

**Instructor:** Todd Cort

## Course Overview

The purpose of this course is to explore the data that is currently available to measure environmental, social and governance (ESG) performance for companies. The class discusses the data that currently exists, the challenges associated with ESG data and how these challenges impact our ability to apply the data to decision-making.

Sustainability data is already used to drive significant decisions by companies, investors and regulators, and yet there are enormous shortcomings in the current data available on which these decisions are made. In part 1 of this course we will explore challenges for sustainability data in terms of scope, comparability, methodology, validation and coverage from a broad perspective (not looking at any specific data set). Then, we will explore specific tools that are being used or developed that rely on this data – and how the data shortcomings are impacting our ability to make decisions. Specifically, we will explore:

- Green Bond labeling and certification
- Conservation Finance vehicles
- Environmental Profit and Loss statements
- Sustainability accounting methodologies to value natural and social capital

**NOTE: This is not a data analytics class. We will explore how data is used and applied and the challenges of the data given the stakeholders that want to use sustainability data and the methods they currently employ that utilizes that data.**

## Learning Objectives

At the end of the course, students will:

- Recognize the needs of investors and companies with regard to ESG data and how the current available data meets (or does not meet) those needs.
- Be able to apply ESG data to a suite of investment and valuation tools with awareness of critical assumptions on the quality and coverage of this data when making decisions
- Understand the current movements and efforts to improve and expand ESG data including the hurdles currently in place for these efforts.

## Readings

See readings listed for each session below in the Course Schedule/Course Calendar

## Resources

*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/>.

Columbia University School of Professional Studies  
Master's of Sustainability Management

*SPS 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://sps.columbia.edu/student-life-and-alumni-relations/academic-resources>.

### **Course Requirements (Assignments)**

There are four (4) assignments that must be completed in this course: two position papers and two business dilemma solutions. Each assignment is due at the beginning of class on the assigned date (e.g., Assignment #1 – the first Position Paper – is due at the beginning of class on May 30).

**Position Papers:** These assignments involve a critical reading of an assigned article. Position Papers are to be no more than 3 pages in length and shall include a summary of the salient points of the article as well as an analysis of the strengths and weaknesses of the article in terms of methodology and application.

**Business Dilemma Solutions.** The two business dilemmas in this course will look at sustainability data challenges faced by two different stakeholders. First, an asset manager for Gifford Pinchot State University (fictional) must assess and apply carbon accounting data to meet client expectations for decarbonized investing. Second, NS, the Dutch rail company, must use ESG data to value social and environmental externalities in order to develop a more meaningful corporate strategy. Case studies will include an answer to the dilemma, rationale to support that answer and evidence, calculations, logic and assumptions behind the rationale. Case study deliverables will be no more than 10 pages in length including any appendices.

### **Evaluation/Grading**

100 Points Total divided as follows:

- 1) Assigned reading position papers (20 points each for total of 40 points)
  - a. 7 Points: Summary of salient points from article
  - b. 10 Points: Analysis of strengths and weaknesses of article
  - c. 3 Points: Deliverable is presented within the length limits
- 2) Business Dilemma Solutions (30 points each for total of 60 points)
  - a. 3 Points: Deliverable answers the business dilemma
  - b. 12 points: Deliverable presents a clear logic to support the answer
  - c. 12 Points: Deliverable uses calculations, data and/or cited evidence to support the answer
  - d. 3 Points: Deliverable is presented within the length limits

### **Course Policies**

*Participation and Attendance*

Discussion in class is a critical element of the course and therefore attendance to each class is mandatory. Students are expected to come well prepared to discuss topics in class. While the class discussions are intended to be 'voluntary', we will rely on cold calling as necessary to determine student preparation and to address critical aspects of each topic. Discussions are expected to be challenging, yet civil and part of the evaluation is based on the student's ability to hear others before forming opinions.

*Late work*

Columbia University School of Professional Studies  
 Master’s of Sustainability Management

There are 4 deliverables. Deliverables are associated with position papers or business dilemma solutions and will be due at the beginning of class on the due date via email to [todd.cort@googlegmail.com](mailto:todd.cort@googlegmail.com). The instructor will respond to each submitted deliverable by email and it is the responsibility of the student to ensure that their deliverable has been received by the instructor. Deliverables may be submitted up to one day late for a 25% automatic reduction in score. No deliverables will be accepted over 24 hours after the due date/time.

**Course Schedule/Course Calendar**

Session	Date	Topics	Deliverable	Readings
1	5/23	Introduction to course; Value of sustainability to investors		<p><u>RECOMMENDED</u></p> <p>Esty, D. and Cort, T. “Sustainability Metrics: What Investors Need and Do Not Get”, submitted to <i>Environment and Organization (To be posted on Canvas)</i></p> <p>Gunnar Friede, Timo Busch and Alexander Bassen, “ESG and Financial Performance: Aggregated Evidence from more than 2000 Empirical Studies” <i>J. Sust. Fin &amp; Inv.</i>, 5,4, 2015, 210-213</p> <p>Marc Orlitzky, Frank Schmidt, and Sara Rynes, “Corporate social and financial performance: A meta-analysis,” <i>Organization Studies</i>, 24/3 (2003): 403-441.</p> <p>David Lubin and Daniel Esty, “The Sustainability Imperative,” <i>Harvard Business Review</i> (2010).</p>
2	5/23	Flow of Data; World of ESG Metrics		
3	5/30	Green Bonds 1: Introduction	Position Paper #1: Robert Eccles, Ioannis Ioannou, and George Serafeim, “The Impact of Corporate Sustainability on Organizational Processes and Performance,” <i>Management Science</i> , 60/11 (2014): 2835–2857.	<p><u>RECOMMENDED</u></p> <p>Green Bonds Principles;  <a href="http://www.icmagroup.org/assets/.../Green-Bonds/GBP-2016-Final-16-June-2016.pdf">www.icmagroup.org/assets/.../Green-Bonds/GBP-2016-Final-16-June-2016.pdf</a></p> <p>Climate Bonds Initiative;  <a href="https://www.climatebonds.net">https://www.climatebonds.net</a></p>

Columbia University School of Professional Studies  
 Master's of Sustainability Management

4	6/1	Green Bonds 2: Labeling and Standards		<p><u>RECOMMENDED</u></p> <p>Reed, P., Yonovjak, L. and Cort, T., A Framework for Evaluating Environmental Performance of Fixed Income Investments, in preparation for <i>Harvard Business Review</i> (to be posted to canvas)</p> <p>MSCI, "Executive Summary: Intangible Value Assessment (IVA) Methodology," (December 2014),      &lt;<a href="https://www.msci.com/resources/factsheets/IVA_Methodology_SUMMARY.pdf">https://www.msci.com/resources/factsheets/IVA_Methodology_SUMMARY.pdf</a>&gt;.</p> <p>Global Sustainable Investment Alliance, "2014 Global Sustainable Investment Review,"  <a href="http://www.gsi-alliance.org/wp-content/uploads/2015/02/GSIA_Review_download.pdf">http://www.gsi-alliance.org/wp-content/uploads/2015/02/GSIA_Review_download.pdf</a></p> <p>United Nations Principles of Responsible Investment, "Annual Report 2015: From Awareness to Impact,"  <a href="http://www.unpri.org/publications/">http://www.unpri.org/publications/</a></p> <p>S. Douglas Beets and Christopher C. Souther, "Corporate Environmental Reports: The Need for Standards and an Environmental Assurance Service," <i>Accounting Horizons</i>, 13/2 (1999): 129-145.</p>
5	6/6	Conservation Finance Workshop Part 1		<p><u>RECOMMENDED</u></p> <p>Martin, C. Conservation Finance 101;  <a href="http://www.conservationfinancenetwork.org/conservation-finance-101">http://www.conservationfinancenetwork.org/conservation-finance-101</a></p> <p>Additional Materials to be posted on Canvas</p>
6	6/8	Conservation Finance Workshop Part 2		
7	6/13	Business Dilemma Discussion: GPSU	<p>Business Dilemma #1: GPSU</p> <p><a href="http://vol11.cases.som.yale.edu/low-carbon-investing">http://vol11.cases.som.yale.edu/low-carbon-investing</a></p> <p>Username: Pinchot</p> <p>Password: SOM2014</p>	

Columbia University School of Professional Studies  
 Master's of Sustainability Management

8	6/15	Environmental Profit and Loss		<p><u>REQUIRED</u></p> <p>Puma EPL;  <a href="http://about.puma.com/en/sustainability/environment/environmental-profit-and-loss-account">http://about.puma.com/en/sustainability/environment/environmental-profit-and-loss-account</a></p>
9	6/20	Sustainability Accounting Part 1		<p><u>REQUIRED</u></p> <p>KPMG New Vision of Value;  <a href="http://www.kpmg.com/Global/en/topics/climate-change-sustainability-services/Documents/a-new-vision-of-value-v1.pdf">http://www.kpmg.com/Global/en/topics/climate-change-sustainability-services/Documents/a-new-vision-of-value-v1.pdf</a></p> <p><u>RECOMMENDED</u></p> <p><a href="http://www.teebweb.org">http://www.teebweb.org</a></p> <p><a href="http://www.thesroinetwork.org/sroi-analysis">http://www.thesroinetwork.org/sroi-analysis</a> (15-minute video)</p> <p><a href="http://sixsigmabasics.com">http://sixsigmabasics.com</a> (1 page)</p> <p><a href="http://www.epa.gov/sustainability/analytics/benefit-cost.htm">http://www.epa.gov/sustainability/analytics/benefit-cost.htm</a> (1 page)</p> <p><a href="http://en.wikipedia.org/wiki/Life-cycle_assessment">http://en.wikipedia.org/wiki/Life-cycle_assessment</a> (1 page)</p> <p><a href="http://www.ecosystemvaluation.org">http://www.ecosystemvaluation.org</a></p>
10	6/22	Sustainability Accounting Part 2	<p>Position Paper #2: Valuing wilderness in Iceland: Estimation of WTA and WTP using the market stall approach to contingent valuation, Nele Lienhoop, Douglas MacMillan, Land Use Policy 24 (2007) 289-295</p>	
11	6/27	NS Business Dilemma Presentations and Discussion	<p>Business Dilemma #2: NS</p> <p><a href="http://vol11.cases.som.yale.edu/ns-kpmg">http://vol11.cases.som.yale.edu/ns-kpmg</a></p> <p>username: SOMcase</p> <p>password: Caseview@SOM10</p>	
12	6/29	NS Business Dilemma Presentations and Discussion; Wrap-up		

## School Policies

### *Copyright Policy*

Please note -- Due to copyright restrictions, online access to this material is limited to instructors and students currently registered for this course. Please be advised that by clicking the link to the electronic materials in this course, you have read and accept the following:

The copyright law of the United States (Title 17, United States Code) governs the making of photocopies or other reproductions of copyrighted materials. Under certain conditions specified in the law, libraries and archives are authorized to furnish a photocopy or other reproduction. One of these specified conditions is that the photocopy or reproduction is not to be "used for any purpose other than private study, scholarship, or research." If a user makes a request for, or later uses, a photocopy or reproduction for purposes in excess of "fair use," that user may be liable for copyright infringement.

### *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.

SPS holds each member of its community responsible for understanding and abiding by the SPS Academic Integrity and Community Standards posted at <http://sps.columbia.edu/student-life-and-alumni-relations/academic-integrity-and-community-standards>. 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>.