THE FINANCE OF BUYOUTS AND ACQUISITIONS
SPRING 2021

INSTRUCTOR

Professor Burcu Esmer
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Office hours are available by appointment (days/times are flexible)

All times indicated in this syllabus are Philadelphia time (Eastern Time and GMT -5 hours)

COURSE OBJECTIVE

This course provides an understanding of key financial and legal concepts, important considerations, and institutional information in mergers, acquisitions, and leveraged buyouts. Students will develop skills necessary to structure a deal or form an opinion about proposed transactions.

This course is divided into two parts: strategic and financial acquisitions. Each part has a unique terminology and valuation approaches, therefore topics will be covered in a broad nature. Students interested in a detailed examination of valuation techniques should consider the Valuation course.

This course requires a solid understanding of financial modeling and working knowledge of Microsoft Excel. While I will be providing supplementary material on modeling, students who have limited or no modeling may still find the course challenging.

This course is most suitable for finance majors who are considering careers in corporate finance, investment banking, private equity, or consulting.

FIRST SESSION

In the first session, we will talk about the course's objectives and the expected workload. All registered students are expected to attend the first lecture or otherwise watch its recording within 24 hours of the session. Students should then acquire the necessary information to make a quick decision about whether they want to stay enrolled for the course or leave their spots to students on the waitlist.

CO-REQUISITE

Advanced Corporate Finance FNCE 203 **or** Valuation FNCE 207

COURSE WEB PAGE

Course materials including lecture notes, suggested readings, required assignments, deadlines, solutions to problems, and other useful information will be available on the Canvas course web page.

Please be sure to check the course page regularly for any updates and deadlines. (You can set and customize the frequency of course notifications on Canvas by clicking on Account> Notifications and changing the Course Content setting to "Immediately". While these notification

preferences apply to all courses, you can also adjust your course-level notifications by clicking the "View Course Notifications" button on the right side of our course home page.)

While I will start each lecture with weekly reminders, it is **students' responsibility** to be mindful of deadlines and any important developments pertaining to the course.

CLASS MATERIALS

- Course Reader (includes cases and articles) – Available on Course Webpage on Canvas
- Lecture Notes and Other Reading Materials – Available on Course Webpage on Canvas
    - Please note: for case discussions, only abridged versions of the slides will be posted.
- Suggested background reading:
    - Gaughan, Patrick A., *Mergers, Acquisitions and Corporate Restructurings* 7th ed., Wiley, 2017 (the ebook version is available on Canvas under Course Materials @ Penn Libraries tab)
    - PitchBook, Preqin, PEHub, The New York Times Deal Book, Wall Street Journal, Financial Times, Reuters' M&A Page, MarketWatch's M&A Page
- A useful review of corporate valuation techniques is found in "Valuation: measuring and managing the value of companies" by Tim Koller, Mark Goedhart, and David Wessels

METHOD OF INSTRUCTION

This course will be taught synchronously online via Zoom. All sessions will be recorded and will be available to view until the end of the semester. From time to time, some content may be pre-recorded and made available on Canvas. When appropriate, pre-recorded material may replace some of the class time.

The course combines lectures, case discussions, and guest speakers. Lectures provide fundamental information, institutional details, empirical evidence, and basic analytical methods. Class time will mostly be used for interactive discussions. Several quantitative examples will be provided in pre-recorded videos so that students can go over them at their own pace.

We will discuss several cases throughout the semester. The primary objective of the case method in finance is to **use the logic of financial theory to arrive at sensible conclusions** when faced with real world problems. However, one should **keep in mind that there is no one absolutely right approach to tackle a case; different assumptions can lead to different solutions**. While there is no one "right" answer, there are good arguments and bad arguments. The process of this course will help distinguish between sensible and nonsensical arguments. I will be providing my case analyses, however, considering my analyses as the correct solution defeats the purpose of this course and contributes to the silly notion that in the "real world" there is a single correct recipe.

Several guest speakers have been arranged to provide practical industry insights to the topics and deals discussed in class. Any information provided by guest speakers but not discussed in lectures/cases are supplemental and students will not be tested on them on quizzes.

GRADE DECOMPOSITION

Group work:
Deal Proposals & Presentations (2 total)	50%
Case Study Assignments (2 total)	15%

<u>Individual work:</u>

Quizzes (4 total)	12%
Homework Assignment	12%
Participation & Attendance	11%

Course grades will be "curved" at the end of the semester.

The cutoff for *Fail* will be determined based on the class curve at the end of the semester. Failure to contribute to group assignments, missing classes, and quizzes may lead to a failing grade.

GRADE COMPONENTS

GROUP WORK

There are two deal proposals and two case study assignments that must be worked on in groups. Students should organize themselves into <u>groups of four or five</u>. **All teams should self-register on Canvas by no later than** *11:59pm* **on** *February 3.* You may use the discussion board on Canvas to post that you are looking for a team member or a group. <u>If a student does not self-register by the deadline, s/he will be randomly</u> <u>assigned to a group</u>. It is the student's responsibility to contact the other team members and arrange meetings. Groups must remain the same throughout the semester. Having diverse backgrounds within a group is beneficial. Since group work is a cooperative undertaking, students are urged to ensure that they form groups that are able to work effectively.

<u>Deal Proposals & Presentations</u>

In this course, there will be two deal proposals. Deal proposals take a long time to complete. I encourage you to start working on the proposals early.

The deal proposal is an active learning tool and allows you to apply many concepts that you have learned at the Wharton School.

There are many ways to be successful with these projects. Since the transactions are all hypothetical, there is no single right answer. What is key is that your group demonstrates a thoughtful and thorough analysis using the key concepts discussed over the term. You may choose to use all of the illustrative tools or just select a few that you feel are most appropriate to the specifics of your case. There is no mandated format for these proposals.

1. **Merger Deal Proposal (25% of the course grade)**

Each group must propose a potential takeover transaction, taking the role of an investment bank pitching the deal to the bidder or the target. Using the analytical tools learned in class, you should select a bidder and a target, and structure the transaction. The company being targeted must be one that none of the team members has valued before. The analysis should cover different aspects of the deal, such as the strategic and economic benefits, target and synergy valuation, method of payment, bidding strategy, target management reaction, and corporate governance issues. You should rely on firm and market data that are publicly available for your analysis. However, you cannot use pre-built models that you have used in the past or materials otherwise prepared by professionals. Exchange of analysis and calculations across groups is not allowed. **Each group should fill out the survey which will be published on Canvas and disclose the firm they picked by 11:59pm on Monday, February 22.**

A written report and a PowerPoint presentation must be submitted via Canvas and **are due 11:59pm on Friday, March 6. Late submissions/submissions via email will not be accepted.**

Selected groups will present their deal proposals on **Monday, March 8** in front of an industry professional. Exceptional presentation performances will contribute to participation scores. The remaining groups must record and submit their presentation by *11:59pm* **on Tuesday, March 9**. Additional details are provided in the Merger Proposal Guidelines on Canvas.

2. **Leveraged Buyout (LBO) Deal Proposal (25% of the course grade)**

Each group must identify a target firm as a financial buyer and prepare a deal proposal. You may use firm specific or market data that are publicly available for your analysis. However, you cannot use pre-built models that you have used in the past or materials otherwise prepared by professionals. Furthermore, any existing deal that is used in a teaching material (e.g., a case study) cannot be chosen as the topic of your proposal. **Each group should fill out the survey which will be published on Canvas and disclose the firm they picked by 11:59pm on Monday, April 5.** Please note that you may use the same firm you targeted for the merger deal proposal.

A written report and a PowerPoint presentation must be submitted via Canvas and **are due by 11:59pm on Monday, April 26. Late submissions/submissions via email will not be accepted.**

A few selected groups will present their term projects on the last day of class (**Wednesday, April 28).** Exceptional presentation performances will contribute to individual participation scores. The remaining groups should record and submit their presentation by **11:59pm on Thursday, April 29**. Additional details are provided in the LBO Proposal Guidelines on Canvas.

Case Study Assignments:

There will be two case study assignments during the semester that require write-ups. These cases are marked with an asterisk in the tentative course outline below. Each group is expected to **submit** a soft-copy of their conclusions via Canvas in a 2-3 page long executive summary prior to any class discussion. Supporting computations and tables can be included in an appendix. All of the assumptions and formulas used should be provided (preferably as a footnote). Groups must submit the .xls file along with their executive summary. Raw data from the case exhibits in .xls format and some hints for the analysis will be available on Canvas. Dow case is under *Study.Net materials* folder. HCA case is on Canvas under *Cases* folder.

Although brief discussions across groups are allowed, exchange of analysis or calculations is not. Most cases we will cover in this course involve actual companies. You may use firm specific or market data that are publicly available for your analysis. You cannot, however, use old notes, handouts, or solutions from previous years or similar courses elsewhere for your write-ups and class discussions.

Case write-ups must be submitted via Canvas and are due by 1:30pm on assigned dates (please see course schedule below). **Late submissions and submissions via email will not be accepted.**

INDIVIDUAL WORK

Quizzes:

There will be four quizzes. These quizzes will cover the material discussed in lectures and may include quantitative and qualitative questions. Quizzes will be published on a Wednesday evening and will be due by 1:30pm the following Monday. Students will have one attempt to complete each quiz. Quiz questions will come randomly from a question bank.

Since students have several days to complete the quiz, there will be no make-up for missed quizzes. If you experience any technical issues, you must notify me as soon as possible so that we can fix the issue promptly.

Homework Assignment:

There will be one homework assignment. The assignment will be posted on **Wednesday, April 7 at 4:30pm** and will be due by **4:30 pm on Thursday, April 8** (i.e. you will have 24 hours to complete this assignment). This assignment will assess the understanding of LBO modeling. A practice question with an answer key will be posted on Canvas beforehand. Exchange of analysis and calculations across students is not allowed. There will be no make-up. If you experience any technical issues, you must notify me as soon as possible so that we can fix the issue promptly.

If your travel or interview plans conflict with the schedule of the course, you must change your plans or drop the course now.

Class Participation and Attendance:

One goal of the course is to provide students with the opportunity to discuss complex financial issues. Moreover, many students have relevant experience that others can learn from. For these reasons, participation in classroom discussions is central to a great learning experience.

Starting January 25th, attendance will be recorded during the first five minutes of each lecture. Recorded attendance requires that you have your web camera on at all times. If you are in a location with poor-quality internet, you may apply for an individual exception to this rule **until January 25th** by filling out the course survey on Canvas. If you are experiencing any (technical) issues and need to keep your camera off during a particular session, you need to email me and the TA at the beginning of the class so that you will not be recorded as absent.

Please make sure that your Zoom log-in name matches your name on your academic record, otherwise, we may not be able to track your attendance accurately. There will also be in-class polls given at random times which will enable us to monitor your presence during the class. If a session is replaced with a recording, students need to watch the recording **within one week** of the posting to receive attendance credit.

Missing up to two classes for any reason (illnesses, interviews, religious holidays, case competitions, etc.) will not affect your attendance score. Any absences beyond two will lower your attendance grade.

Your participation score will be determined based on three factors.

1. In-Class Participation

Students are expected to actively participate in class discussions.

You may use the "raise hand" function in Zoom to show that you would like to contribute. You may also write your answers, ask questions, and comment on a topic using the chat option. If you choose to use the chat option, you need to make sure that your message is seen by the entire audience so that TAs can record it.

I may cold call to ensure that the class enjoys the benefit of every student's contribution. Class participation is scored individually and based on your contributions in each session you will receive **0** (no participation), **1** (minimal participation), or **2** (active and contributing to the flow). We consider the quality of your comments as well as the quantity. This part of the participation grade is based on each student's total in-class participation score over the term.

2. Evaluation Scores

Each student will anonymously evaluate his/her team members for each case and project submission. Your team members' evaluation of your efforts and your participation in the survey will contribute to your individual participation score.

3. Class Surveys

We will circulate a survey following each guest speaker session. Filling out these surveys will contribute to your participation score.

Students can improve their participation grades by making positive contributions to the class, for instance by sharing an interesting article on the class discussion board.

Violation of the course policies, the Wharton Learning Agreement, or any basic norm of classroom etiquette and professionalism (e.g. talking on the phone during the class) can result in a lower participation grade.

Inadequate class participation combined with several absences can lead to a failing grade.

RE-GRADE REQUESTS

If you feel that an item has been incorrectly graded, you may submit a re-grade request to me, *not to a TA*. Each re-grade request must include a concise written explanation of the problem accompanied by the original graded assignment and must be submitted **within one week** after the assignment is graded and made available for review. Please note that re-grading applies to the whole assignment, not just the part(s) that are mentioned in your request. If you are submitting a request for a group project, please carbon copy (cc) your team members in your email and include your group number in your request.

CODE OF ETHICS:

Assignments submitted for grading should be your or your team's own work only. Most cases in this course involve actual companies. You may use firm specific or market data that are publicly available for your analysis. You cannot, however, use old notes, handouts, or solutions to the cases from previous or other sections of this course or similar courses elsewhere for your written reports and class discussions.

Students should not in any way rely on the work of prior students or current students who are not on their team. This prohibition extends to prior quizzes, exams, assignments, cases, or projects that are directly relevant to the assignment being completed. When a project requires you to produce a forecasting/valuation model, the use of a model not created exclusively by the students on the team for the purposes of this class is a violation of the code of academic integrity. For all submitted assignments, students must start with an Excel spreadsheet which is at most populated with raw data.

Failure to follow this rule will result in an automatic failing grade for the course. The University of Pennsylvania's Code of Academic Integrity is available at: https://provost.upenn.edu/policies/pennbook/2013/02/13/code-of-academic-integrity

TEACHING ASSISTANTS (TAS)

The teaching assistants (TAs) are responsible for recording attendance, answering questions about the grading of case study assignments and proposal submissions, grading some parts of quizzes, and holding weekly office hours.

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TA office hours will start in the week of January 25. Please see Canvas homepage for TA office hours and additional information.

TENTATIVE COURSE OUTLINE

This outline is a preliminary guide as to when material will be covered. There may be changes, with advance notice given in class and/or on Canvas. Note that guest lectures may be scheduled outside of the regular class slots due to our guests' work schedules. Conditional on our guests' permission, these sessions will be recorded and made available on Canvas.

PART I: MERGERS AND ACQUISITIONS

Session 1: January 20
Introduction and Organization

Session 2: January 25
Refresher: Valuation Concepts

Session 3: January 27
Refresher: Valuation Concepts (cont'd)
Supplemental Pre-recorded Session:
Case Analysis: Monmouth, Inc. Part I

Session 4: February 1
Introduction to M&A: value creation and the merger process
Suggested Reading:
- Gaughan Ch. 1 and 2
- Eckbo, B. Espen, 2014, "Corporate takeovers and economic efficiency", Annual Review of Financial Economics 6, 51-74
- Eckbo, B. Espen, 2009, "Bidding strategies and takeover premiums: A review", Journal of Corporate Finance 15, 149-178.
- McConnell, John J., and Valeriy Sibilkov, 2016, "Do investment banks have incentives to help clients make value-creating acquisitions", Journal of Applied Corporate Finance 28, 103-117

Session 5: February 3
Consideration, distribution of synergy gains, and corporate governance issues in M&A
Suggested Reading:
- Gaughan Ch. 4 and 13
- M&A legal context: Basic framework for corporate governance, HBS 9-803-200
- Standards related to the sale or purchase of a company, HBS 9-904-004

Session 6: February 8
Synergy valuation and target stand-alone value
Suggested Reading:
- Gaughan Ch. 15

Session 7: February 10
Synergy valuation and target stand-alone value (cont.)
Supplemental Pre-recorded Session:
Case Discussion: Monmouth, Inc. Part II

Session 8: February 15
Case: Dow's Bid for Rohm and Haas

Session 9: February 17
Accretion/dilution, method of payment, and exchange ratio
Suggested Reading:
- Rappaport, Alfred, and Mark L. Sirower, 1999, Stock or cash? The Trade-Offs for Buyers and Sellers in Mergers and Acquisitions, *Harvard Business Review* (Nov-Dec), reprint 99611
Supplemental Pre-recorded Session:
- Case Analysis: Monmouth, Inc. Part III

Session 10: February 22
Price protection and risk sharing
Suggested Reading:
- Amobi, Tuna, 1997, Price protection in stock-swap transactions, *Merger & Acquisitions* 32, 22- 28.
- Caselli, Stefano, Stefano Gatti, and Marco Visconti, 2006, Managing M&A risk with collars, earn-outs and CVRs, *Journal of Applied Corporate Finance* 18 (4), 91-104.
Supplemental Pre-recorded Session:
- Basics of Option Pricing

Session 11: February 24
Hostility, defensive tactics, and antitrust
Suggested Reading:
- Gaughan Ch. 5

Session 12: March 1 @ TBA (or watch the recording)
Structuring the deal
Guest speaker: Stephen Munger, Managing Director and Chairman, Global M&A Morgan Stanley Investment Banking Division

Session 13: March 3
Legal Framework
Guest speaker: TBA
Suggested Reading:
- Gaughan Ch. 3

PART II: BUYOUTS

Session 15: March 15
PE Process and Trends
Suggested Reading:
- Gaughan Ch. 8 and 9

Session 16: March 17
PE Process and Trends (cont.)
Suggested Reading:
- Bain Global Private Equity Report 2020
- PitchBook US PE Breakdown 2020

Session 17: March 22
LBO Model Basics

Session 18: March 24
Reduced Form Valuation / Multiples

Session 19: March 29
LBO Model Exercise

Session 20: March 31
Case Discussion: HCA*

Session 21: April 5
Case Discussion: Realogy

Session 22: April 6
Restructuring: Comparative Analysis
Case Discussion: TXU Deal

Session 23: April 14
Revisiting Realogy & Impact Investing in PE
Guest speaker: Marc Becker, Senior Partner and Co-Lead of Impact, Apollo

Session 24: April 19
Growth Equity and Middle Market
Case Discussion: NOH

Session 25: April 21
Guest Speaker TBA

Session 26: April 26
Incentives and Private Equity Fund Structure
Suggested Reading:
   • "Note on Private Equity Partnership Agreements" by Josh Lerner

Session 27: April 28
LBO Deal Proposal Presentations

PART I : MERGERS AND ACQUISITIONS

Session #	Day	Date	Topic	Deadline
Session 1	Wed	20-Jan	Intro and organization	
Session 2	Mon	25-Jan	Refresher: Valuation Concepts	
Session 3	Wed	27-Jan	Refresher: Valuation Concepts (cont.)	
Session 4	Mon	1-Feb	Intro to M&A, value creation, merger process	
Session 5	Wed	3-Feb	Motivations for M&A	Team formation deadline (11:59pm)
Session 6	Mon	8-Feb	Synergy Valuation & Target Standalone Value	Quiz 1 is due: M&A Fundamentals (1:30pm)
Session 7	Wed	10-Feb		
Session 8	Mon	15-Feb	Case 1: Dow Case*	Dow Case Submission (1:30pm)
Session 9	Wed	17-Feb	Method of Payment, Accretion/dilution	
Session 10	Mon	22-Feb	Price Protection and Risk Sharing	• Disclose target and acquirer firm selection for merger deal proposal (11:59pm)
				• Submit peer evaluation regarding Dow Case (11:59pm)
Session 11	Wed	24-Feb	Hostility, defense tactics and anti-trust	
Session 12	Mon	1-Mar	Deal Structuring	Quiz 2 is due: M&A Payment Considerations (1:30pm)
			Guest: Stephen Munger, Managing Director and Chairman, Global M&A Morgan Stanley Investment Banking Division	
Session 13	Wed	3-Mar	Legal Framework	
			Guest: TBA	
	Fri	6-Mar		Merger deal proposal is due (11:59pm)
Session 14	Mon	8-Mar	Merger Deal Presentations	
	Tue	9-Mar		Merger deal proposal presentation recording is due (11:59pm)
	Wed	10-Mar	Spring Break (No Class)	

PART II : BUYOUTS

Session #	Day	Date	Topic	Deadline
Session 15	Mon	15-Mar	Private Equity (PE) Fundamentals and Trends	Submit peer evaluation regarding merger deal proposal (11:59pm)
Session 16	Wed	17-Mar	PE Fundamentals and Trends (cont.)	
Session 17	Mon	22-Mar	LBO Model	Quiz 3 is due : PE Framework and Trends (1:30pm)
Session 18	Wed	24-Mar	Reduced Form Valuation / Multiples	
Session 19	Mon	29-Mar	LBO Model cont.	Quiz 4 is due : LBO Model and Basics (1:30pm)
Session 20	Wed	31-Mar	Case 2: HCA*	HCA Case Submission
Session 21	Mon	5-Apr	Case Discussion: Realogy	• Disclose target firm selection for buyout deal
				• Submit peer evaluation regarding HCA Case
Session 22	Wed	7-Apr	Restructuring: Comparative Analysis (Case Discussion: TXU Deal)	
	Thu	8-Apr		HW Assignment is due (4:30pm)
	Mon	12-Apr	Engagement Day (No Class)	
	Tue	13-Apr		
Session 23	Wed	14-Apr	Guest: Marc Becker, Senior Partner and Co-Lead of Impact, Apollo	
Session 24	Mon	19-Apr	Growth Equity & Middle Market (Case Discussion: NOH)	
Session 25	Wed	21-Apr	Guest: TBA	
Session 26	Mon	26-Apr	PE Fund Structure	LBO deal proposal is due (11:59pm)
Session 27	Wed	28-Apr	LBO Deal Presentations	
	Thu	29-Apr		LBO deal proposal presentation recording is due (11:59pm)
	Mon	3-May		Submit peer evaluation regarding LBO deal proposal (11:59pm)