

Course Syllabus

Course:

FIN 6352: Financial Modeling
Section 5U1: Wednesdays, 6:00-9:45pm, JSOM 11.206
Summer 2016

Course Instructor:

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Office Hours: By appointment only.
Special Note: I have found that direct email (NOT through eLearning) is an effective mode of communication for most questions that students ask (especially with financial models attached if question pertains to a modeling problem) and so I try to respond to these as soon as I am able to do so.

Course Pre-requisites, Co-requisites, and/or Other Restrictions:

FIN 6301 or consent of instructor.

Course Description:

This course will present practical examples and real-world templates and tools used by investment bankers and private equity professionals in (i) financial statement spreading and analysis; (ii) valuation (using comparables, precedent transactions, and discounted cash flow analysis) of public and private companies in both minority interest and controlling interest situations; (iii) construction and sensitivity of integrated cash flow models (financial statement projections); (iv) construction and analysis of leveraged buyout models; and, (v) construction and analysis of M&A (accretion/dilution) models. Classroom discussions will be a blend of lecture and case studies, with case studies involving a hands-on modeling approach by all students. Homework/projects will provide additional real-world context and practice for in-class discussions and case studies.

Course Objectives:

Student learning outcomes for this course are as follows:

- Gain an overview of basic analytical functions performed by junior investment bankers/private equity professionals;
 - Gain a working knowledge of the three common valuation methodologies (comparable companies, precedent transactions, discounted cash flow);
 - Gain a working knowledge of and ability to construct integrated cash flow models (projections), including revolver modeling;
 - Gain a working knowledge of and ability to construct leveraged buyout models, including sources/uses of cash, proforma balance sheet, returns modeling, and PIK debt with warrants; and,
 - Gain a working knowledge of and ability to construct accretion/dilution (M&A) models, both in shortcut and long form, and including synergies and CHOOSE functionality.
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Required Textbooks and Materials

Course materials are all electronic in nature and will be distributed either via USB at the first class session, or posted in advance for download via the UTD system. Due to the copyrighted and proprietary nature of the course materials, however, **students will be required to purchase course materials through the Investment Banking Institute – www.ibtraining.com**. Materials can be purchased with a credit card by submitting the payment form I've provided. Although I will distribute course materials electronically prior to receipt of payment, grades will not be released until such purchase has been made through IBI. There is no sharing of course materials.

Laptop computers (preferably PCs loaded with Microsoft Excel) are **required** for each class session.

Grading Policy

To evaluate how well you have mastered the material, I will evaluate your performance based upon homework assignments, a final project, and class participation. There will be **no exams** given in this course.

Homework: Each class topic will have a homework assignment due prior to the start of the next class the week after it has been assigned. Homework assignments will account for 50% of your final point total.

Project: You will have a final project that will be described in separate handout. The project will account for 40% of your final point total.

Class participation: I expect students to come to class prepared to not only discuss the material under study but also to answer in-class questions. If you are confused by something that I have presented, then it is your responsibility to tell me and ask for further clarification. Class participation will account for 10% of your final point total. Simply attending class does not ensure credit for class participation.

Final point totals will be used to establish a final grade distribution, in compliance with suggested University/Departmental grading policies, as follows:

Top 40%	A or A-
Next 40%	B+, B, or B-
Bottom 20%	C or below

For students requesting homework “help” or “hints”, please keep in mind that each granted request will result in a small point deduction from the final homework score. This is to serve as a grade equalizer, and will be explained further on the first day of class.

No cheating will be tolerated in this class. Cheating includes plagiarism from others or plagiarism from your own papers, sharing information (except if and when assignments require working as a group), taking additional time than allowed, falsifying documents or any other way of getting information from a source that is not allowed or is not cited or any other form of cheating listed under the University Policy (<http://www.utdallas.edu/judicialaffairs/index.html>).

This course will use the resource turnitin.com which searches the web for possible plagiarism and is over 90% effective. Any suspicion of cheating will be reported to Judicial Affairs and if you are found responsible, the recommendation will be to follow these guidelines:

- An infraction that a student is found responsible for but is minor AND was unintentional, the recommendation is one letter grade adjustment to the paper/exam.

- A moderate infraction will result in an F on the exam or project.
- Any student found responsible for a major infraction or a second infraction of any severity, will be disciplined with an F in this course.

Please note that if you are suspected of cheating and your case is in Judicial Affairs at the time of reporting grades, your grade will be “NR”. If an employer requires this course or the completion of a degree, this could delay the finalization of the grade by an undetermined amount of time and threaten that employment. In the case of an NR, the student will be responsible for ensuring the grade change is submitted.

Course & Instructor Policies

Late work: Homework, when due, will be due prior to the start of class, and should be turned in via eLearning. Any homework received after this point will be docked one letter grade per day late. The final project is due by the end of class on its due date and will not be accepted after that point in time. Failure to turn in a final project will result in an F for the course.

Class attendance: You cannot be successful in this course if you do not attend class. Further, you cannot get marks for class participation if you do not attend.

Computer Usage during Class: While laptops are required to be used in class, my expectation is that they will ONLY be used for the modeling exercises we perform during class. There should be no computer usage for any other purpose, including surfing the web or completing other unrelated tasks.

UT Dallas Syllabus Policies and Procedures

The information contained in the following link constitutes the University’s policies and procedures segment of the course syllabus.

Please go to <http://go.utdallas.edu/syllabus-policies> for these policies.

Course Schedule/List of Assignments

INTRODUCTION, INDUSTRY OVERVIEW, FINANCIAL STATEMENTS OVERVIEW AND ANALYSIS (Topic 1)

- a. Brief Industry Overview – Bulge Bracket vs. Boutique Investment Banks, PE Firms, Hedge Funds
- b. Review of Financial Statements – Balance Sheet, Income Statement, Statement of Cash Flows
- c. SEC Filings Overview
- d. Review of sample 10-K– Business Overview, MD&A section, Financial Statements, and Notes
- e. Overview of Non-Recurring Adjustments
- f. Examples of Non-Recurring Adjustments
- g. Deriving Historic Ratios and Trends
- h. Example of “Spreading” Financials
- i. **HOMEWORK** - Spread the financial statements for Heinz

VALUATION (Topic 2)

- a. Overview of the three (3) Generally Accepted Valuation Methodologies
 - i. Discounted Cash Flow Analysis (DCF)
 - ii. Trading Multiples
 - iii. Precedent Transactions
- b. Overview of Valuation Template
- c. Spreading Comps – Example
- d. Precedent Transactions Analysis - Example
- e. Discounted Cash Flow Analysis - Example
- f. **HOMEWORK (due in 3 parts):**
 - i. Comps Spreading Exercise
 - ii. Precedent Transactions Exercise
 - iii. DCF Exercise
 - iv. Integration of the three methodologies to reach a value conclusion

CONSTRUCTION OF INTEGRATED CASH FLOW MODEL (PROJECTIONS) (Topic 3)

- a. Uses for a Financial Model
- b. Tips for Setting up a Financial Model
- c. Creating Five Year Projections for Income Statement, Balance Sheet and Cash Flow
- d. Debt and Interest Schedule
- e. Integration of Projected Income Statement, Balance Sheet and Cash Flow
- f. Revolver Modeling
- g. Running Sensitivities
- h. **HOMEWORK** – Construct integrated cash flow model (projections)

LEVERAGED BUYOUT (LBO) MODELING (Topic 4)

- a. Private Equity Industry Overview – Fund Structure, Returns, Waterfall Models
- b. Uses for An LBO Model on Sell-side and Buy-side
- c. Review of Deal Structure and LBO Model Example
 - i. Introduction to LBOs
 - ii. Creation of a Sources and Uses Worksheet
 - iii. Discussion of Typical Financing Sources for LBO
 - iv. Purchase Price Calculations and Considerations
 - v. Capital Structure Options / Reviews
 - vi. Proforma Income Statement, Balance Sheet, Cash Flow
 - vii. Goodwill Calculation
 - viii. Integration of Income Statement, Balance Sheet, Cash Flow
 - ix. Debt and Interest Schedule
 - x. Revolver and Mandatory / Option Debt Prepayment and Impact on Returns
 - xi. Returns Analysis – IRR on Debt, Hybrid Instruments and Equity Investments
- d. Returns Analyses
- e. **HOMEWORK** – Construct LBO Model

ADVANCED FINANCIAL MODELING (Topic 5 - discussion only, no homework)

- a. Review of advanced modeling functions in Excel
- b. Review of Private Equity “Waterfall” model
- c. Review of “Cash Flow Sweep” model

MERGERS & ACQUISITIONS (M&A) MODELING, M&A SALE PROCESS (Topic 6)

- a. Uses for a Merger Model
- b. How to construct a Merger Model
 - a. Calculation of Equity Value and Purchase Price
 - b. Explanation of Consideration Used in Purchase (Stock, Cash, Assumed Debt)
 - c. Discussion of Multiples Paid
 - d. Post-Merger Control Issues
 - e. Synergies and Pretax Synergies Required to Breakeven
 - f. Revenue and EBITDA Contribution
 - g. Proforma Income Statement
 - h. EPS Dilution for Acquirer
 - i. Sensitivities

M&A SALE PROCESS – a brief overview (discussion only, no homework)

PITCHING - a brief overview (discussion only, no homework)

VENTURE CAPITAL INVESTING (discussion only, no homework)

- a. Types of Early Stage Investors
- b. Valuation
- c. Cap Tables, Liquidation Tables
- d. The “VC Valuation Method” - Example

DISTRESSED INVESTING (discussion only, no homework)

- a. Overview of Distressed Investing
- b. Corporate Debt Pricing
- c. How to get Control of a Distressed Asset
- d. Case Study – Samsonite
- e. Financial Model

INTERVIEWING/RECRUITING (discussion only, no homework)

- a. Overview of investment banking interview process
- b. Commonly asked qualitative questions
- c. Commonly asked technical questions
- d. Resume, interview preparation tips

FINAL PROJECT (due date TBD): Students will be required to construct a full M&A model, which effectively draws upon and integrates into one model all of the core skills learned to date in class (Valuation, Modeling, construction of pro forma balance sheet, analysis of M&A transaction impact on EPS, and quantification of results).

All items in this syllabus, including homework descriptions and timelines, are subject to change at the discretion of the Professor.