flip a coin to determine which of the two groups will present their analysis. At the end of the presentation, the second group will get an opportunity to critique and comment on the first group's analysis. Students in both groups will get up to 7.5% participation credit.
- Volunteer individually or as a group to present your valuation model of a company about to go public.

During the first 4 class meetings, I will count the total number of news presentations, clarifying questions, and other valid contributions to class discussion. If this number exceeds 20, then <u>all</u> students in the class will receive 3% participation credit.

### 3.2 Quizzes

Research in cognitive psychology on learning and memory shows that frequent testing greatly improves long-term retention and performance on final exams. To take advantage of this *testing effect*, we will have frequent short quizzes. About every other class meeting, we will have a quiz that will consists of 3–5 questions that will take about 10–15 minutes to answer. No books or notes are allowed, but you will be able to work in *groups of up to 3 students*. For each student, I will drop the two quizzes with the lowest scores and use the remanining scores to determine the quiz component of your course grade. Given that each quiz will account for a small fraction of the overall course grade, there will be **no make-ups**.

### 3.3 In-class simulations and projects

We will play 2 in-class simulation games—Working Capital Simulation and Capital Budgeting Simulation—and have 3 in-class group projects.

Two days after each simulation, you will submit a two-page memo summarizing your decisions and reasons behind them, analyzing your performance, and discussing what you learned from the simulation and what you would do differently. For the Capital Budgeting simulation, you will also submit at the beginning of the simulation a one-page memo explaining the decision you intend to make in the first round of the simulation.

The other in-class group projects will involve building DCF models, estimating cost of capital, etc. For these projects you will turn in your model at the end of class.

#### 3.3.1 Group formation

For the in-class group projects, you will organize yourselves into groups of 3–4 students. Unless there are extenuating circumstances that you communicate to me before the relevant deadline, no assignments done individually or by groups other than 3–4 students will be accepted. I will set up a discussion forum on Carmen to facilitate group formation. At the end of the class dedicated to each group assignment you will upload your results to the designated Dropbox folder on Carmen.

#### 3.4 Final exam

The final exam will be a comprehensive, closed-book, multiple-choice exam. The exam is currently scheduled for 6-7:45pm on April 27, 2016 in Schoenbaum 105.

# 4 Course Materials

The **textbook** for this course is *Fundamentals of Corporate Finance* by Jonathan Berk, Peter DeMarzo, and Jarrad Harford, 3rd edition, Pearson Prentice Hall, 2014. This is the same textbook as the one is used in Business Finance 3220. It is ok to use earlier editions. However, it will be up to you to figure out the correspondence between chapters and suggested exercises across different editions.

In addition to the textbook, there are **2** course packets. The first one consists of two simulations that we will play in class. Because we will play these simulations in groups, you need to purchase only one of these packets per group. For administrative purposes, each section of the course has a different course packet id:

- 8:00am: https://cb.hbsp.harvard.edu/cbmp/access/43366503
- 9:35am: https://cb.hbsp.harvard.edu/cbmp/access/43366510
- 11:10am: https://cb.hbsp.harvard.edu/cbmp/access/43366494

The second course packet contains the cases that we will discuss in class. The link to this course packet is https://cb.hbsp.harvard.edu/cbmp/access/43366208

## 4.1 Optional supplementary readings

If you are interested in learning more about corporate finance and valuation, I recommend the following:

- Joshua Rosenbaum and Joshua Pearl, Investment Banking: Valuation, Leveraged Buyouts, and Mergers & Acquisitions, 2nd edition, Wiley Finance, 2013.
- Simon Benninga, *Financial Modeling*, 3rd edition, MIT Press, 2008.
- Tim Koller, Marc Goedhart, and David Wessels, *Valuation: Measuring and Managing the Value of Companies*, 5th edition, John Wiley & Sons, 2010.
- Aswath Damodaran, Damodaran on Valuation: Security Analysis for Investment and Corporate Finance, 2nd edition, John Wiley & Sons, 2006.

# 5 Miscellaneous

## 5.1 Course Expectations

Since attendance  $\neq$  participation, it is up to you whether you want to attend. If do choose to come to class, I expect you to follow common norms of professional behavior.

- You are expected to be on time. Class starts promptly at 8:00/9:35/11:10. You should be in your seat and ready to begin class at this time. Class ends at 9:20/10:55/12:30. Packing up your things early is disruptive to others around you and to myself. Similarly, persistent walking in and out of class is not acceptable. If you have an excuse for coming late or leaving a class early, notify me in advance to help minimize the distraction. Otherwise, late students are not allowed to enter.
- We will devote some of our class time to working with online financial data, building financial models in Excel, and running simulations. Having access to a laptop or a tablet device is therefore important. At the same time, electronic devices come with an inherent temptation to use them for shopping, social media, and other activities not related to class. Although attempts to multi-task have been shown to result in dramatic deterioration in cognitive performance and ability to learn, my primary concern is that the use of electronic devices for unrelated tasks creates a distraction for your fellow students who are there to learn. I expect you to be considerate of your classmates and avoid using electronic devices for activities that are not related to class.

If you repeatedly maintain unprofessional behavior, the professor has the right to lower your letter grade.

### 5.2 Getting Help

If you have any questions about the course or corporate finance more generally, or if you need individual assistance, please do not hesitate to stop by during my office hours or to email me to make an appointment.

### 5.3 Standards of Academic Conduct

Students are expected to be familiar with and abide by The Ohio State Universitys code of student conduct, available at http://studentaffairs.osu.edu/resource\_csc.asp. In addition students are expected to adhere to the Fisher Honor Statement:

As a member of the Fisher College Business Community, I am personally committed to the highest standards of behavior. Honesty and integrity are the foundations from which I will measure my actions. I will hold myself accountable to adhere to those standards. As a future leader in the community and business environment, I pledge to live by these principles and celebrate those who share these ideals. In accordance with OSU Faculty Rule 3333-5-487, all instances of academic misconduct will be reported to the Committee on Academic Misconduct, which recommends appropriate sanctions to the Office of Academic Affairs.

# 6 Course Schedule

Please refer to the calendar tool and course announcements on Carmen for more detailed and up-to-date information of the course schedule, assigned readings, and deadlines. The schedule below is meant as an overview of the course content and main deadlines.

Jan. 12	Course introduction
Jan. 14	Investment decision rules, Fundamentals of capital budgeting
Jan. 19	In-class simulation game: Working capital
Jan. 21	DCF modeling in Excel
Jan. 26	Case: Victoria Chemicals
Jan. 28	In-class simulation game: Capital budgeting
Feb. 2	Case: Tottenham Hotspur
Feb. 4	In-class group project: Capital budgeting
Feb. 9	Cost of equity
Feb. 11	Cost of debt, credit ratings
Feb. 16	Cost of capital
Feb. 18	Cost of capital
Feb. 23	In-class group project: Cost of capital
Feb. 25	Valuation
Mar. 1	Fundamental valuation
Mar. 3	Relative valuation
Mar. 8	IPOs
Mar. 10	Introduction to capital structure
Mar. 22	Leverage and risk, Modigliani-Miller
Mar. 24	Taxes and capital structure
Mar. 29	Leveraged recapitalizations
Mar. 31	In-class group project: leveraged recapitalization
Apr. 5	Case: Restructuring JAL
Apr. 7	Debt overhang, agency problems, asymmetric information
Apr. 12	Case: Stone Container
Apr. 14	Payout policy
Apr. 19	M&A
Apr. 21	Wrap-up

# 7 Learning Objectives

Upon successful completion of this course, students will be able to

- build a **DCF model** in Excel to evalute an **investment project**,
- calculate and interpret net present value (NPV), internal rate of return (IRR), payback period, discounted payback period, and profitability index (PI) for a single capital project,
- compare the NPV and IRR methods when evaluating independent and **mutually** exclusive projects,
- perform sensitivity, breakeven, and scenario analyses in Excel to identify drivers of value and key sources of uncertainty in a project,
- evaluate **working capital** efficiency based on operating and cash conversion cycles and compare with that of peer firms,
- estimate weighted average cost of capital (WACC) using information on comparable firms,
- estimate the **cost of debt** capital using the CAPM approach and the yield-to-maturity approach,
- estimate the **cost of equity** capital using the CAPM approach,
- explain the correct treatment of **flotation costs**,
- value a firm using **multiples**,
- analyze the effect of operating and financial **leverage** of the firm's net income and return on equity,
- understand the process of taking a company public (IPO),
- identify and evaluate the advantages and disadvantages of different types of **debt financing** available to firms,
- evaluate a firm's creditworthiness and **estimate its credit rating** using key financial ratios,
- estimate the value of **interest tax shields** under alternative leverage policies,

- evaluate the optimal mix of debt and equity that **trades off** the costs and benefits of debt,
- explain how optimal leverage varies across industries,
- describe regular cash dividends, special dividends, stock splits, and share repurchases, including their expected effect on shareholders wealth and a firms financial ratios,
- describe dividend payment chronology,
- evaluate alternative payout policies,
- calculate the effect of a share repurchase on EPS, book value per share, and price per share.