FOSTER
SCHOOL OF
BUSINESS
UNIVERSITY *of* WASHINGTON

Accounting 579

Alphanomics: Active Investing in Equity Markets
Spring 2025

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Office Hours:	Mon & Wed, 4:00-5:30pm		
	(or by appt.)		
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Course Overview

This course is structured as a primer on active investing in public equity markets. Our starting premise is that, when information is costly to acquire and analyze, equilibrium prices cannot fully incorporate all value-relevant information. In real-world markets, stock prices are established through a process of risky information-based arbitrage. Together we will examine the evidence on the types of information that have proven to be useful in identifying attractive companies and making investment decisions in public markets.

The main goals of the course are to develop students' ability to: (1) assess the value and worth of individual firms under different assumptions, (2) identify attractive investment opportunities with quantitative stock screens, and (3) manage a portfolio of publicly traded stocks. Specific topics covered include: an overall framework for active investing, financial ratio analysis, cash flow analysis, equity valuation, earnings quality evaluation, fraud detection, quantitative stock selection, short-selling mechanics, stock trading fundamentals, and basic portfolio management.

This course is designed for students with a strong interest in public equity investing, either personal or professional. It should be particularly helpful to those with career aspirations in asset management, equity research, private equity, and financial consulting. Prior stock investing experience or a class in Financial Statement Analysis (e.g., ACCT510) would be helpful. However, this course is designed to be accessible to anyone who has completed the equivalent of the core MBA-level training in economics, accounting, and finance. Newbies to stock investing are welcomed.

This is a hands-on course with an emphasis on experiential learning. Students will use a variety of analytical tools to evaluate individual companies, design stock screens, conduct back-tests, and assess portfolio risk. We will also review many academic research studies and build these insights into our investment process. There is no final exam. However, there will be six individual cases and a final group project. Much of the content is quantitative in nature and students can expect a moderate to heavy workload.

Course Material

• Web Resources:

S&P Capital IQ:	https://capitaliq.com
Stock Selection:	https://www.portfolio123.com
Risk Management:	https://www.portfoliovisualizer.com/

• Required texts:

What works on Wall Street, Fourth Edition, by James P. O'Shaughnessy (McGraw-Hill, 2011). *Hereafter referred to as **"WWOW"**.*

The Little Book that Still Beats the Market, Joel Greenblatt (Wiley, 2010). *Hereafter referred to as "**Greenblatt**".*

• Supplementary texts: (good references for anyone interested in going deeper)

Alphanomics: The informational underpinnings of market efficiency, by Charles M. C. Lee and Eric So, 2015 (Foundations and Trends in Accounting Vol. 9, Nos 2-3, 59-258). *A digital copy is free to registered students on Canvas, under "Modules -> Tool Box -> Other Resources." Hereafter referred to as "**Lee&So**".*

Quantitative Value, by Wesley R. Gray and Tobias E. Carlisle (Wiley, 2013). *Hereafter referred to as "**QV**".*

Efficiently Inefficient: How smart money invests and market prices are determined, by L. H. Pedersen (Princeton University Press, 2015).

Where the Money Is: Value Investing in the Digital Age, by A. Seessel (Simon & Schuster, 2022).

Business Analysis and Valuation: Using Financial Statements, Fifth Edition, by K. Palepu and P. Healy (Cengage India, 2015).

Active Portfolio Management, Second Edition, by R. C. Grinold and R. N. Kahn (McGraw-Hill, 1999).

Course Design

The course format is a combination of lectures, hands-on exercises, and case studies. The lectures introduce new theories, summarize academic research, or teach new skills; the cases & exercises apply these concepts/skills to live data.

Class Participation	20%
Individual Assignments	40%
Final group project	40%

Class Participation: Class attendance is mandatory. This part of your grade is based on punctual attendance and thoughtful engagement. The course TA will be monitoring attendance and participation. Under normal conditions, a late penalty is assessed for joining 5 or more minutes after a class begins.

Each student is allowed one excused absence per quarter, provided advance notice is given to the instructor and/or TA. Absences beyond one class will incur a significant penalty. Students who miss a class are still responsible for the missed content and assignments. Class sessions will be taped, however recordings will typically only be made available to students who had an excused absence.

Class participation grades are not based on "volume" of engagement or on getting the "right" answer. Rather, we will be looking for good questions, well-reasoned viewpoints, and other signs of thoughtful engagement that enrich the classroom experience for everyone.

Most classes involve some pre-assignment, often in the form of videos. *It is essential that you do these pre-assignments, as the content is assumed during class.* You need not understand every detail in the pre-assignment, but you should cover the material beforehand. Cold calling is fair game.

Individual Assignments: Students will receive six individual assignments. The top five out of six case grades count towards your final course grade. Most assignments will require you to prepare an executive summary of your findings (typically one page in length). You are encouraged to work in groups as you conduct the detailed analyses, and you may share some supporting tables, but *the one-page executive summary must be written individually, in each student's own words.*

Assignments must be submitted via Canvas *by 5:00pm on the due date* (note: this is an hour *before* the start of the class session). If you miss a class, your assignment will still be accepted if it is posted to Canvas on time. All assignments are graded out of 10. Late penalties will be based on the degree of lateness and whether the solution has already been discussed in class.

Please note that the material in these individual cases builds on each other, so it is essential that you keep up with these assignments. The pace of the course is such that falling behind and then trying to catch up later is very difficult.

Final Group Project*:* 40% of your grade will be based on your final group project. Groups should consist of three to five members. Detailed information on this final project is provided at the end of the syllabus.

Group Formation Policy

It will be helpful to form working groups as you do your case assignments. Also, the final project must be done in groups of 3 to 5 students. In prior iterations of this course, some of these groups were stacked with students that have experience in investing while others were full of newcomers and novices. I have considered randomly assigning students to groups but felt that would be too draconian.

Instead, I have implemented an "Adopt a Newbie" or AAN rule. Under this rule, at least 30% of the membership of each group must consist of Newbies. For this purpose, a Newbie is someone who has never worked in financial services (including financial consulting, private equity, asset management, investment banking, equity or fixed income research, venture capital, or a Corporate M&A department). In a 3-person group, you only need one Newbie; in 4- or 5-person groups, you will need two Newbies.

I realize this is an imperfect way to distinguish between Pros and Novices, but I trust you will appreciate the spirit of the rule. The bottom line is to please form groups that contain some inexperienced investors. Get to know some new people and help make the world a better place. If there aren't enough Newbies to go around (I doubt that will happen), let me know and I can amend the rules.

To help facilitate group formation, I will be posting an interactive spreadsheet that allows you to self-identify by experience, find others, and sign up into groups. You should check this spreadsheet as soon as is practicable and self-identify as to your experience level.

Academic Integrity

By being a student in this class, you acknowledge that you are a member of a learning community in the Foster School of Business that is committed to the highest academic standards. As a member of this community, you agree to refrain from cheating, attempting to cheat, plagiarism, lying, and stealing in relation to academic work.

For this course, it means group discussions of cases are encouraged, but the one-page summary solutions are to be written up individually. In addition, students should appropriately reference/cite any source material they use in completing their assignments (including sell-side analyst reports and key internet sources).

Accommodations

Washington state law requires that UW develop a policy for accommodation of student absences or significant hardship due to reasons of faith or conscience, or for organized

religious activities. The UW's policy, including more information about how to request an accommodation, is available at Religious Accommodations Policy:

https://registrar.washington.edu/staffandfaculty/religious-accommodations-policy/

Accommodation must be requested within the first two weeks of this course using the Religious Accommodations Request form available from the link above.

I am also committed to ensuring that students with a documented disability have equal opportunity to participate in the educational opportunities of this class. To request academic accommodation due to disability, please contact the Disability Resources for Students Office (DRS), 448 Schmitz, 206-543-8924. If you already have a letter from DRS and would like to arrange accommodations, please do not hesitate to approach me.

A few final words before we start...

This is a hands-on course designed around experiential learning, so it will frankly be a lot of work. The fact that we are meeting for a double session on a Monday evening will probably further complicate our lives. So, I am going to need you guys to be even more tuned in than usual. That includes providing regular feedback to the professor and helping each other (particularly Newbies in your group) to understand/process the class material.

One important tip I can give you right away is that the class material builds up quickly, so the key to success in this class is to keep up with the weekly assignments. You *must* do the pre-class assignments before each class, and you *need* to do your best to submit the written cases on time. Fulfilling these two commitments will make for (relatively) painless learning for you, and much better domestic relationships for me.

Another tip is to reach out if you need help. Your TA and I are available via email, and I can do Zoom tutorials outside of regularly scheduled office hours as needed. I have a couple of out-of-town research trips during the term, so sometimes there may be a delay in my response time, but I will always get back to you as soon as possible.

Finally, the workload for this class may feel heavy at times, but it has been time-tested over the years, and an astonishing proportion of prior students have survived. I keep in touch with many of the survivors and from what I can gather, the material learned in this class has enduring value, both personally and professionally. That is gratifying.

That is all for now. Again, please do not hesitate to contact me, or your TA, if you have questions about anything. That applies before classes start and continues to apply throughout the term.

Welcome aboard, buckle up, and I hope you enjoy the ride!

ACCTG 579
Assignment Sheet

Note: The cases and assignments marked by **bold characters** are required for hand-in. The summary memo for these six cases <u>must be written individually</u> and posted to Canvas <u>by 5:00pm on the due date</u>. Late submissions are subject to a grade penalty. Top five out of six case grades count towards your final course grade.

<u>Class</u>	<u>Date</u>	<u>Topic</u>	<u>Pre-class Assignment</u>
I. Introduction			
1	Mar 31	Lec1: The Magic of Markets	• read Course Syllabus • read Hayek • read Lee on Market Efficiency (you should at least read the Handbook Chapter) • *For a deeper dive on behavioral models (optional), also read p.243-247 of the original Lee (2001) article.)* (Est time: 60-120 mins)
		Lec2: Cash Flow Analysis	• No pre-readings • *Optional after-class work: Watch 2 SCF videos (Mazda & GTI Inc.)*
II. Firm-level Analysis			
2	Apr 7	Lec3: Strategic Ratio Analysis	• Watch two pre-assignment videos on Strategic Ratio Analysis while taking notes on the Lec3 handouts; bring annotated notes to class (Est time: 45-60 mins).
		Lec4: Capital IQ Tutorial & Market Multiples	• Watch the Cap IQ Tutorial video, on Canvas -> Tool Box; (Est Time: 20 mins). • In-class work session; bring laptops (and make sure you are pre-registered for Capital IQ before class). • *Additional reference (read if needed): Healy & Palepu: Chapter 5*
3	Apr 14	Lecs5&6: Residual Income Model (RIM)	• **DUE: Case 1** • Pre-assignment: Must watch the 2 videos on RIM valuation before class. • Bring laptop and Lec4&5 Handout to class.

4	Apr 21	Lec7: Choosing the Right Valuation Approach	• **DUE: Case 2**
			• Bring Lec 6 handout
			
			• *Further references:*
			  - *4 Supplemental Videos on "Implied Cost of Capital"*
			  - *Article: "Choosing the Right Valuation Approach"*
			  - *Article: "Toward an Implied Cost of Capital"*

		Lec 8: Quality of Earnings	• read "Enron 101", "Media Vision" • *If you have time, read:* *Beneish (1999); Beneish, Lee, Nichols (2013)*
5	April 28	Lec 9: Value Investing: Bridging Theory and Practice	• **Due: Case 3** • Read <u>Greenblatt.</u> In particular, p.127-143. • read as time permits: *"Lee and So (2015 – Chapter 4"* • [Further Reference: <u>QV</u>, Chap 7 and 8]
		Lec 10: Introduction to Portfolio123	• Register at www.portfolio123.com, and go through first 8 pages of P123-Intro Note. • [Further Reference: <u>QV.</u> Chap 1 & 2]

II. Quantitative Stock Selection

6	May 5	Lec11: What works on Wall Street?	• read <u>WWOW</u>. Focus on Chaps 1-4, 21, 27 and 28; just skim the other chapters. • **Due: Case 4**

		Lec12: Momentum-based strategies	• Watch: "Momentum Strategies" videos (a total of 65 minutes)
			• Further References (in course packet):
			  "Fusion Investing"
			  "Price Momentum and Trading Volume"
			  "Value and Momentum Everywhere"

7	May 12	Lec13: Conversations with a short seller	• **DUE: Case 5** • Guest lecture: Cory Johnson, host of the Drill Down Podcast

			• Pre-reading material TBD
7	May 12 (cont.)	Lec14: Short-Selling Essentials	• read Stefanini, Chap 3: "Short-Selling" • read Fabozzi, Chap 2: "Mechanics of the Equity Lending Market"
8	May 19	Lec: 15 From Private to Public Equity	**• DUE: A short (half-page) project proposal for a detailed company analysis (this is just the proposal, not the final project itself)** • Guest lecture: Dan Rasmussen from Verdad Capital • pre-reading material TBD
		Lec 16: Research Roundup	• Pre-reading material TBD

II. Portfolio Management & Special Topics

--	May 26	Memorial Day	• No Class **• DUE: Case 6**
9	June 2	Lec17: Introduction to Active Portfolio Management (Part I)	• Follow the Pre-reading assignment, and read excerpts from Chap 5 & 6 of "Active Portfolio Management"
		Lec18: Introduction to Active Portfolio Management (Part II)	• Pre-reading material TBD
10	May 28, or June 4, or June 6 (?)	Personal Investing 101 [NB: The Date of this lecture is yet to be finalized. This is a "make-up" lecture due to Memorial Day being on a Monday this year.]	• Wrap-up lecture on personal investing (attendance for this lecture is optional; class video will be made available to everyone) **DUE: Final Project (on Wednesday, June 4th, by 12 Noon)**

Final Group Project

Your group project is an important part (40%) of your course grade. It is intended to help you integrate/synthesize what you have learned during this class. This project consists of two parts. A short *half-page team proposal for Part II* (a detailed analysis of a single firm) is due on May 19th. *The final project itself is due by **Noon on June 4th**.*

Part I: A Quantitative Trading System (20%)
In the first part, your group is charged with designing a quantitative trading system, implementable in Portfolio 123. A complete trading system consists of a Stock Ranking Algorithm, plus a Simulation (with specific Buy and Sell rules).

Base Strategy using Standardized Parameters:
- This should be a long-only portfolio consisting of *at least* 20 (could be more) reasonably liquid positions
- The default universe should be "U.S.- Easy to Trade"
- Mktcap ≥ 200; close(0) ≥ 2; Avgdailytot(20) ≥ 200000; PctAvgDailyTot(20) < 5
- Assume initial capital of $1 million, slippage of 0.25%, and zero commission fee.
- Report back-test performance for the entire (Max) period; the most recent 5 years; and the most recent 2 years.

Deliverables for Base Strategy:
- An Executive Summary of your guiding design principles and performance results.
- A detailed description of your Ranking system, with justification for your design and input choices. As support, include screenshot(s) of the RANK system with all branches and functions (*f(x)*) showing.
- A detailed description of your Simulation settings, with justifications. As support, include screenshots of: (1) Simulation Summary Page, (2) Trading System Settings, (3) Holdings-Allocation graphs; (4) Performance-Stats (5Y and Max). Each group should report one set of Simulation results using the "Standardized" parameters as listed above.

Additional Experimentations:
- After you have documented your results for the Base strategy with standardized simulation parameters, you can run additional backtests that relax these parameters. This is your chance to be creative and perhaps better showcase your strategy.

- For example, you may wish to create and backtest a long:short portfolio using Screener (no need to run a Simulator for this part). Note that you can vary the amount of shorting that you do so your overall portfolio behaves like a long-only product (with a Beta between 1.2 and 0.8)) or like a market neutral product (with a Beta between +0.2 and -0.2). Perhaps you might want to focus on microcap firms (in which case you should increase the price slippage assumption, maybe to as high as 1.00% or 2.00% per trade), or firms not covered by analysts. Just be sure to document the rationale for your strategy, as well as your performance results (total returns, how often it beats its benchmark, etc.).

Your quantitative strategies will be judged on the basis of four criteria:

1. <u>Sensibility</u>: Do the variables/signals in your model make sense? Can you provide an ex ante rationale for their inclusion? If you have based your model on prior research, have you properly interpreted the research?

2. <u>Completeness</u>: Does it showcase your understanding of the range of investment ideas covered in this course?

3. <u>Efficacy</u>: How well does your trading system perform? What is its Sharpe ratio? Maximum drawdown? Turnover? How sensitive is the performance of the model to minor parameter perturbations (e.g. number of stocks; frequency of rebalancing)?

4. <u>Inventiveness</u>: Does your overall design exhibit innovation and originality?

Part II. Detailed Analysis of One Company (20%)

In the second part of the project, your group will prepare a detailed analysis of a company. Select a firm in which you have a particular interest (perhaps as a potential employee, or perhaps because it was identified as a Long or Short candidate by your stock screen). Assess its attractiveness as an addition to a hedge fund specializing in US equity. Present your findings in the form of an Analyst Recommendation (Buy, Sell, or Hold).

Your project should demonstrate evidence of **detailed financial analysis of firm data**. Integration of tools and concepts acquired in this and other courses (e.g., financial ratio and cash flow analyses, forecasting, alternative valuation techniques, quality of earnings assessment, etc.) will enhance your grade. Your project should also include some form of "benchmarking," that is, comparison to other similar firms or circumstances.

This final company report should be <u>no more than</u> **20 pages**, including tables, graphs, and references. Note that this page limit applies only to the Detailed Company Analysis portion of the final project (not to the Quantitative Stock Screen).

For the detailed company analysis part of the final project, your group should submit a **brief half-page proposal on or before Noon, May 19th** detailing: (1) group membership, (2) which firm you are planning to study, and (3) why you chose this firm. The reason for the proposal is so I will have an opportunity to provide feedback on your choice of company.

Both parts of the final written project are due **at <u>Noon on</u> Wednesday, June 4th, 2025.**

Thematic coherence is important. When writing up your detailed company report, consider carefully the thematic coherence of your analysis. After you have done some preliminary work, settle on a "theme" or "thesis" for your project.

Ask yourself, what is "the story" or "main narrative" for this firm? Why might a casual business reader be interested in your report? If Business Week did a feature article on this firm, how would the headline read?

Try to formulate your thesis concisely, in the form of a single sentence, question or phrase. State this theme upfront. When you write the report, try to marshal your facts in support of this overall thesis.

Report Evaluation Criteria:
Your detailed company analysis will be judged on the basis of the following criteria:

1. Objective   Max. Grade
    - Clearly Defined?   2
    - Interesting?   2
2. Analysis
    - Appropriate?   3
    - Sufficient?   3
    - Accurate?   3
    - Creative/Elegant?   3
3. Conclusion
    - Consistent?   2
    - Persuasive?   _2_
                          Total   <u>20</u>

CHARLES M. C. LEE

(https://en.wikipedia.org/wiki/Charles_M._C._Lee)

Charles M. C. Lee is the Kermit O. Hanson Professor of Accounting at the Foster School of Business, University of Washington. He is also the Moghadam Family Professor, Emeritus, at the Graduate School of Business, Stanford University.

Professor Lee studies the effect of human cognitive constraints on market participants and other factors that impact the efficiency with which market prices incorporate information. He has published extensively in leading academic journals on topics that include behavioral finance, market microstructure, equity valuation, financial analysis, quantitative investing, and security market regulation.

From 2004 to July 2008, Dr. Lee was Managing Director at Barclays Global Investors (BGI; now Blackrock). As Global Head of Equity Research, he led the firm's world-wide active equity research team and was Co-Head of its North American active equity business. During his tenure, BGI had over $300 billion in active equity under management. He joined Stanford GSB as Visiting Professor in 2008 while continuing to serve as an exclusive senior consultant to BGI and became a full-time faculty member in July 2009. In 2021, he retired from the Stanford GSB and joined the Foster School of Business.

Professor Lee has been Editor or Associate Editor of numerous academic journals, including: *The Accounting Review,* the *Journal of Finance*, *the Journal of Accounting and Economics*, *the Journal of Accounting Research*, the *Review of Accounting Studies, Management Science (Finance)*, and the *Financial Analysts Journal*. His research has also been featured in such popular media outlets as: the *Economist*, the *New York Times*, the *Wall Street Journal*, *National Public Radio (NPR)*, the *LA Times, Business Week, CNBC, Forbes, Barron's, Worth, Smart Money*, and *Institutional Investors.*

Dr. Lee has received numerous awards and honors. Select honors include the 2024 AAA FARS Lifetime Achievement Award, the Notable Contribution to Accounting Literature Prize, and 12 National- or School-level Teaching Excellence Awards. He has been the Presidential Scholar of the AAA and has received the Stanford University Asian American Faculty Award for Outstanding Achievements and Service to the University and to the Asian American Community.

Professor Lee received his BMath from the University of Waterloo (1981), and his MBA (1989) and PhD (1990) from Cornell University. He has been a faculty member at the Michigan Business School (1990-95), the Johnson Graduate School of Management, Cornell University (1996-2004), and the Graduate School of Business, Stanford University (2009-2021). From 1995-96 he was Visiting Economist at the New York Stock Exchange.

Prior to entering academic life, he spent five years in public accounting, the last three in the National Research Department of KPMG, Toronto, Canada. He holds a Certificate in Biblical Studies from Ontario Theological Seminary and is fluent in Mandarin Chinese.