

Columbia University School of Continuing Education  
Master of Science in Sustainability Management

**SUMA K440** Environmental, Social Governance (ESG) Investing and Responsible  
Investing Practices  
**Fall 2015, Wednesday 6:10pm to 8:00pm**  
**3 Credits**

Instructor: Rina Kupferschmid-Rojas [rk@esganalytics.com](mailto:rk@esganalytics.com)

Office Hours: Office hours will be held for the hour immediately following the class session or by appointment.

Response Policy: Students can expect a response to emails within 24 hours.

### **Course Overview**

The course has been designed to provide students with a basic understanding of financial markets and investment fundamentals while demonstrating how Environmental, Social, and Governance (ESG) factors can be used along with traditional financial metrics to assess the risks and opportunities of investment decisions. The course will include a review of the most material ESG issues faced across a range of sectors, geographies and asset classes. Students will become familiar with the main policies, regulations, frameworks and market initiatives shaping ESG investment decisions today. The course will also explore the major obstacles facing investors and the future of how data and technology may address these issues.

Throughout the semester students will be exposed to real-world examples of how investors integrate ESG considerations into the investment decision. Students will be asked to provide written reflections on the assigned scenarios. During the second-half of the course students will break into groups of 3-4 and analyze the portfolio of an institutional investment fund. Drawing on the skills developed during the first half of the course student teams will analyze the performance of an assigned portfolio and determine which factors have driven investment performance. Students will then determine the portfolio's future risk and return and make recommendations as to how to allocate the portfolio funds among sectors and assets classes in light of ESG risks and opportunities.

This course is designed for students looking to gain a stronger understanding of investment using a sustainability lens. Students are assumed to have little or no previous exposure to finance.

This course can be used to satisfy the Area 2: Economics and Quantitative Analysis requirement or the Area 5: General and Financial Management requirement for M.S. in Sustainability Management program. This course is approved for students in the Certifications in Sustainable Finance and Sustainability Analytics.

### **Learning Objectives**

By the end of the course, students should to be able to:

- Apply the basic principles and tools of investment and portfolio theory
- Describe and differentiate various asset classes, including: stocks bonds,

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- private equity, real estate, microfinance and impact investing
- Distinguish the material ESG issues facing a range of sectors, geographies and asset classes
- Apply ESG considerations to analyze risk and measure investment performance
- Explain the main ESG policies, pressures and market initiatives facing investors today
- Evaluate and justify the business case for integrating ESG considerations
- Show improved analytical, problem solving, communication, and presentation skills

### Required Textbook

- [\*Evolutions in Sustainable Investing: Strategies, Funds and Thought Leadership\* Krosinsky, Cary; Robins, Nick; Viederman, Stephen 2012.](#)
- *Fundamental Models in Financial Theory* Peleg, Doron. 2014.

### Resources

#### *CourseWorks*

A majority of the reading materials will be available on CourseWorks.

#### *ProQuest*

Electronic versions of the textbooks are available for free through ProQuest e-library. Students will need to set up [ProQuest account](#) if they have not done so already.

#### *Additional Course Resources*

- The Forum for Sustainable and Responsible Investment, the U.S. Sustainable and Responsible Investing Industry Association [www.ussif.org](http://www.ussif.org)
- Global Impact Investing Network [www.thegiin.org](http://www.thegiin.org)
- Access to research reports related to sustainable investing [www.sristudies.org](http://www.sristudies.org)
- ImpactBase, a project of GIIN, is a searchable database of over 250 impact investments ☐ [www.impactbase.org](http://www.impactbase.org)

#### *Columbia University Library*

Columbia's extensive library system ranks in the top five academic libraries in the nation, with many of its services and resources available online: <http://library.columbia.edu/>.

#### *SCE Academic Resources*

The Office of Student Life and Alumni Relations (SLAR) provides students with academic counseling and support services such as online tutoring and career coaching: <http://ce.columbia.edu/student-life-and-alumni-relations/academic-resources>.

### Course Requirements (Assignments)

### Assignments

Students will complete six, one-to-two page reflections on a given topic. Prompts will be provided and posted to CourseWorks one week prior to their due date. Topics include an argument for/against the evolving definition of fiduciary duty, critique of *Report or Explain*, assessment of endowment policies, selection and justification of top ESG indicators for an assigned company, critique of reporting frameworks, and analysis on how to scale ESG in alternative asset classes.

### Midterm

The midterm will consist of five short-answer questions and one essay question. Students will be asked questions related to asset classes and pricing, ESG policies and market initiatives, and ESG indicators. Students will then be asked to apply their understanding of these topics to a case study in their essay question.

### Team term paper and presentation

Students will break into groups of 3-4 to analyze the portfolio of a pension fund. Using the skills and understanding developed during the first half of the course; student teams will analyze the past performance of the portfolio and determine the factors that have driven investment performance. Students will then determine the portfolio's future risk and return and make recommendations for how to allocate the portfolio funds among sectors and assets classes in regards to ESG risks and opportunities. Student groups will prepare a 10-12 page paper outlining their chosen pension fund, their analytical methodology, their chosen ESG indicators, and their results regarding the portfolio's risk and their associated recommendations. Student groups will prepare and present a 10-minute presentation to their class and be prepared to address questions for their classmates during a Q&A session. Team members will submit individual peer grading forms after the paper and presentation is submitted to encourage accountability and contribution from each team member.

### Participation

Participation in all lectures and project activities is required. Contributions are expected to enhance the quality of the class experience for all students. This involves each student making relevant and useful comments, or posing pertinent questions, in clear and succinct language to the Courseworks discussion board regularly throughout the semester. During the lectures, students are expected to come prepared to answer impromptu questions about the readings and course assignments.

### **Evaluation/Grading**

The final course grade will be computed using a weighted index of numeric grades that combine performance under topic reflections, attendance and participation and the final term paper and presentation. The weighted index will be scaled into a letter grade scale from F to A+.

### Assignments 30%

Reflections will be evaluated based on their adherence to the prompt, and the clarity and detail of the analysis. Students are expected to draw from relevant course

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readings and to provide their own unique insight based on outside research or professional experience. Each reflection will be graded on a scale of 0-100.

Midterm 20%

The midterm exam will be evaluated based on the correctness, clarity and detail of each short answer question response and the detail and thoughtfulness of the analysis in the open ended essay. The midterm will be graded on a scale of 0-100.

Term Project 25%

The term project paper will be evaluated based on the clarity, thoughtfulness and detail of the pension fund analysis. The risk assessment and recommendations will be evaluated for their detail and feasibility. The paper should use clear, concise language. The term project paper will be graded on a scale of 0-100. Each member of the group will receive the same term project paper grade.

Term Presentation 15%

The term presentation will be evaluated on the clarity of the presentation and professionalism of the accompanying slides. The term presentation will be graded on a scale of 0-100. Each member of the group will receive the same presentation grade.

Participation 10%

Participation will be evaluated based on the quality of the students contributions in class discussions each week and/or posting relevant comments/questions to the CourseWorks discussion board regarding course readings and case studies. Discussion board posts may include analysis of pertinent news articles or events, or thoughtful responses other student's posts. The teaching assistant will track and evaluate weekly class and discussion board participation that will be weighted and factored into a final grade. Participation will be graded on a scale of 0-100.

**Course Policies**

Attendance

Regular attendance in lectures is required. Each week, before the lecture, students must review all required readings. Understanding the foundational concepts presented in the texts is a critical pre-requisite to participation in the lecture.

Late work

All assignments must be submitted on the published due dates. In the absence of well-documented extenuating circumstances, 10 points will be deducted for each day the assignment is late.

**Curriculum**

<b>Week of (day TBD)</b>	<b>Topic</b>	<b>Reading (due)</b>	<b>Assignment (due at beginning of class)</b>
9/7	<b>Course introduction</b>  <b>History of SRI/ESG</b>	<b><i>Evolution In Sustainable Investing</i></b> Krosinsky, 2012. Chapter 5, pp48-51. Chapter 6, pp53-58, 61-74	

		<p><b><i>The Short Guide to Sustainable Investing.</i></b> DoShorts. Cary Krosinsky,2013. pp6-71</p> <p><b><i>Sustainable Capitalism</i></b>          Generation Investment Management LLP pp2-24</p>	
9/14	<p><b>Financial markets &amp; investment fundamentals</b>          Asset classes, risk and return metrics, asset pricing, modern portfolio theory, etc.</p>	<p><b><i>Fundamental Models in Financial Theory</i></b>          Peleg, Doron. 2014. Select portions ~ 100 pages</p> <p><b><i>Fiduciary Duty: Climate Should Be Treated Like Other Highly Modeled Investment/Longevity Risks.</i></b> Responsible Investor. Simon Howard   December 16th, 2013 pp1-2</p>	<p><b>Assignment:</b> Discuss the changing view of fiduciary duty and explain why or why not ESG factors should be included in the definition.</p>
9/21	<p><b>Hot topics in ESG investing today:</b>          Policies, market initiatives, etc.</p>	<p><b><u><a href="#">The 21st Century Investor: Ceres Blueprint For Sustainable Investing</a></u></b> pp4-47</p> <p><b><i>US SIF 2014 Report on US Sustainable, Responsible and Impact Investing Trends.</i></b> Read Executive summary &amp; Introduction pp12-25, skim pp26-93.</p> <p><b><i>Eurosif European SRI Study 2014.</i></b> pp4-34, skim pp36-71.</p> <p><b><u><a href="#">Global Reporting Initiative REPORT OR EXPLAIN: A smart EU policy approach to non-financial information disclosure.</a></u></b> Global Reporting Initiative, 2013. pp1-7</p> <p><b><i>Measuring Sustainability Disclosure: Ranking The World's Stock Exchanges.</i></b> Corporate Knights Capital. 2014. pp2-35 (leads into discussion for weeks 4,5)</p>	<p><b>Assignment:</b>          Critique the “Report or Explain” approach. Do you agree or disagree with GRI’s argument? Why or why not? What could be done instead?</p> <p><b><u><a href="#">Report or Explain A policy proposal for sustainability reporting to be adopted as a common practice for the advancement of a Green Economy for the UN Conference on Sustainable Development (Rio+20)</a></u></b></p>

9/28	<b>Deep dive into material ESG issues and indicators of industries and geographies</b> Focus Area: environment	<b><i>Sustainability — What matters?</i></b> G&A Inc. 2014, skim entire document ~200pgs  <b><i>Evolution In Sustainable Investing</i></b> Krosinsky, 2012. Chapter 7 pp85-90, Chapter 15 pp169-179	<b>Assignment:</b> Identify the top 10 material ESG indicators of an assigned company. Justify why each has been chosen and how they affect the business value.
10/5	<b>Deep dive into material ESG issues and indicators of industries and geographies</b> focus areas: social & governance	<b><i>From Transparency to Performance Industry-Based Sustainability Reporting on Key Issues.</i></b> Harvard University Initiatives for Responsible Investment pp1-100  <b><i>Evolution In Sustainable Investing</i></b> Krosinsky, 2012. Chapter 19 pp217-220	Possible speaker of a 500 Fortune Chief Sustainability Officer
10/12	<b>Deep dive into ESG factors across different asset classes</b> stocks, private equity	<b><u><a href="#">Environmental, Social and Governance Investing by College and University Endowments in the United States: Social Responsibility, Sustainability, and Stakeholder Relations</a></u></b> IRRC Institute 2012. ppV-46  <b><i>Evolution In Sustainable Investing</i></b> Krosinsky, 2012. Chapter 23 pp253-259, Chapter 33 pp383-392, Chapter 34 pp393-398, Chapter 35 pp401-412, Chapter 38 pp429-438	<b>Assignment:</b> Compare and contrast the investment policy and performance of two endowments.
10/19	<b>Deep dive into ESG factors across different asset classes</b> Bonds, real estate, microfinance etc.	<b><i>The Drivers of Responsible Investment: The Case of European Pension Funds</i></b> , Riikka Sievänen, Hannu Rita, Bert Scholtens, Journal of Business Ethics. September 2013, Volume 117, Issue 1, pp 137-151  Responsible Investor Insight. <b><i>Green Bonds: The future of Sustainability Financing.</i></b> Issue 6, October 2014. Pp 4-52.	Possible speaker(s) to provide investor prospective of different asset classes/investment strategy  <b>Midterm Take Home Assignment Due in Class</b>

		Bridges Ventures, The Parthenon Group, GIIN <a href="#"><u>Investing for Impact: Case Studies Across Asset Classes</u></a> Pp3-16, 26-33	
10/26	<b>Understanding major frameworks, players &amp; indices:</b> e.g., SASB, GRI, CDP, UN Global Compact, ISO 26000, PRI, Ceres Dow Jones, MSCI, FTSE4good, Calvert Social Index, etc.	<a href="#"><u>Building the Capacity of Investment Actors to Use Environmental, Social and Governance (ESG) Information.</u></a> Principles for Responsible Investment, March 2013. Pp 8-59  <b><i>Socially Responsible Investing: An Investor Perspective.</i></b> Journal of Business Ethics February 2013, Volume 112, Issue 4, pp707-720	Possible speakers from SASB, PRI
11/2	<b>Understanding major frameworks, players &amp; indices cont.</b>	<b><i>Drawbacks of a Delisting from a Sustainability Index: An Empirical Analysis</i></b> Russo, Angeloantonio; Mariani, Massimo. International Journal of Business Administration 4.6 (2013) 20pages  Additional: <b><i>Lifting the veil on environment-social-governance rating methods</i></b> Stubbs, Wendy; Rogers, Paul. Social Responsibility Journal 9.4 (2013): 622-640.	<b>Assignment:</b> Critique two of the listed frameworks and outline the best practices for widespread adoption.
11/9	<b>Making the business case:</b> quantitative and qualitative results of research and real-world examples (e.g., strategic benefits, operational advantage, risk	<del>OBSE</del> <b><i>From the Stockholder to the Stakeholder: How Sustainability Can Drive Financial Outperformance,</i></b> University of Oxford & Arabesque Partners Sept 2014, pp 8-45  <a href="#"><u>HBS Case KKR: Leveraging Sustainability</u></a> Robert G. Eccles, George Serafeim pp 1-13	<b>Assignment:</b> Discuss how to best scale ESG in alternative asset classes.

	mitigation covered by both case studies and statistical analyses)	Sections from Bob Willard <b><i>Sustainable Advantage</i></b> ~25-30pp	
11/16	<b>Making the business case continued</b>	<b><i>The Drivers of Responsible Investment: The Case of European Pension Funds</i></b> , Riikka Sievänen, Hannu Rita, Bert Scholtens, Journal of Business Ethics. September 2013, Volume 117, Issue 1, pp 137-151  <b><u><a href="#">The Impact of Corporate Sustainability on Organizational Processes and Performance</a></u></b> , Robert G. Eccles, Ioannis Ioannou, George Serafeim, Harvard Business School, July 2013. pp 1-24  <b><i>The Financial Performance of SRI Funds Between 2002 and 2009</i></b> , Olaf Weber, Marco Mansfield, Eric Schirrmann, June 2010. 20 pages.	
11/23	<b>The future of data and technology:</b> Review of ESG data, analytics, research providers (e.g., Bloomberg/Sustainability, MSCI, eRevalue, Asset4, Trucost)	<b><i>Integrating Sustainability Into Capital Markets: Bloomberg LP And ESG's Quantitative Legitimacy</i></b> , Andrew Park & Curtis Ravenel, Journal of Applied Corporate Finance, Volume 25, Issue 3, pages 62-67, Summer 2013  Review research providers' websites	Possible speaker from a data provider and ESG researcher
11/30	Final presentations		Group paper due
12/7	Final presentations		

### School Policies

Students are expected to adhere to these policies to the letter and in spirit.

*Copyright Policy*

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*Academic Integrity*

Columbia University expects its students to act with honesty and propriety at all times and to respect the rights of others. It is fundamental University policy that academic dishonesty in any guise or personal conduct of any sort that disrupts the life of the University or denigrates or endangers members of the University community is unacceptable and will be dealt with severely. It is essential to the academic integrity and vitality of this community that individuals do their own work and properly acknowledge the circumstances, ideas, sources, and assistance upon which that work is based. Academic honesty in class assignments and exams is expected of all students at all times.

SCE holds each member of its community responsible for understanding and abiding by the SCE Academic Integrity and Community Standards posted at <http://ce.columbia.edu/node/217>. You are required to read these standards within the first few days of class. Ignorance of the School's policy concerning academic dishonesty shall not be a defense in any disciplinary proceedings.

*Accessibility*

Columbia is committed to providing equal access to qualified students with documented disabilities. A student's disability status and reasonable accommodations are individually determined based upon disability documentation and related information gathered through the intake process. For more information regarding this service, please visit the University's Health Services website: <http://health.columbia.edu/services/ods/support>.