Financial Management and Environmental Accounting (ESM 279)

Bren School of Environmental Science & Management University of California, Santa Barbara Spring 2024

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Course Objectives

The main question addressed in this course is: what motivates companies to be environmentally-friendly? We will examine this question from three perspectives under the guiding principle that the main objective of companies is to maximize the market value of the existing owners' equity. First, we will study how the market value of a firm is determined and how investors can manage risk by owning equity in a portfolio of companies. Key supporting topics include cash flow valuation, interest rates, and bond and equity markets. Second, we will take a closer look at the financial management of a company to understand how it makes investment decisions. We will examine how companies use information in balance sheets and income statements for financial planning, how they make long-term financing decisions, and how they determine their mix of debt and equity. Third, we will consider if environmental goals are compatible with a company's objective to maximize equity value. The answer depends, in part, on the motivations of investors, which brings us to the last topic of the course: green – or, more broadly, Environmental, Social and Governance (ESG) – investing. We will examine how ESG investment opportunities are identified, how ESG funds are constructed, the performance of ESG funds relative to traditional funds, and the evidence on whether ESG investing yields environmental gains.

After taking this course, you will

- Be able to use basic tools of financial analysis
- Understand how financial instruments (loan, bonds, stocks) work
- Know how investors tradeoff risk and return
- Be able to use information from financial statements to evaluate investment decisions
- Understand how companies do financial planning
- Understand markets for green investment products
- See how green investing can motivate companies to be good environmental stewards

Course Materials

There is not a required textbook for this class. Much of the lecture material is based on Ross, S.A., Westerfield, R.W., and B.D. Jordan. 2017. Essentials of Corporate Finance, 9th Edition. McGraw Hill. The hardcopy of the textbook costs \$150 new. There is also an Ebook version for only \$20. Another option is to use Higgins, R.C. 2012. Analysis for Financial Management, 10th Edition. McGraw Hill. The pdf version of this textbook is free, and I will point you to relevant sections. This textbook will not track the lectures as well as Ross, Westerfield, and Jordan.

Course Requirements

Class meetings: I expect students to attend every class. I will provide a short "current events" reading before each class. I expect students to come to class prepared to discuss it.

Readings: The readings are optional. My lectures will cover what I consider to be the most important topics. You are encouraged to do the readings if you want to reinforce your understanding of the material presented in lectures and gain exposure to additional topics.

Homework assignments: There will be five short homework assignments. You may work on the assignments with others; however, you are responsible for writing your own answers, in your own words. Assignments will be posted by the end of the week (Thursday or Friday) and due on the following Friday by 11:59 pm. At the beginning of Tuesday's class, we will have a short group discussion about the homework assignment.

Group presentations: Students will work in groups to develop a presentation on a topic related to green investing. The topics are listed, below, under Weeks 3, 6, 8, and 10. I will assign students to topics once the class enrollment has stabilized. Students will give a 20-25 minute presentation with slides on their assigned topic and then lead a 10-15 minute discussion. Slide decks should be submitted by June 6, the last day of instruction.

Essays: After each student presentation, I will assign short essay questions. The questions will be posted by the end of the week (Thursday or Friday) and due the following Friday by 11:59 pm (except for Essay #4, which is due on a Wednesday). You may discuss the essay questions with other students, but I expect you to write your own essays, in your own words. The use of AI tools, such as ChatGPT, is expressly and emphatically forbidden.

Times and Dates

Class meets Tuesday and Thursday, 2:00-3:15 pm, Bren 1424.

Homework assignments and essays will be due on the following Fridays by 11:59 pm: April 12, April 19, April 26, May 3, May 10, May 17, May 24, May 31, and June 12.

The group presentation slide decks are due on **June 6**.

Course Grades

Course grades will be based on homework assignments (40%), essays (30%), and the group presentation and slides (30%).

Copyright

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Schedule

Week 1

April 2. Overview of the Course and Introduction to Financial Management (RWJ Ch. 1)

April 3. Optional session on discounting (2-3 pm,

https://ucsb.zoom.us/j/7798718548?omn=82776467040

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April 4. Discounted Cash Flow Valuation (RWJ Ch. 5)
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Week 2

April 9. Interest Rates and Bond Valuation (RWJ Ch. 6)

April 11. Interest Rates and Bond Valuation (RWJ Ch. 6)

April 12. Homework #1 Due

Week 3

April 16. Equity Markets and Stock Valuation (RWJ Ch. 7)

April 18. Student presentations I

- What are the global trends in ESG investing?
- What are the motivations of ESG investors?

April 19. Homework #2 Due

Week 4

April 23. Returns from Capital Market Investments (RWJ Ch. 10)

April 25. Anna Steffens (confirmed)

April 26. Essay #1 Due

Week 5

April 30. Risk and Return (RWJ Ch. 11)

May 2. Risk and Return (RWJ Ch. 11)

May 3. Homework #3 Due

Week 6

May 7. Student presentations II

- What criteria are used to identify ESG investment opportunities?
- What criteria are used to identify ESG investment opportunities?

May 9. Financial Statements and Cash Flow (RWJ Ch. 2)

May 10. Homework #4 Due

Week 7

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May 14. Working with Financial Statements (RWJ Ch. 3)
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May 16. Net Present Value and Other Investment Criteria (RWJ Ch. 8)

May 17. Essay #2 Due

Week 8

May 21. Student presentations III

- How are ESG funds designed?
- How does the financial performance of ESG funds compare to traditional funds?

May 23. Capital Budgeting (RWJ Ch. 9)

May 24. Homework #5 Due

Week 9

May 28. Guest lecture by Caitlin Martin, Wiliams-Sonoma (confirmed)

May 30. TBD

May 31. Essay #3 Due

Week 10

June 4. Cost of Capital (RWJ Ch. 12)

June 6. Student presentations

- Does ESG investing yield environmental gains? What is the evidence?
- Can we rely on private capital markets to address environmental and social problems?

Week 11

June 12. Essay #4 Due