

FBE 421 Financial Analysis and Valuation

Syllabus – Spring 2020

Professor Julia Plotts

Office: Hoffman Hall 221

Office Hours: before/after class by appointment

Section 15325 T-Th 12-1:50pm HOH 1

Section 15326 T-Th 2-3:50pm HOH 1

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Course Description

This course develops and uses tools of financial analysis to evaluate the performance and assess the value of companies. Through the use of various cases and examples, the course covers methods for utilizing financial data and applying valuation techniques to make strategic and financial decisions. The course covers valuation methods from both a conceptual and practical framework. It is an applications oriented course designed to provide a comprehensive set of tools and a conceptual framework for tackling the practical challenges of performance evaluation and business valuation. The course introduces topics such as mergers and acquisitions, private equity and venture capital and the valuation of private companies and leveraged buyout analysis.

The course covers the theory and practice of financial analysis and valuation. Our coverage of the material is designed to allow you to become comfortable with the fundamentals so that you may improve your proficiency in participating in future financial and strategic discussions within a company or organization and with external analysts and service providers.

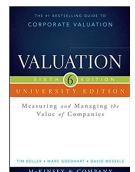
Learning Objectives

1. Gain knowledge of the following areas: accounting, finance, strategy and industry analysis.
2. Understand the key aspects of financial analysis for both performance evaluation and valuation; use and interpret financial data to make decisions about courses of action for a firm.
3. Perform valuations for public and private firms for purposes of fundamental research, strategic analysis, transactions such as an IPO or a merger, or a restructuring.
4. Gain proficiency in applying valuation frameworks such as the Enterprise Discounted Cash Flow (DCF) technique, market multiples approach (comps), and transaction-based approaches such as LBO analysis.
5. Demonstrate critical thinking skills in the application of techniques in financial analysis and valuation. Gather, categorize, analyze, interpret, and evaluate relevant qualitative and quantitative information and develop the ability to be creative and innovative through the completion of a final valuation project.
6. Develop communication strategies for discussing financial analysis and valuation.
7. Conduct research using a broad range of sources, synthesizing and judging the quality of collected information and support written or oral claims logically and persuasively.
8. Apply valuation in a global context, considering the interplay of international markets, and economic, social and cultural issues.

Required Materials

Required Textbook: *Valuation: Measuring and Managing the Value of Companies, University Edition (Wiley Finance) 6th Edition* by McKinsey & Company Inc., Tim Koller, Marc Goedhart, David Wessels Copyright © 2015 Wiley ISBN-13: 978-1118873731, ISBN-10: 1118873734 **The 6th edition (University edition) is recommended.**

Here is the link to the e-book copy in the library: <https://ebookcentral.proquest.com/lib/social/detail.action?docID=4039480>



Required Cases: Our course pack can be purchased online from HBS Publishing for \$34. It should be purchased directly through the HBS link. <https://hbsp.harvard.edu/import/696028>

Index of HBS Cases and Notes:

Notes:

- Solving the Puzzle of the Cash Flow Statement
- Corporate Valuation and Market Multiples
- Primer on Multiples Valuation and Its Use in Private Equity Industry
- Valuation of Late-Stage Companies and Buyouts

Cases:

- Hansson Private Label, Inc. Evaluating and Investment in Expansion
- Ferrari: The 2015 Initial Public Offering
- Spyder Active Sports—2004
- H.J. Heinz M&A

Course Notes

Slides, handouts and supplemental readings/articles will be posted on Blackboard. If you have any questions or need assistance with the Blackboard Course Pages, please contact the Marshall HelpDesk at 213-740-3000 or HelpDesk@marshall.usc.edu. Notes or recordings made by students based on a university class or lecture may only be made for purposes of individual or group study, or for other non-commercial purposes that reasonably arise from the student's membership in the class or attendance at the university. This restriction also applies to any information distributed, disseminated or in any way displayed for use in relationship to the class, whether obtained in class, via email or otherwise on the Internet, or via any other medium. Actions in violation of this policy constitute a violation of the Student Conduct Code, and may subject an individual or entity to university discipline and/or legal proceedings.

Other Resources

The Wall Street Journal, Registration link: <https://libraries.usc.edu/databases/wall-street-journal>
A financial calculator is recommended for lecture and exams.

Prerequisites and/or Recommended Preparation:

Prerequisite: BUAD 215 or BUAD 306. This course assumes knowledge of intro corporate finance and accounting. It will be assumed that students are comfortable with the topics of standard corporate finance texts such as Ross, Westerfield and Jaffe or Brealey & Myers. Please review your basic finance and accounting concepts. The pace and schedule of topics covered in this class does not allow for review of these concepts. Working knowledge of excel is also important.

Grading Policies:

Final grades represent how you perform in the class relative to other students. Historically, the average grade target for this class is a 3.3/4 (B+). Three items are considered when assigning final grades: 1) your average weighted score as a percentage of the available points for all assignments (the points you receive divided by the number of points possible) 2) the overall average percentage score within the class 3) your ranking among all students in the class.

Grading Policies (continued):

<u>ASSIGNMENTS</u>	<u>% of Grade</u>
TESTS Mid-Term Exam	25%
Final Exam	25%
Case Analysis, Assignments and Class Participation	25%
Group Valuation Project	<u>25%</u>
TOTAL	100%

Class Participation

Class participation is an extremely important part of the learning experience in this course as the richness of the learning experience will be largely dependent upon the degree of preparation by *all* students prior to each class session.

Students should bring their printed name tag to every class. Quickly attendance codes will be given at the start of every class.

A course that incorporates the frequent use of case analyses to illustrate the practical application of concepts and practices requires the student to diligently and thoroughly prepare cases and actively offer the results of the analyses and conclusions derived as well as recommendations during each class session. My expectation and that of your classmates are that you are prepared for *all* classes and will actively participate in and meaningfully contribute to class discussions.

In-class participation is also a critical part of this course's learning experience. Cold calling may take place to encourage active participation and to gain multiple perspectives and points of view, thus lending itself to the richness of the learning experience. In-class participation grading will be based on students' demonstrated willingness to participate and the quality of the comments expressed, rather than quantity. While some students are far more comfortable than others with class participation, *all* students should make an effort to contribute meaningfully.

The evaluating of in-class participation is based on the following:

- *Relevance* – Does the comment or question meaningfully bear on the subject at hand? Irrelevant or inappropriate comments can detract from the learning experience.
- *Responsiveness* – Does the comment or question connect to what someone else has said?
- *Analysis* – Is the reasoning employed consistent and logical? Has data from course materials, personal experience, or general knowledge been employed to support the assertions/findings?
- *Value* – Does the contribution further the understanding of the issues at hand?
- *Clarity* – Is the comment concise and understandable?

During class sessions, I frequently assume the role of a facilitator to encourage a discussion that includes perspectives from a variety of viewpoints and, secondly, to help pull together prevailing analyses and recommendations. The direction and quality of a discussion is the *collective responsibility of the class*.

Excellent Performance

- Initiates information relative to topics discussed
- Accurately exhibits knowledge of assignment content
- Clarifies points that others may not understand
- Shares personal experiences or opinions related to topic
- Offers relevant / succinct input to class

- Actively participates in class exercises
- Demonstrates ability to apply, analyze, evaluate & synthesize course material.
- Demonstrates willingness to attempt to answer unpopular questions
- Builds on other students' contributions
- Very high levels of professionalism manifested in interactions with speakers and classmates.

Average Performance

- Participates in group discussions when asked
- Demonstrates knowledge of course material
- Offers clear, concise, "good" information on class assignments
- Offers input, but tends to reiterate the intuitive
- Attends class regularly

Unacceptable Performance

- Fails to participate even when directly asked
- Gives no input to discussions
- Does not demonstrate knowledge of the readings
- Shows up to class: does nothing
- Distracts group / class
- Irrelevant discussion

Exams

There will be a midterm and a final exam, which will consist of various multiple choice and short answer theoretical concept and practical valuation questions and problems. The questions will be both quantitative and qualitative in nature and will be based on material presented in lecture, cases, readings and guest speaker sessions. Electronic devices are not permitted during exams. Calculators are permitted (assuming they are not on a mobile phone or other communications device.) Students with exam accommodations must present verification letters to me ***within the first two weeks of class*** - see section below on Students with Disabilities (Disability Services and Programs DSP).

The date/time of the Final Exam is determined by the University. You are required to be present for both exams. Make-up exams will not be administered. If an exam is missed due to a legitimate reason (such as illness), documentation must be provided and we will discuss how to handle the situation.

Assignments and Team Case Analysis

We will analyze real companies and work through problems by analyzing different scenarios and courses of action. In your analysis of the case studies you should place yourself in the role of the decision maker as you read through the situation and identify the problems and issues. In class we will probe underlying issues, compare different alternatives, and finally, suggest courses of action in light of the objectives of the case.

The cases have been included in the curriculum as a means to provide this self-study and practice in analysis. The case questions are posted in the assignment folder on Blackboard. For many of the HBS cases you will receive supplementary excel spreadsheets and some additional information. You do not need to do outside research for any of the cases.

Please work on your cases in teams of **4-6 students**. Do your best to work through the case utilizing readings and other supporting materials. Seeking assistance or "hints" from the instructor or past students is not authorized. A written case analysis should consist of a **2-page** written executive summary using a standard font and font size (such as Times New Roman size 11-12), addressing

the case questions with supporting computations and tables in a separate appendix (if relevant). Case grades will be determined relative to the analyses of other groups in the class. Groups may be randomly selected to verbally present their findings on the cases during the class session. The quality of work product should be reflective of what you would be comfortable presenting to a current or prospective employer.

Teams may change composition during the course of the semester. If a set of teammates decides they can no longer work together, they are free to separate. Make sure that your teammates' expectations for their performance in this course are consistent with your expectations for yourself.

In addition to the team cases, there will be individual assignments to help you apply the material and/or prepare for a guest speaker session.

Your case analysis will be turned in as a group written deliverable. Only one team member should submit on the due date/time electronically via the Blackboard assignment link.

Team Valuation Project

The Team Valuation Project is a research report due on April 28th at the start of class. The deliverable description will be posted to Blackboard prior to Spring Break. Team presentations will be held in class. Attendance is mandatory at this session.

Peer Evaluation

You will be asked to complete a peer evaluation for your group.

Assignment Submission Policy

Assignments must be turned in on the due date/time electronically via Blackboard. The cover sheet of each written assignment should contain the first and last names of the students submitting the assignment arranged alphabetically. All of the names of the members in the team must appear at the top of the memo to receive credit.

Retention of Graded Coursework

Final exams and all other graded work which affected the course grade will be retained for one year after the end of the course *if* the graded work has not been returned to the student.

Technology Policy

Laptop and Internet usage is not permitted during academic or professional sessions unless otherwise stated by the respective professor and/or staff. Use of other personal communication devices, such as cell phones, is considered unprofessional and is not permitted during academic or professional sessions. Videotaping faculty lectures is not permitted due to copyright infringement regulations. Audiotaping may be permitted if approved by the professor. Use of any recorded or distributed material is reserved exclusively for the USC students registered in this class.

Academic Integrity and Conduct

USC seeks to maintain an optimal learning environment. General principles of academic honesty include the concept of respect for the intellectual property of others, the expectation that individual work will be submitted unless otherwise allowed by an instructor, and the obligations both to protect one's own academic work from misuse by others as well as to avoid using another's work as one's own (plagiarism).

Plagiarism – presenting someone else's ideas as your own, either verbatim or recast in your own words – is a serious academic offense with serious consequences. Please familiarize yourself with the discussion of plagiarism in SCampus in Part B, Section 11, "Behavior Violating University Standards" policy.usc.edu/scampus-part-b. Other forms of academic dishonesty are equally

unacceptable. See additional information in SCampus and university policies on scientific misconduct, policy.usc.edu/scientific-misconduct.

Students will be referred to the Office of Student Judicial Affairs and Community Standards for further review, should there be any suspicion of academic dishonesty. The Review process can be found at: <http://www.usc.edu/student-affairs/SJACS/>. Failure to adhere to the academic conduct standards set forth by these guidelines and our programs will not be tolerated by the USC Marshall community and can lead to dismissal.

Discrimination, sexual assault, and harassment are not tolerated by the university. You are encouraged to report any incidents to the *Office of Equity and Diversity* <http://equity.usc.edu/> or to the *Department of Public Safety* <http://dps.usc.edu/contact/report/>. This is important for the safety of the whole USC community. Another member of the university community – such as a friend, classmate, advisor, or faculty member – can help initiate the report or can initiate the report on behalf of another person. *Relationship and Sexual Violence Prevention and Services* (RSVP) <https://engemannshc.usc.edu/rsvp/> provides 24/7 confidential support, and the sexual assault resource center webpage <https://sarc.usc.edu/reporting-options/> describes reporting options and other resources.

Support Systems:

Counseling and Mental Health - (213) 740-9355 – 24/7 on call
studenthealth.usc.edu/counseling

Free and confidential mental health treatment for students, including short-term psychotherapy, group counseling, stress fitness workshops, and crisis intervention.

National Suicide Prevention Lifeline - 1 (800) 273-8255 – 24/7 on call
suicidepreventionlifeline.org

Free and confidential emotional support to people in suicidal crisis or emotional distress 24 hours a day, 7 days a week.

Relationship and Sexual Violence Prevention and Services (RSVP) - (213) 740-9355(WELL), press “0” after hours – 24/7 on call
studenthealth.usc.edu/sexual-assault

Free and confidential therapy services, workshops, and training for situations related to gender-based harm.

Office of Equity and Diversity (OED)- (213) 740-5086 | *Title IX* – (213) 821-8298
equity.usc.edu, titleix.usc.edu

Information about how to get help or help someone affected by harassment or discrimination, rights of protected classes, reporting options, and additional resources for students, faculty, staff, visitors, and applicants. The university prohibits discrimination or harassment based on the following *protected characteristics*: race, color, national origin, ancestry, religion, sex, gender, gender identity, gender expression, sexual orientation, age, physical disability, medical condition, mental disability, marital status, pregnancy, veteran status, genetic information, and any other characteristic which may be specified in applicable laws and governmental regulations. The university also prohibits sexual assault, non-consensual sexual contact, sexual misconduct, intimate partner violence, stalking, malicious dissuasion, retaliation, and violation of interim measures.

Reporting Incidents of Bias or Harassment - (213) 740-5086 or (213) 821-8298
usc-advocate.symplcity.com/care_report

Avenue to report incidents of bias, hate crimes, and microaggressions to the Office of Equity and Diversity | Title IX for appropriate investigation, supportive measures, and response.

The Office of Disability Services and Programs - (213) 740-0776 dsp.usc.edu

Support and accommodations for students with disabilities. Services include assistance in providing readers/notetakers/interpreters, special accommodations for test taking needs, assistance with architectural barriers, assistive technology, and support for individual needs.

USC Support and Advocacy - (213) 821-4710 uscsa.usc.edu

Assists students and families in resolving complex personal, financial, and academic issues adversely affecting their success as a student.

Diversity at USC - (213) 740-2101 diversity.usc.edu

Information on events, programs and training, the Provost's Diversity and Inclusion Council, Diversity Liaisons for each academic school, chronology, participation, and various resources for students.

*USC Emergency - UPC: (213) 740-4321, HSC: (323) 442-1000 – 24/7 on call
dsp.usc.edu, emergency.usc.edu*

Emergency assistance and avenue to report a crime. Latest updates regarding safety, including ways in which instruction will be continued if an officially declared emergency makes travel to campus infeasible.

*USC Department of Public Safety - UPC: (213) 740-6000, HSC: (323) 442-120 – 24/7 on call
dsp.usc.edu Non-emergency assistance or information.*

Students with Disabilities

USC is committed to making reasonable accommodations to assist individuals with disabilities in reaching their academic potential. If you have a disability, which may impact your performance, attendance, or grades in this course and require accommodations, you must first register with the Office of Disability Services and Programs (www.usc.edu/disability). DSP provides certification for students with disabilities and helps arrange the relevant accommodations. Any student requesting academic accommodations based on a disability is required to register with Disability Services and Programs (DSP) each semester. A letter of verification for approved accommodations can be obtained from DSP. Students with exam accommodations must present verification letters to me ***within the first two weeks of class***. DSP is located in GFS (Grace Ford Salvatori Hall) 120 and is open 8:30 a.m.–5:00 p.m., Monday through Friday. The phone number for DSP is (213) 740-0776. Email: ability@usc.edu.

Emergency Preparedness/Course Continuity

In case of a declared emergency if travel to campus is not feasible, the *USC Emergency Information* web site (<http://emergency.usc.edu/>) will provide safety and other information, including electronic means by which instructors will conduct class using a combination of Blackboard, teleconferencing, and other technologies.

Spring 2020 Financial Analysis and Valuation Course Outline and Assignments

Week	Date	Topic	Readings, Deliverables and Class Preparation
1	1/14	Course Introduction	Read Syllabus, Skim Chapter 1 Optional review of finance concepts Kahn Academy video: Time Value of Money (8 minutes) https://tinyurl.com/kle973q
1	1/16	Foundations of Value	Chapter 2 Principles of Value Creation Chapter 3 Conservation of Value Video “Creating value: An interactive tutorial” http://tinyurl.com/qd5hdnf Watch the first two segments (22 minutes) of online video: 1) core-of-value principle; 2) conservation of value Review Exhibit 2.2 Value Inc. vs. Volume Inc example. Optional practice: Chapter 2 review questions 1-5
2	1/21	Foundations of Value	Read Chapters 6-7 ROIC and Growth Read Fortune magazine’s Term Sheet newsletter 1/17/19 interview with Lead Edge Capital founder Mitchell Green where he discussed his criteria for his investment thesis. One of the criteria is "How efficient are you with your capital?" https://tinyurl.com/yb6qyw9c <i>Discussion questions:</i> What are the 5 sources of competitive advantage that allow companies to charge a price premium? What are the 4 sources of competitive advantage that contribute to cost and capital efficiency? Can you identify real world examples of companies with these? Review the empirical data in Chapter 6. 1) Identify 3-5 high and low ROIC industries; 2) Identify 2 industries where the variation in returns is significant; 3) Identify the industries with better stability of ROIC (persistently high return industries) vs. the industries with persistently low returns. What are the three main components of growth? Rank these components (above average, average and below average) based on amount of value created (per \$ of revenue).
2	1/23	Financial Analysis and Performance Evaluation - Valuation Process - Financial Statement Analysis	The income statement, revenue, gross profit, operating profit, net income, ROA and ROE. (15 minutes) https://tinyurl.com/m9d5xbg Read Solving the Puzzle of the Cash Flow Statement (HBS)
3	1/28	Financial Analysis and Performance Evaluation - Measuring Free Cash Flows - Cash Flow Analysis - Reorganizing Fin. Statements	Read Chapter 9 To prepare financial statements for analyzing economic performance you must reorganize the statements into: operating items, non-operating items and sources of financing. Review the examples in the chapter: 1) Invested Capital; 2) NOPLAT; 3) FCF. <i>Discussion questions:</i> What is the definition of ROIC and FCF? What is included in Invested Capital? What is the definition of operating working capital? What are some examples of non-operating assets?

Week	Date	Topic	Readings, Deliverables and Class Preparation
3	1/30	Financial Analysis and Performance Evaluation - Reorganizing FS (continued)	<i>Recommended review:</i> Complete chapter 9 review questions 1-6.
4	2/4	Financial Analysis and Performance Evaluation - Financial Statement Analysis	<i>In class exercise:</i> Identify the Industry - Analysis of Financial Statement Data
4	2/6	Forecasting Future Cash Flows	Read Chapter 11 Forecasting Performance <i>Discussion questions:</i> Review the 7 components of a good model. What are the 6 steps to forecasting according to the text? What is the difference between a top-down and bottom-up approach to forecasting?
5	2/11	Estimating Cost of Capital Evaluating Investments	Read Chapter 13 Estimating Cost of Capital Deliverable: Hansson Private Label case
5	2/13	Estimating Cost of Capital	Chapter 13 (continued)
6	2/18	Enterprise Valuation DCF-WACC Approach	Read Chapter 8 Frameworks for Valuation Chapter 12 Estimating Continuing Value
6	2/20	Enterprise Valuation DCF-WACC Approach	Read Chapter 14 Moving from Enterprise Value to Value per Share
7	2/25	Review and/or Special Topic	Reading TBD
7	2/27	Midterm Exam	Closed Note/Closed Book Midterm Exam
8	3/3	Enterprise Valuation - Relative Valuation Using Market Comparables	Read Corporate Valuation and Market Multiples, Primer on Multiples Valuation and its use in Private Equity Industry (HBS) <i>Discussion questions:</i> What are the pros and cons of valuation using multiples? What is the difference between a forward-looking vs. a backward-looking multiple? How do you calculate Enterprise Value in an EV multiple such as EV/EBITDA? How is an Equity Value multiple different (P/B or P/E)? What type of multiple is best for financial institutions, early stage companies or capital-intensive industries?
8	3/5	Applying Valuation Frameworks for IPOs	Deliverable: Ferrari IPO case
9	3/10	Group Project Introduction	See Blackboard for Project Description
9	3/12	Enterprise Valuation - DCF-APV Approach	Revisit Chapter 8 Frameworks for Valuation
10		3/17/-3/19 Spring Break	No Class Scheduled
11	3/24	Project Workshop Guest Speaker: Helga Haraldsson	Deliverable: Group Project Plan Library Resources Presentation
11	3/26	Real Options - Valuing Flexibility Guest Speaker: Tom Plotts	Read Chapter 35 Flexibility <i>Discussion questions:</i> When is the value of flexibility the most valuable? What are the contributors to flexibility value? Review exhibit 35.5 Classification of Real Options and think about real-world applications of the approach.

Week	Date	Topic	Readings, Deliverables and Class Preparation
12	3/31	Mergers and Acquisitions	Read Chapter 27 M&A <i>Discussion questions:</i> What is the difference between a strategic buyer and a financial buyer? What are the specific factors that differentiate deals that are successful vs. unsuccessful based on returns to the acquirer's shareholders? Provide examples of the strategic rationale for a value-creating acquisition. Review the 6 archetypes for Value-Creating Acquisitions. Provide examples of revenue and cost savings synergies.
12	4/2	Private Company Valuation -Analysis of Strategic Alternatives	Deliverable: Spyder Active Sports 2004 case
13	4/7	Venture Capital and Valuing High Growth Companies Guest Speaker: Mitchell Green, Lead Edge Capital	Read Chapter 32 Valuing High Growth Companies <i>Discussion Questions:</i> Do traditional valuation approaches work for high-growth companies? How would you approach valuing a two-division firm with one mature division and one high-growth division? How does the total market for a new product differ from a company's addressable market? Which is more relevant for forecasting a company's revenues?
13	4/9	Private Equity	Read "Valuation of Late-Stage Companies and Buyouts" (HBS) <i>Discussion questions:</i> What are the characteristics of a strong LBO candidate? What are some examples of LBO exit/monetization strategies for financial sponsors? What are the two primary indicators in an LBO analysis that determine feasibility of a deal to a buyer?
14	4/14	LBO Valuation - Overview of LBOs - LBO Analysis	Skim the Bain Global PE Report 2019 https://tinyurl.com/ter2eny Review the global buyout value 1996-2018 and identify high and low deal value periods and consider the cause for this change in activity. Review the average EBITDA purchase multiple and average Debt/EBITDA for LBOs over time. Review the median holding period for global buyout-backed investments over time.
14	4/16	LBO Valuation - Evaluating a LBO investment	Deliverable: Heinz M&A Case
15	4/21	Venture Capital Guest Speaker: Luke Sikora, Vulcan Capital	See Blackboard for readings <i>Discussion questions:</i> How does a VC firm work? What is the Babe Ruth Effect? Review the calculation for pre-money, post-money valuation and pre-money, post-money shares Review CB Insights Unicorn Tracker https://tinyurl.com/lz9hdfh What are the top 10 (valuation, location and industry)?
15	4/23	Review and/or Special Topic	
16	4/28	Final Project Presentations	Mandatory Attendance
16	4/30	Review/Course Wrap Up	
Final	5/7 5/13	2-4pm Final exam section 15326 2-4pm Final exam section 15325	

*All Chapter references are for the Koller text 6/e University Edition.

Schedule is subject to change based on guest speaker availability (with the exception of exam dates).