

Jon M. Huntsman School of Business	
Course Assessment: Financial Statement Analysis and Valuation	
Accounting 6620	Fall 2011
Instructor: Jeffrey T. Doyle	

Section 1: Overview and Learning Objectives

Accounting 6620, Financial Statement Analysis and Valuation is a graduate class in the Masters of Accounting (MAcc) program. The enrollment for the Fall 2011 semester was **18 students** (down from 27 last year). The purpose of the class is to learn the basic accounting standards about valuation, enable students to gather and analyze historical information about a business, create forecasts of future sources of value, and utilize those forecasts to estimate an intrinsic value. The average grade given in the class was almost exactly equal to a **B+ (3.32 average)**, which is my general target for a graduate class.

Section 1.1 Huntsman School Objectives

Huntsman Pillar	Emphasis	Discussion
Ethical Leadership	Low	There is some discussion of evil managers and earnings management.
Global Vision	Low	There is some discussion of global markets and international accounting standards.
Entrepreneurship	Medium	Financial statement analysis and valuation play critical roles in entrepreneurial activities. The tools learned in this class can enable students to analyze and create entrepreneurial opportunities.
Analytical Rigor	High	The main contribution of this class is in providing complex analytical tools that student can use to analyze and value business enterprises. Advanced theories and information gathering, organizing, and analyzing form the core of this course.

Section 1.2 School of Accountancy Learning Goals

There are two School of Accountancy learning goals that are designated as “high” for this class. They focus on research, analysis, application, and decision making using accounting information. The class takes a “user approach” to financial statements and acts as a capstone class, using skills students have gained from classes in strategy, economics, marketing, and finance in a comprehensive final project.

Learning Goal	Emphasis	Discussion
Professional Skills: Research complex accounting-related issues and apply findings in various decision settings	High	In all of the nine learning objectives for the class (shown below), students obtain financial information for specific companies and use that information to make valuation and credit risk decisions. Students learn how to research companies using data from SEC reports, analysts, financial statement data providers, etc.

Professional Skills: Develop, measure, analyze, synthesize, validate, communicate, and make professional judgments relative to financial and other types of information in problem solving and decision making	High	The principal decision-making skill taught in the class is how to analyze and value a business. Throughout the course, students obtain and analyze financial information, synthesize that information to create forecasts, and reach a decision about the valuation of a business. Students use time value of money concepts, statistical analysis, and other tools to solve real-world problems.
Professional Skills: Oral and written communication in the context of accounting-related matters	Medium	On assignments and exams, students are required to present their results in a rigorous written format. The students also complete a final project that is partially assessed for written communication skills.
Professional Values and Attitudes: An appreciation for the need to continue life-long learning to maintain professional knowledge and skills	Medium	The ability to independently access and analyze financial information is a skill that will be useful throughout the students' professional careers.

Section 1.3 Course Learning Objectives

The organization of my eight learning objectives for the course follows the chronological content delivery of the class. Under each of the main objectives, I have listed the more detailed knowledge and skills that I expect each student to obtain.

Learning Objectives
<p>1. Students will gain a broad understanding of markets, valuation theory, and valuation-related accounting rules</p> <ul style="list-style-type: none"> • Understand the concepts of market efficiency, including the theory's assumptions and detractors • Understand and implement fundamental and technical analysis • Understand and identify the sources of investment value and their link to basic valuation theory and models • Understand and apply valuation-related accounting rules (fair value methods, fair value hierarchy, etc.)
<p>2. Students will be able to identify and access sources of information for use in analysis, forecasting, and valuation</p> <ul style="list-style-type: none"> • Understand the importance of information to markets and how to think about the quality of that information • Obtain, calculate, and statistically analyze market returns (basic regression analysis) for individual stocks or indices • Obtain and calculate basic valuation ratios • Acquire and analyze analyst information (forecasts, target prices, etc.) • Obtain historical financial information for a firm and understand how data providers (e.g., Compustat) organize and categorize financial data • Import financial statements into a valuation spreadsheet
<p>3. Students will be able to analyze financial statements and other data to assess a firm's strategy and its success vis-à-vis its competitors</p> <ul style="list-style-type: none"> • Understand the basic forces of competition in markets and the determinants of success • Conduct a basic ROE analysis • Conduct an advanced ROE analysis, including the decomposition of financial statements into operating and financing pieces • Understand how growth is analyzed and calculate sustainable growth rates

<ul style="list-style-type: none"> • Understand and analyze margins, turnover ratios, and economies of scale • Understand and apply the concept of mean reversion to investing • Understand the concepts of credit risk and loss given default
<p>4. Students will be able to assess the quality of a firm’s accounting information and understand the risks inherent in the accrual system</p> <ul style="list-style-type: none"> • Calculate and understand the market-to-book ratio (economic vs. accounting assets) • Understand and be able to articulate the inherent limitations of book value versus market value • Understand why accruals “go bad” in general (evil managers and foggy crystal balls); explain (and replicate) the accrual anomaly; understand cash versus accrual accounting and how they both can be manipulated • Understand and be able to detect the concepts of noise and bias in information (both statistically and how it applies to estimates of financial information, including accruals) • Calculate the cash and accrual components of income (both the NI/CF method and the balance sheet method) and identify what constitutes a red flag • Analyze the risks associated with specific accruals on the balance sheet (e.g., accounts receivable and inventory)
<p>5. Students will be able to use financial and accounting analysis to forecast future firm fundamentals (earnings, cash flows, balance sheets)</p> <ul style="list-style-type: none"> • Understand and be able to implement the systematic forecasting framework for all financial statements • Understand and apply general forecasting concepts such as the forecast horizon, terminal period assumptions, etc. • Obtain historical information and other relevant information and create a reasonable set of forecasted financial statements that are internally consistent for a specific firm • Understand and be able to analyze non-GAAP earnings and their properties; understand the clean surplus relation and the all-inclusive principle
<p>6. Students will understand the concept of risk and be able to calculate appropriate risk-adjusted discount rates</p> <ul style="list-style-type: none"> • Understand the concepts of risk, margin of safety, and diversification • Know some practical ways to limit risk in investing • Understand different investing vehicles (mutual funds, hedge funds, etc.) • Estimate the cost of equity capital for a firm (understand CAPM, calculate beta from scratch, calculate an earnings beta, and utilize size portfolio returns) • Understand and be able to calculate an implied cost of capital
<p>7. Students will understand different valuation models and be able to use fundamental forecasts and a discount rate to arrive at an estimate of firm value</p> <ul style="list-style-type: none"> • Calculate cash distributions under a DCF or residual income approach • Understand and be able to implement a basic DCF model to find a current value • Understand and be able to implement a basic residual income model to find a current value • Understand the assumptions that make the DCF and residual income models equivalent • Calculate and utilize present value techniques (formulas, Excel, and calculators) and perpetuity formulas
<p>8. Students will understand valuation ratios and be able to use them in a comparable market analysis and in trading strategies</p> <ul style="list-style-type: none"> • Calculate and understand market-to-book, price-to-earnings, and other valuation ratios • Use market multiples and comparable analysis to value firms • Understand how valuation ratios can be mathematically derived from the more complete residual income model and be able to identify the key drivers of these ratios • Identify and be able to use segment data for use in comparable analysis • Understand some common trading strategies • Implement a trading strategy and understand how ideas are generated and back tested

Section 2: Assessing Student Learning

Section 2.1 Student Performance

The student assessment process in this class includes many informal feedback mechanisms such as interactive class discussion, assigned problem sets that are graded by me, office visits and emails from students, and review sessions. More specific, graded student assessment occurs through three graded exams and a final project (a valuation of a company of the student's choice), which is an application of most of the concepts and skills learned throughout the semester. My goal for a graduate class is to achieve about 80% mastery in each area. I map each exam question to one of my eight learning goals. A summary of student performance for the three exams and for the final project are provided below.

<u>Student Exam Performance</u>			
Learning Objective	Description	Performance	Relative Weight
1	Markets and valuation	88.3%	9.0%
2	Information	76.5%	6.0%
3	Strategy and financial analysis	86.0%	18.3%
4	Accounting quality	92.9%	18.3%
5	Forecasting	88.8%	15.0%
6	Risk and cost of capital	89.1%	8.7%
7	Valuation models	84.4%	12.0%
8	Valuation ratios	89.0%	12.7%

<u>Final Project Performance</u>		
Learning Objective	Description	Performance
2	Overall quality / exec summary	77.8%
3	Strategy and financial analysis	85.0%
4	Accounting quality	85.0%
5	Forecasting	80.8%
6	Risk and valuation	83.3%

- Overall, it appears that the students did very well on the exams and on the final project. The only area that was under 80% was Objective 2, acquisition and evaluation of information. The final projects definitely lacked some effort (or skill?) in the acquisition of a wide variety of information sources. The students did not stray too far from basic SEC filings.
- I would like to grade the final project a bit differently next year: give an explicit score for 1) information acquisition and 2) break out valuation using valuation ratios and comparables.
- The students are definitely able to learn the basic skills I am teaching and perform on an exam. However, I'm still concerned about the depth of their knowledge and their ability to apply the skills in a robust and professional manner.

Section 2.2 Student Evaluations

USU switched to a new system of student evaluations in 2011-2012. The overall student evaluations for the course were mostly positive, with overall scores of 5.0 out of 5.0 for “excellent teacher” and 4.9 for “excellent course”. The IDEA system also incorporates student evaluations of progress on selected learning objectives. The overall score was 4.8 out of 5.0 for the four learning objectives I selected (see below).

Student Evaluations Summary	
General evaluation	“Excellent teacher” = 5.0 “Excellent course” = 4.9
Progress on learning objectives	Overall score = 4.8 Gaining factual knowledge (essential) = 4.9 Learning principles/theories (essential) = 4.8 Applying course material (important) = 4.8 Developing professional skills (important) = 4.8

The student comments were overall very positive. Some things that were emphasized:

- Use of enthusiasm and humor to keep the class interesting
- Students have ample opportunity to ask questions
- Good work load that was challenging

Some student suggestions:

- “it would be nice to follow the slides during class for organization”, “The powerpoint presentations that were placed on blackboard were not helpful in reviewing past classes”, “maybe some more detailed notes”
- “More guidance on the Freestyle assignments”, “perhaps a bit more structure”

Section 3: Continuous Improvement

Section 3.1 Changes in Course Due to Past Assessment

This was the third time I have taught the course. Several of my changes below were in response to last year’s teaching assessment.

- Last year’s comment: “I am not going to use the same textbook next year. I am going to prepare my own set of readings for the class. This will be a big undertaking, and it might have some problems (especially the first year). I will also be developing my own valuation spreadsheet for the students to use. I would like to get them involved in the creation of their own spreadsheet, but we’ll see about the tradeoff between individual student learning and uniformity.”

This was A LOT of work for me, but I was really pleased with the outcome. I still have improvements to make to make up for the lack of a textbook, but the customized valuation workbook worked very well (especially the student involvement).

- Last year’s comment: “I would like to do the final project as we go along in the semester, rather than waiting until the end. They need more feedback (they get none, since it is turned in on the last day of class).”

This was another innovation this year with four or five review-style “freestyle” assignments that had the students working on their projects as the semester progressed. This was a success, but I need to provide more real-time feedback and more structure around the assignments.

- Last year’s comment: “The midterm exam was way too long - again. There was too much open-ended writing involved. The final exam was just about right, but had too much unnecessary writing. I need to really review these tests next year.”

I switched to three exams instead of two this year to help alleviate this problem. The tests were more manageable (although the scores were very high on average). I'm not sure I'm in love with this change.

Section 3.2 Ideas for Future Improvement

- I would like to improve my PowerPoint slides and post them earlier. I don't use them in class, but are still good for student notes and as an outline. I did not use a textbook for the first time this semester, and I need to provide some kind of tangible alternative. Not using a textbook was definitely a success, but it's an area that can definitely be improved each year. I could possibly supplement with a course pack of readings or even internet videos.
- I also provided an Excel valuation workbook that I had the students build as the semester progressed. I thought this was a definite improvement, as the students had more understanding of the workbook since they were involved in creating the formulas. This was a big success.
- Possible to keep adding more diverse material (beyond equity valuation) like financial instrument valuation, fixed income, etc. I'm not sure what else I would drop, however. I could get some feedback on this.
- The other big innovation was adding final project "freestyle" assignments and class sessions during the semester. This enables some additional review time and got the students working on their final projects throughout the semester. I could still improve this process. Some of these class sessions were a little bit boring and not as focused as I would have liked. I also do not like grading the final project after the semester ends (no feedback for students).
- I could streamline the assignments more to get the same learning "bang" for less of a "buck" (paid by the students' time).
- I would like to have them better able to access more data next year – possibly by improving the use of WRDS or other databases. They are very weak at being innovative in finding good data.
- The course is very U.S.-centric with almost no discussion of international applications/issues for valuation. I need more training myself to be able to improve the class along these lines. I'm also not sure if there is time for additional content in the course.
- I would also like to review another FSA class (Professor Damodaran from Columbia), which is available on-line