ACCOUNTING FOR VALUE
B8022, Spring, 2016

(** Tentative spring 2016 syllabus: All information below is subject to change**) 

PROFESSOR NAME: Stephen Penman

Professor Office
: 612 Uris Hall
Office Hours: TBA

REQUIRED PREREQUISITES AND CONNECTION TO THE CORE

This course builds on material in Financial Accounting, Corporate Finance, and Capital Markets core courses and complements courses on equity investing in the Value Investing Program and elective courses on fundamental analysis in the Accounting Division. Material from the Managerial Economics and Strategy Formulation core courses is also relevant. Students should have a reasonable understanding of financial accounting principles, the balance sheet, income statement, and cash flow statement, along with the basic principles of finance.

COURSE DESCRIPTION AND OBJECTIVES

This course is about handling accounting information in value investing. The issue is straightforward: How do I infer value from such numbers as earnings, book value, cash flows, return on equity, and return on assets? What are the pitfalls? When can I be led astray? How do I make valid inferences? “Profitability” is an important valuation attribute, but does reported accounting profitability convey real profitability? If not, how do I handle the deficiency? How does accounting differ across industries, jurisdictions, and competitive situations? How is accounting “translated for an understanding of the economics of a firm under study?

The answers to these questions require, first, an understanding of the integrity of the numbers that financial statements report and, second, an understanding of what a “clean” number tells us and what it does not tell us. The first question is the issue of so-called “earnings quality.” While we will be sensitive to the quality of the accounting in this course—and indeed develop some striking criticisms and make adjustments—our focus will largely be on the second, the issue of
appreciating the value implications of accounting numbers. (There is a detailed course on earnings quality at Columbia Business School, Earnings Quality and Fundamental Analysis, B8008.)

Accounting numbers, used appropriately, are powerful aids to the value investor in understanding a business and the value in that business. However, they can be easily misused. A P/E ratio, for example, serves as an important input to a value investor, but the investor is in danger of being falsely cued if he or she does not appreciate what that ratio actually captures. A too-simple form of “value investing” trades on P/E and price-to-book (P/B) under the label, “Value versus Growth” investing, but the uninitiated is in danger of falling into the Value Trap. In this course you will understand the Value Trap and how to avoid it. More importantly, you will appreciate how a dedicated approach to value investing deals with accounting numbers to understand when price is different from value. Indeed, the course will show how to bring the appropriate (possibly adjusted) accounting numbers together to challenge the market price and thus avoid the greatest risk in investing, the risk of paying too much.

Accounting numbers, and their interpretation, vary across industries and jurisdictions, so have to be handled carefully in understanding the economics of a business and issues like the competitive situation and growth prospects that are so important in value investing. In the course, accounting is dealt with as part of business analysis which is, after all, the prime focus in value investing. We learn about the business via accounting numbers if they are appropriately handled.

The course title is that of my book, Accounting for Value. This easy-read develops the themes and the course flushes them out. By the end of the course, you should have the answers to the following questions:

- How do I understand the profitability of a business from the financial statements and what does that imply for the value of the business?
- Apple Inc. trades at a forward P/E of 11.5. What does that tell me? Is the stock cheap or expensive?
- Apple Inc. trades with a PEG ratio of 0.85. Is it cheap?
- The value investor is wary of taking on leverage. How does leverage affect accounting numbers such as earnings and return on equity, and how can those levered numbers lead me astray?
- How do I use the accounting to understand the business and the value imbedded?
- The value investor is wary of buying growth, for growth is risky. How does the accounting tell me that prospective growth is risky?
- What is the Value Trap? How can I avoid it?
- Which accounting numbers do I have to be wary of?
- How do I use accounting numbers to understand the growth expectations built into the market price?
- How do I challenge the market price using accounting numbers?

THE TEXT FOR THE COURSE

Read the Introduction and the first two chapters of this book before the class begins, then the remaining chapters as the course proceeds. It is written largely for practitioners, introducing and illuminating the issues addressed in the course.

*Other Reading*

A more detailed text that digs into accounting issues in more depth is Penman, S., *Financial Statement Analysis and Security Valuation*, 5th ed. (Irwin/McGraw-Hill, 2013). If you buy this book, the international soft-cover version is the same material at the U.S. version but much cheaper.


**CLASS FORMAT**

Class sessions will revolve around power point presentations, short exercise examples, and longer case discussions. Students will receive a complete copy of notes for each class, along with advance case and exercise material for subsequent classes. Students should come to class well-prepared to discuss issues and push for their resolution.

**METHOD OF EVALUATION**

<table>
<thead>
<tr>
<th>Course Project</th>
<th>50%</th>
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<tbody>
<tr>
<td>Final Exam</td>
<td>50%</td>
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</tbody>
</table>

The final exam will be for 90 minutes, open book, in the final class for the semester.

**Course Project**

All course projects will be titled, “Challenging the Market Price of Company X Using Accounting Information” (you choose the X). It can be done individually or in groups up to four people. It should be no more than 10 pages in length (exclusive of detail on calculations involved). It is due at the end of the exam period for the semester.

The submission will be graded on its creativity, demonstration of depth of knowledge, rigor, and clarity in communication. It must be original work.

The project must be submitted in hard copy, delivered to Professor Penman’s office, to the Assistants’ station in Uris 6W, or by mail. Mailing address: Professor Stephen Penman, 612 Uris Hall, Columbia Business School, 3022 Broadway, New York, NY 10027.

Under Business School standards, the project is Type A (with the group self-selected) in the table below:
### Type and Designation

<table>
<thead>
<tr>
<th>Type</th>
<th>Designation</th>
<th>Discussion of concepts</th>
<th>Preparation of submission</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>group / group</td>
<td>Permitted with designated group*</td>
<td>By the group</td>
<td>Same grade for each member of the group</td>
</tr>
<tr>
<td>B</td>
<td>group / individual</td>
<td>Permitted</td>
<td>Individually</td>
<td>Individual</td>
</tr>
<tr>
<td>C</td>
<td>individual / individual</td>
<td>None of any kind</td>
<td>Individually</td>
<td>Individual</td>
</tr>
<tr>
<td>D</td>
<td>(An optional category to be defined in detail by the individual faculty member)</td>
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</tbody>
</table>

* The designated group can be either an assigned study group or a self-selected one.

### Classroom Norms and Expectations

Classroom activities are to be conducted in an atmosphere of mutual respect, engagement, and participation, with the common goal of enhancing each other’s learning and mastery of the material. The 3Ps of the Core Culture apply:

**Present:**
- On time and present for every session
- Attendance is required, although not tracked

**Prepared:**
- Complete pre-work required, expect cold calling
- Bring name plates to class

**Participating:**
- Constructive participation expected
- No electronic devices unless for educational purposes. Laptops permitted, but only if open to the course material

### Course Schedule and Topics

<table>
<thead>
<tr>
<th>WEEK</th>
<th>TOPICS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td><strong>Introduction</strong></td>
</tr>
<tr>
<td></td>
<td>1 Value Investing Principles: What the Value Investor Wants from Accounting</td>
</tr>
<tr>
<td></td>
<td>Cash versus Earnings Valuation.</td>
</tr>
</tbody>
</table>
Eating the 10-K for breakfast

**Understanding the Business with Accounting Numbers: Use and Misuse of Accounting Numbers**

1. Pricing with P/E and P/B Ratios
2. Value versus Growth Investing: The Value Trap
3. Accounting for Leverage and Financing Risk
4. Accounting for Profitability of the Business
5. Accounting for Growth Prospects
6. Accounting for Business Risk

**Accounting for Value in the Business**

7. Connecting Accounting Numbers to Value in the Business
8. Value in the Balance Sheet
   - Fair value accounting
   - Accounting for Missing Intangible Assets
   - Replacement Value accounting
9. Value in the Income Statement
   - Anchoring on Quality Earnings
   - Identifying Sustainable Earnings and Earnings Power

10. Accounting for Growth Expectations in the Market Price
11. Accounting for Value: Challenging the Market Price
12. Accounting for Value: Price versus Value

Final Exam (90 minutes)