B7399 Private Equity

Professor Scott Gallin
247 N. Wyoming Ave
South Orange, NJ 07079
917-319-2260
smg178@columbia.edu

Course Overview
This seminar focuses on private equity investments and, in particular, how firms analyze opportunities and decide whether to commit capital to them. It will also cover the way firms monitor and manage these assets once they own them. We will cover these topics through cases related to four different types of investments (i.e., venture capital deals, growth equity investments, middle market buyouts and large-scale LBOs).

The structure of the class will include lectures, case studies and guest speakers. You will get the most from the course by completing the assigned reading and coming to class prepared to participate and ask questions. In addition to cases, there are required texts and articles, but there is no timetable for reading them. They were chosen to provide you with additional resources and perspective for this semester, and down the road.

Course Goals
This course focuses on the analytics used to evaluate venture-stage, growth equity and buyout transactions. It also examines how firms structure their equity and debt investments and secure commitments from other capital providers. The analysis of each case will call on you to employ many of the skills you have acquired in business school (e.g., financial statement analysis, valuation, industry analysis, microeconomics, macroeconomics, operations, strategic management and organizational dynamics).

Another goal of the course is to emphasize the importance of monitoring and managing investments. An overlooked aspect of private equity is that substantial value can be created after an investment closes as the asset is managed and guided towards exit. This is especially true given conditions today. Investors can no longer assume they will be able to exit through an IPO, recapitalization or sale to a financial sponsor or benefit from the multiple expansion that once accompanied a sale to a strategic buyer. As a result, it is very important for firms to drive the growth and evolution of their portfolio companies.

Aside from these practical goals, the lectures will cover technical items (e.g., how to value companies, how to use financial analysis techniques, etc.), investment process related items (e.g., how to draft and read term sheets, stock purchase agreements and loan documents, how to conduct due diligence, etc.) and strategic items (e.g., how to assess a company’s industry position, how to use macroeconomic factors when making investment decisions, etc.).
B7399 Private Equity

Class Preparation and Assignments
Most weeks you will read one or two HBS cases, which will also be presented and discussed in class. In order to participate in these conversations (note: involvement is one determinant of your grade), you will need to be familiar with every case.

Required Texts
There are several required texts for this course. I believe each is a good business book and contains ideas you can use in a variety of careers. The required titles are:

- Keynes's Way to Wealth - John F. Wasik
- Doing Capitalism in the Innovation Economy - William Janeway
- Opposable Mind - Roger Martin
- Why Intelligence Fails - Robert Jervis

Required Cases
These are available in your case book.

Case Presentations
You will be asked to form teams that will analyze a case and present your findings in class. Each presentation will need to address the following:

1. Overview of business and investment opportunity
2. Valuation, transaction structure, risk-reward discussion
3. Your recommendation (i.e., to invest or pass)
4. Analysis of underlying market, competitive dynamics
5. Investment strengths
6. Investment weaknesses/risks and possible mitigants
7. Financial performance, projections and expected returns (i.e., a model)
8. Potential exit options (e.g., list of strategic buyers)

The presentation will be limited to 20 minutes. For this exercise a summary of the case’s facts is not necessary. In fact, it will lower your grade. Instead, your goal is to make a recommendation and then use the facts provided in the case – as well as any you uncover through other research – to support your conclusion.
Some of the topics you should also cover include, but are not limited to:

**Qualitative Analysis**
- Market overview (size of addressable, growth rate, etc.)
- Industry overview and assessment of the firm’s role in value chain
- Macroeconomic risks
- Analysis of competitors and competitive dynamics/basis of competition
- Analysis of milestones to monitor as the company executes its business plan and a description of what will drive growth
- Commentary on management team, strengths, weaknesses, needs, etc.

**Quantitative Analysis**
- Historical financial analysis
- Valuation
- Potential deal structure
- Financial model
- Unit economics
- Return expectations and range of outcomes

At the end of each presentation your peers will pose questions about the deal and, more importantly, your recommendation. **YOU SHOULD POST YOUR SLIDES TO CANVAS AT LEAST 24-HOURS BEFORE PRESENTING.**

**Case Write-Ups**
You will be responsible for on case write-ups of no more than three (3) pages. Each of these should summarize your conclusions about the case based on the eight factors listed on the previous page. One of the most important practical skills you can develop in business school is an ability to write clearly, concisely and persuasively. It is also important that you become comfortable using numbers to support your investment recommendation. That being said, you do not need a full financial model for these briefs. These papers will be due at the start of the class when the case is being presented.

**Grading**
The in-class presentation, case write-up and final exam will each be worth 20% of your grade. Twenty percent (20%) of your grade will be based on the four homework assignments. These include the Tad O’Malley write-up, the financial analysis worksheet, the IRR exercise and the course summary. The latter is a two-page essay summarizing what you have learned in the course. It should incorporate some of the ideas and arguments found in at least one of the books on the reading list. The goal of the quantitative work is to expose you to some of the nuts and bolts of analysis in private equity. You will receive full credit if you submit your work on time (versus getting everything correct) because the goal is to get you to try to answer the questions. Class
B7399 Private Equity

participation, which includes contribution to case discussions and the questions you ask other presenters, will be worth 20%. Remember, quality is more important than quantity.

<table>
<thead>
<tr>
<th>Items</th>
<th>Due Date</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Case Presentation</td>
<td>Various</td>
<td>20%</td>
</tr>
<tr>
<td>Written Case Summary</td>
<td>Various</td>
<td>20%</td>
</tr>
<tr>
<td>Tad O’Malley</td>
<td>January 15, 2016</td>
<td>5%</td>
</tr>
<tr>
<td>Cash Flow Exercise</td>
<td>February 15, 2016</td>
<td>5%</td>
</tr>
<tr>
<td>IRR Exercise</td>
<td>March 26, 2015</td>
<td>5%</td>
</tr>
<tr>
<td>Course Summary</td>
<td>April 16, 2016</td>
<td>5%</td>
</tr>
<tr>
<td>Final Exam</td>
<td>April 22, 2016</td>
<td>20%</td>
</tr>
<tr>
<td>Class Participation</td>
<td>Various</td>
<td>20%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td>100%</td>
</tr>
</tbody>
</table>

**Guest Speakers**

I plan to have guest speakers this semester. Ideally, a venture capitalist will speak when we are looking at venture stage investing, someone specializing in growth equity will address the class when we are focused on that topic, etc. Unfortunately, we are at the mercy of our guests’ schedules, so please be flexible and understanding if the guest lectures do not correspond perfectly with the topics we are covering in class. In order to get the most from the speakers I would recommend reviewing their firm’s Web site to gain an understanding of where they invest. It will also be helpful to know something about the types of transactions their firms execute and the businesses in their portfolios. Come to class prepared to ask challenging questions.
B7399 Private Equity

Class Schedule

Sessions 1 & 2 – Course Introduction (Jan 8th, Warren 209)

Topics
- General Course Introduction, Review of Syllabus, Class Requirements
- Industry Overview
  - History of Private Equity
  - Involvement and Participation in Private Equity
  - Risk-Reward Profile of Private Equity
  - Overview of Credit Cycle and Its Impact on Valuation
- Deal Evaluation Process
  - Key Qualitative Factors
    - Markets, Growth Trends, Competitors, Management, etc.
  - Key Quantitative Factors
    - Financial Statements, Unit Economics, Capital Intensity, etc.

Required Reading
- Fed Study on Private Equity (Distributed via CANVAS)
- If Private Equity Sized Up Your Business
- Martin Smith

Assignment (Due via e-mail)
- Two half-page summaries of the “Coming Home” and “3F” cases in Tad O’Malley due January 15, 2016

Sessions 3 & 4 – Evaluating and Analyzing PE Deals: Part I (Jan 9th, Warren 209)

Topics
- The “Private Equity Process”
- Jobs in Private Equity
- Deal Evaluation (continued from Class One)
- Valuation
  - Techniques for Valuing Companies
  - Pre- and Post-Money Valuation
  - Acquisition/Control Premiums
  - Sensitivity Analysis
  - Impact of Growth Rate on Valuation
  - Impact of Leverage on Valuation
  - Using the Balance Sheet to Support Analysis
- Putting It Together – Discussion of FleetCor

Required Reading
- Summit Partners: The FleetCor Investment (A, B and C)
- A Note on Valuation in Private Equity Settings
B7399 Private Equity

Sessions 5 & 6 – Structuring & Due Diligence in VC Deals (Feb 5th, Warren 209)

Topics
• Deal Terms & Structuring Equity Investments
  o Securities Employed
    ▪ Equity: Common vs. Preferred (Redeemable vs. Convertible)
    ▪ Warrants and Options Liquidation Preferences
    ▪ Equity vs. Debt: Respective Trade-Offs, Benefits and Risks
  o Impact of Equity Securities on Valuation
  o Acceptable Sources & Uses
  o Governance in Venture Deals

Required Reading
• A Note on Private Equity Securities

Assignment (Due February 15, 2016)
Free Cash Flow Exercise

Sessions 7 & 8 – Financial Modeling (Mar 4th, Warren 209)

• Materials to be distributed on course Web site

Sessions 9 & 10 – Growth Equity Investments Part I (Mar 5th, Uris 326)

Topics
• Venture Capital Due Diligence
  o Qualitative Factors
    ▪ Markets, Secular Trends, Management, Technology, Competitors, Sales Cycle, Customers, Evolutionary vs. Revolutionary, Manufacturing/Sourcing, Business Model, etc.
  o Quantitative Factors
    ▪ Financials, Unit Economics, Assets, etc.
    o Role of Outside Vendors/Resources to Facilitate Analysis
• Review of Term Sheet (“Makit Bedar”)
• Growth Equity Transactions (Topics Covered Include)
  o Analyzing, Identifying Promising Segments, Assessing Risk
  o Scalability of Business vs. Size of Market/Underlying Customer Base
  o Understanding Capital Intensity and Future Capital Requirements
  o Developmental Milestones, Inflection Points in Valuation
  o Evaluating Management
  o Creating a Scarce, Valuable Asset
  o Innovation: Disruptive vs. Sustaining
B7399 Private Equity

Sessions 11 & 12 – Growth Equity Investments: Part II (Mar 19th, Uris 326)

Topics
• Corporate Finance in Growth Equity Deals
  o Optimal Capital Structure (Additional Equity vs. Debt, Different Structures for Each)
• Adding Value in Growth Equity Deals
  o Leading Operational Improvements
  o Facilitating Organic Growth
  o Identifying M&A Targets
• Timing Exits in Growth Equity Deals
  o Positioning a Company
  o Capturing Optimal Value

Required Reading
• Pet Doctors
• Purchasing Cake Masters

Assignment (Due March 26, 2016)
IRR and Multiple of Capital Returned Analysis

Sessions 13 & 14 – Follow-On Deals, Good Money After Bad? (Apr 1st, Warren 209)

Topics
• Structuring Follow-On Investments
  o Growth vs. Rescue Financing
• Good Money After Bad?
  o Analyzing Recent Financial Performance
    ▪ Comparison to Investment Case, Plan, Peers, etc.
    ▪ What Works, What Didn’t? What Assumptions Are Valid?
  o Assessing Future Business Prospects
    ▪ Determining What Changes Need to be Made
    ▪ How Likely is Future Success?
    ▪ Is this a Complete Re-Start?
  o Underwriting a “New” Investment Decision
  o Avoiding Common Pitfalls (Investor Psychology)

Required Reading
• Car Wash Partners
• Outerlink
B7399 Private Equity

Sessions 15 & 16 – Introduction to LBOs (Apr 2nd, Uris 326)

Topics
- Leveraged Buyouts
  - Overview, Benefits Of
- Valuation of LBOs
  - Impact of Leverage on Price and Returns
  - The Downside of Leverage
- Buyout Deal Terms
  - Letters of Intent and Purchase Agreements
  - Review of Sample LOI
- Equity Securities Used in LBOs
  - Preferred Equity: Redeemable vs. Convertible
  - Common Equity
  - Management Options
- Structuring Debt Agreements
  - Common Deal Terms
    - Financial and Other Covenants, Events of Default, Tenor, Yields on Different Securities
    - Intercreditor Agreements, Impact Of
    - Different Types of Debt and Their Role in Capital Structures
      - Revolvers
      - Asset-Backed vs. Cash Flow Loans
        - “Market” Terms for Various Debt Tranches
      - High-Yield and Mezzanine Debt
      - Seller Paper

Required Reading
- Berkshire Partners – Purchase of Rival Company (A)
- Legendary Pictures and Abry Partner
B7399 Private Equity

Sessions 17 & 18 – LBOs as Consolidation Plays (Apr 15th, Warren 209)

Topics
- Investing in Consolidations
  - Finding the Right “Platform”
    - Common Consolidation Strategies in Private Equity
  - Using Financial Leverage to Create Equity Value
    - Risks Associated with the Use of Debt in Consolidation Plays
  - Assessing Strategic Fit
  - Valuing Acquisitions
- The Synergy Trap
  - How to Avoid Overpaying
  - Areas of Diligence to Focus on Prior to Closing
  - Post-Integration Activities

Required Reading
- AtHome Care: Health Care Services Roll-Up
- Carter’s

Assignment (Due April 15th)
Two-page write-up on either “What You’ve Learned this Semester”

Sessions 19 & 20 – LBO Diligence & Portfolio Monitoring (Apr 16th, Warren 310)

Topics
- Due Diligence in LBOs
  - Qualitative Factors
  - Quantitative Factors
    - Review of Financial Statement (trends, horizontal and vertical analysis), Unit Economics, Capital Intensity, Assets and Asset Quality, Off Balance Sheet Liabilities
  - Assessing Validity of Sell-Side/Management Projections
  - Identifying Opportunities for Improvement Post-Closing
  - Role of Outside Vendors/Resources to Facilitate Analysis
- Financial Analysis/Portfolio Monitoring
  - Serving on Boards
  - Periodic Financial Reporting
  - Adding Value as an Investor
    - Capital Allocation, Strategic Direction, Building a Management Team, Business Development, etc.
B7399 Private Equity

Required Reading
- Citect Corporation
- Project Dialtone

Sessions 21 & 22 – Exiting LBOs and Course Wrap-Up (April 22nd, Warren 209)

Topics
- Exiting Buyouts
  - Positioning and Preparing a Company for Sale
  - Exit Timing
    - Is it the Right Time to Exit?
    - Market Conditions, Firm’s and Underlying Market’s Lifecycle, Fund’s Lifecycle, Other Factors, etc.
  - Why do PE firms sell?
- Course Wrap-Up

Required Reading
- Brazos Partners and the Tri-Northern Exit
- The Company Sale Process

Other Recommended Reading
These books should be read at your leisure. You may have already encountered a few of these titles in other classes.

Venture Capital Investing – David Gladstone, Laura Gladstone

Valuation for M&A – Frank Evans, David M. Bishop

Lessons from Private Equity Any Company Can Use – Hugh Macarthur and Orit Gadiesh

Predictably Irrational: The Hidden Forces That Shape Our Decisions – Dan Ariely

Fooling Some of the People All of the Time – David Einhorn and Joel Greenblatt

Mergers & Acquisitions from A to Z – Andrew J. Sherman, Milledge Hart

A New Brand World – Scott Bedbury and Stephen Fenichell

Fortune’s Formula – William Poundstone


Value Investing – Bruce Greenwald, Judd Kahn, Paul Sonkin, Michael van Biema

Manias, Panics, and Crashes – Charles Poor Kindleberger
B7399 Private Equity

*Mastering the Merger* – David Harding, Sam Rovit

*Execution* – Larry Bossidy

*The Art of M&A Due Diligence* – Alexandra Reed Lajoux, Charles Elson

*How We Got Here* – Andy Kessler

*Startups that Work* – Joel Kurtzman, Glenn Rifkin

*Handbook of Financing Growth* – Kenneth Marks

*Due Diligence for Global Deal Making* – Arthur Rosenbloom (Editor)

*Trading Up* – Michael Silverstein, Neil Fiske

*Expectations Investing* – Alfred Rappaport and Michael Mauboussin

*The Art of M&A* – Stanley Foster Reed, Alexandra Reed Lajoux

*The Synergy Trap* – Mark Sirower

*Deal Terms* – Alex Wilmerding

*Confessions of a Venture Capitalist* – Ruthann Quindlen

*Done Deals* – Udayan Gupta

*Financial Shenanigans* – Howard Schilit

*How to Run a Company* – Dennis C. Carey

*Irrational Exuberance* – Robert Schiller

*Fooled by Randomness* – Nassim Nicholas Taleb

*The Art of Strategy* – Avinash Dixit

*Distressed Investing* – Martin Whitman & Fernando Diz

*Billion Dollar Lessons* – Paul Carrol

*Talent is Overrated* – Geoff Colvin

*Pioneering Portfolio Management* – David F. Swensen
B7399 Private Equity

*Deals of the Century: Wall Street, Mergers, and the Making of Modern America* – Charles R. Geist


*Getting to Plan B: Breaking Through to a Better Business Model* – John Mullins and Randy Komisar

*Who: The A Method for Hiring* – Geoff Smart

*Myth of the Rational Market* – Justin Fox

*The Predictioneer’s Game* – Bruce Bueno de Mesquita

*The Private Equity Edge* – Arthur Laffer

*Most Important Thing* – Howard Marks

*Start Something That Matters* – Blake Mycoskie

*What to Ask the Person in the Mirror* – Robert Kaplan

*Value Investing* – Martin Whitman

*Lean Six Sigma That Works* – Bill Carreira and Bill Trudell

*Art of Choosing* – Sheena Iyengar

*25 Entrepreneurs Who Changed Business As We Know It* - John Byrne

*What I Learned Losing a Million Dollars* – Jim Paul

*One World School House* - Salman Khan

*The 80/20 Principle* - Richard Koch

*The Art of the Idea* - John Hunt

*American Genesis* - Thomas Hughes

*Private Equity at Work* - Eileen Appelbaum and Rosemary Batt

*The Hard Thing About Hard Things* - Ben Horowitz
Executive Presence - Sylvia Ann Hewlett

Zero to One - Peter Thiel and Blake Masters

The New Tycoons - Jason Kelly