# Financial Statement Analysis (AMIS 4210) 

Spring Semester 2021

## Administration

Professor: Carlos Corona<br>E-Mail:<br>corona.55@osu.edu<br>Course Website:<br>Class Times:<br>Canvas<br>T/Th: 11:10 am-12:30 pm

## Course Objectives

This is a course on fundamental analysis. The primary emphasis is on equity (share) valuation, focusing on developing and applying methods for valuing firms using financial statement analysis. The skills you will learn in this course are very practical. The fundamental analysis methods will be examined in detail and applied in cases and projects involving publicly listed companies. Topics include models of shareholder value, a comparison of accrual accounting and discounted cash flow approaches to valuation, the determination of price/earnings (P/E) and market-to-book ( $\mathrm{P} / \mathrm{B}$ ) ratios, the reformulation of financial statements, the analysis of profitability, growth, and value generation in a firm, and diagnosing accounting quality.

The course does not "assume market efficiency." Rather, it develops the techniques for challenging traded prices to assess whether investments are appropriately priced. Most importantly, we learn how to handle accounting and financial reports in valuation. We see that valuation is really a matter of appropriately accounting for value. The course combines accounting principles and investment principles to answer the question: How do I account for value so that I can challenge stock prices with some confidence?

The course will be taught from the perspective of designing techniques to be used in an (independent) equity research department or firm. Accordingly, the material is pertinent to the security analyst - particularly the equity analyst - who must issue a buy, hold or sell recommendations on stocks. However, much of the material covered in the course is also relevant to the corporate financial analyst evaluating acquisitions, restructurings, and other investments and calculating the value generated by strategic scenarios.

After completing this course, you will gain two valuable tools in your skill set: (1) financial statement analysis; and (2) equity valuation principles. The focus of financial statement analysis
is a rigorous reformulation of published GAAP statements. The reformulation is needed to highlight the shareholder-value generation and distribution process of the firms. The focus of the equity valuation is on theory-consistent valuation benchmarks. These benchmarks provide important guidance to further, more detailed firm valuation methodologies.

## Course Material

## Textbook:

Stephen Penman, Financial Statement Analysis and Security Valuation, fifth edition, New York, NY: McGraw-Hill/Irwin, 2013. ISBN-13 = 978-0078025310

## Course website:

Course website (in Carmen - Canvas) contains comprehensive, up-to-date course information and additional reading material.

## Office Hours

Fixed: Wednesdays 1:30-2:30pm
Variable: By appointment.

## Evaluation and Grading

## FSA I

Group Project $1 \quad 20 \%(8+12)$
Group Project $2 \quad 20 \%(8+12)$
Midterm 1 (take-home) 10\%
Midterm 2 (take-home) 10\%
Midterm 3 (take-home) 10\%
Final Exam (take-home) 10\%
Class Participation (e.g., Homework, Mini-cases) 20\%

## Class Sessions: preparation and participation

- Initially, there will be two synchronous classes per week. However, I may reduce that to only one synchronous class per week. In that case, I will replace the other class with a video. Most videos will contain lectures and will also prepare you for the assignments and minicases.
- Synchronous class sessions will be more participative and will cover lectures, assignments, and mini-cases. Classes will also be recorded and posted on Carmen.
- A Zoom link will be provided on Canvas to attend the synchronous class sessions.
- Homework assignments should be submitted individually. The homework helps individual understanding of lectures, and the grading is effort-based.
- Mini-cases should be done and submitted in groups. Mini-cases are work that is helpful for your group project, typically following an in-class example. The group mini-cases grade is also effort based.
- You are encouraged to participate in and contribute to our class discussions on concepts,
techniques, and real-life companies used as class examples. Also, good citizenship in your teamwork is a part of your class participation.


## Group Projects (Reports and Presentations)

Each group is required to deliver a project each half-semester that involves financial analysis and valuation using tools developed in the course. Each group chooses one company that it wishes to cover. Each project requires a written report (project write-up) and a presentation. The project write-ups are graded on rigor, creativity, demonstration of depth of knowledge, and clarity in communication ( 24 points). Group presentations are graded as part of the overall grading of the project (16 points). Detailed instructions about the group projects will be distributed later. Attendance is required for each presentation. Deductions will be taken for missing presentations without prior approval.

## Exams

All exams must be individually-completed. They all are open-book online and cumulative exams. You will have two or three days during which you can take the Exam. Once you start the Exam, you must finish it within the time specified. You may use a calculator or your computer. During the Exam, you can only use internet access to download the Exam and upload your answers in Carmen. Try to find a calm place to take your Exam. During the Exam, you should not communicate with anyone other than your pet (human beings cannot qualiy as pets).

The exams will emphasize techniques and concepts covered in assigned chapters from the text, cases, class discussions, and notes. They may include problems, essay questions, and short answer questions, but they often include problems/mini-cases I wrote just for that purpose.

Medical emergencies and family emergencies are the only valid reasons for missing the Exam. In such instances, you must provide supporting documentation (e.g., signed note from your physician). If you miss a midterm exam, your final exam grade will replace the missing midterm exam grade.

The Final Exam will cover all topics in the course. The final exam grade, if better, will replace the lowest midterm exam grade in the computation of the final grade. This gives everyone a final opportunity to compensate a "bad day" and significantly improve the overall grade. Warning: I would not rely on this policy too much. Since the final Exam is cumulative and the material in the last part of the course is difficult, it is not common for students' final exam scores to be appreciably higher than their midterm-exam grades.

## Academic Integrity and Student Conduct

- I expect your behavior in class to be similar to the one you would have in an in-person class. I consider turning your camera off a disrespectful behavior. Using your phone or any computer application to chat during class is also a lack of respect. If you need to say something, raise your hand and say it.
- The university policy on academic integrity is strictly followed.
- Collaboration on assignments is allowed, but you must submit your own assignment. You cannot copy any part of anyone else's assignment. You must write the answers in your own words.
- During exams, collaboration or communication with anyone is not allowed. You can only use an internet connection to access Carmen. Only the textbook and your notes from the course can be used.
- Any potential process for an integrity violation will involve notifying the student, the undergraduate business program head, and the Division of Student Affairs.
- The undergraduate business handbook sets expectations for students regarding class attendance, participation, and personal behaviors that are considered appropriate for inclass, student-student, and student-faculty interaction.


## Students with Disabilities

- Students with documented disabilities should feel free to inform me in private of their needs and make arrangements with the Office for Disability Services.

FSA

| Week | Date | Topic | Textbook Chapters | DUE <br> (Tentative) | Recommended Exercises |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Part-I: Introduction to Accounting-based Valuation |  |  |  |  |  |
| 1 | 1/12 | Introduction and Overview | Ch 1 |  | $\begin{aligned} & \text { C1.9, E1.1-E1.3, } \\ & \text { E1.5, E1.6 } \end{aligned}$ |
|  | 1/14 | Revisiting Financial Statements | Ch 2 |  | $\begin{aligned} & \text { C2.4, E2.1, E2.2, } \\ & \text { E2.4, E2.6, E2.10 } \end{aligned}$ |
| 2 | 1/19 | Valuation Methods | Ch 3, 4 | Homework1 | $\begin{aligned} & \text { C3.9-C3.12, E3.1- } \\ & \text { E3.3, E3.5-E3.8 } \end{aligned}$ |
|  | 1/21 | [Debriefing group exercise] |  | Minicase-0 <br> (M4.1) | C4.2, E4.1-E4.4, E4.7, E4.8, E4.10, E4.12 |
| 3 | 1/26 | Residual Income Model and $\mathrm{P} / \mathrm{B}$ ratio | Ch 5, 7 |  | $\begin{aligned} & \text { C5.8, E5.1-E5.4, } \\ & \text { E5.7, E5.10 } \end{aligned}$ |
|  | 1/28 | [Debriefing group exercise] |  | Minicase-1 |  |
| 4 | 2/02 | Abnormal Earnings Growth Model and P/E ratio | Ch 6, 7 | Homework2 | C6.1, C6.4-C6.7, C6.13, E6.1, E6.3E6.4, E6.7-E6.10 |
|  | 2/04 | [Debriefing group exercise] |  | Minicase-2 |  |
| Part-II: Financial Statement Reformulation |  |  |  |  |  |
| 5 | 2/09 | A Framework of Financial Statement Analysis | Ch 8 |  | $\begin{aligned} & \text { C8.1-C8.10, E8.1, } \\ & \text { E8.4-E8.6 } \end{aligned}$ |
|  | 2/11 | [Debriefing group exercise] |  | Minicase-3 |  |
| 6 | 2/16 | Statement of Shareholder's Equity | Ch 9 | Homework3 | $\begin{aligned} & \text { C9.1, C9.2, C9.6, } \\ & \text { E9.1-E9.3, E9.5, } \\ & \text { E9.7, E9.12 } \end{aligned}$ |
|  | 2/18 | [Debriefing group exercise] |  | Minicase-4 |  |
| 7 | 2/23 | No Class - Instructional Break |  |  |  |
|  | 2/25 | Review |  |  |  |
| 8 | 3/01 | Group Presentation (Project 1: Valuation) |  | Project-1 write-up |  |
|  | $\begin{aligned} & 3 / 02- \\ & 3 / 04 \end{aligned}$ | Midterm 2 |  |  |  |


| Week | Dates | Topics | Textbook Chapters | DUE <br> (Tentative) | Recommended Exercises |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Part-II: Financial Statement Reformulation (cont.) |  |  |  |  |  |
| 9 | 3/09 | Balance Sheet and Income Statement | Ch 10 |  |  |
|  | 3/11 | [Debriefing group exercise] |  | Homework4 |  |
| 10 | 3/16 | Balance Sheet and Income Statement (cont.) | Ch 10 |  | $\begin{aligned} & \text { C10.1-C10.4, E10.1, } \\ & \text { E10.5, E10.6, } \\ & \text { E10.8, E10.9 } \end{aligned}$ |
|  | 3/18 | [Debriefing group exercise] |  | Minicase-5 <br> (M10.1) |  |
| Part-III: Implementing Accounting-based Valuation |  |  |  |  |  |
| 11 | 3/23 | Statement of Cash Flows | Ch 11 |  | E11.1-E11.3, E11.7, E11.8, E11.11 |
|  | 3/25 | Analysis of Profitability | Ch 12 |  | $\begin{aligned} & \text { C12.3, E12.1-E12.3, } \\ & \text { E12.69 } \end{aligned}$ |
|  | 3/28 |  |  | Group Presentation (interim update on Case 2) |  |
| 12 | 3/30 | [Debriefing group exercise] |  | Minicase-6 |  |
|  | 4/01 | No Class - Instructional Break |  |  |  |
|  | 4/02 | [Debriefing group exercise] |  |  |  |
| 13 | 4/06 | Analysis of Growth | Ch 13 | Homework5 | $\begin{aligned} & \text { C13.1, C13.2, } \\ & \text { C13.6, E13.3-E13.7 } \end{aligned}$ |
|  | 4/08 | [Debriefing group exercise] |  | Minicase-7 |  |
| 14 | 4/13 | Valuation of Firm Operations | Ch 14 |  | C14.1, C14.3, C14.6, E14.1-E14.8, E14.11 |
|  | 4/15 | Implementing ReOI Valuation Model |  | Homework6 |  |
| 15 | 4/20 | Review |  | Case-2 write-up and Group Presentations (Case 2: FSA) |  |
|  | $\begin{aligned} & 4 / 22- \\ & 4 / 24 \end{aligned}$ | Final Exam (take-home) |  |  |  |

