

Green Accounting

Instructor: William G. Russell

September – December 2013

Thursdays, 6:10-8:00

Office Hours: tbd

1. Course Overview

Sustainability managers must be familiar with the terminology, practices and consequences of accounting, finance and operational and sustainability performance measurements as we shift to a “green” economy. Our current economic and accounting systems have been essential for enabling markets, companies, investors, governments and consumers to function. They are however, not perfect, and have presented stakeholders at all levels with inadequate or even misleading information that is relied upon to determine financial risk and strategic opportunity values.

Economic bottom line value is the primary indicator affecting the allocation of natural, built, human and social capital resources. It compels the strategic decisions of government and business leaders and the consumption decisions of individuals. Green accounting provides a foundation of historic and future financial and non-financial measurement practices. It prepares students to become sustainability-aware managers with the skills to analyze integrated environmental and social bottom line measures to improve and enhance current financial performance and economic bottom line measures. Improved accounting and value measurement practices are essential to achieving a green economy transformation and advancing a long-term sustainable society.

Green Accounting examines the generation, analysis and use of financial and non-financial information in order to optimize corporate and economy-wide environmental, social and economic performance and achieve sustainable business. The course provides a context and analytical foundation for all students to learn and practice Sustainability-aligned Management. Students learn how the financial bottom-line is presented through traditional financial reports and internal cost tracking and quantitative analysis practices. They obtain critical insights and an appreciation of how financial and non-financial accounting data drives external investor decisions and internal strategic priorities and investments.

Green Accounting students learn critical traditional financial and cost accounting methods and tools and examine how these methods and tools are changing in order to improve resource allocations and sustainability performance outcomes. The course presents a practical blend of traditional and emerging sustainable financial and non-financial accounting topics. We start by reviewing external financial reports and financial accounting concepts, income statements, cash flow statements and balance sheets. In the second half of the course, we focus on internal corporate cost accounting and performance management systems. Core topics covered include activity based costing, full cost accounting and quantifying returns on investments. Throughout, students examine sustainability system frameworks and emerging sustainable accounting initiatives.

Our hope is that students leave the course prepared to play an impactful role in leading companies and communities as they experience disruptive change and transform to an emerging “green” economy.

2. Course Objectives

Students are assumed to have little to no previous exposure to accounting. By the end of the course, students should be able to

- interpret major line items in a conventional balance sheet, income statement and cash flow statement under US GAAP.
- understand how stakeholders are debating the concept and quantification methods to assess materiality and the tension between voluntary and mandatory reporting requirements.
- calculate appropriate performance ratios and compliment those with non-financial sustainability performance measures.
- articulate why GAAP does not adequately account for resource use, pollution or social activity and describe how sustainability reporting standards such as the Global Reporting Initiative close current weaknesses.
- develop a financially quantified sustainability investment business case.

3. Required Texts

- The Essentials of Finance and Accounting for Nonfinancial Managers, Edward Fields
- The New Sustainability Advantage, Bob Willard
- The Green Bottom Line, Martin Bennett and Peter James

Additional articles and resources will be provided on the course website.

4. Course Activities and Assignments

Readings

Each week, before the Thursday evening lecture, you are required to complete all readings from core texts and resources posted to the course website. Understanding the foundational concepts presented in the texts is a critical pre-requisite to participation during class and to complete assignments.

Exercises

Most weeks, you will complete practice exercises that include computation of accounting ratios, quantitative analysis, and brief written interpretations of accounting data and web research findings. The course includes 10 exercises, with each worth 3% of your course grade.

Project

Part One: Analyst Report

In this 3-5 page paper, you will individually choose a company and examine its external corporate and sustainability reports as well as its sustainability ratings. You will assess its financials and recommend whether to invest in the company based on its financial and sustainability performance. This report is worth 30% of your course grade.

Part Two: Sustainability Opportunity Cash Flow Modeling, ROI and Business Case Development
 In these assignments, you work in small groups to examine internal corporate budget setting and internal corporate investing in depth. Using a designated industry sustainability opportunity analysis model and corporate case companies you will work in a team to apply the opportunity model to a case company (15%). A second group project will focus on assessing the return on investment for eco-efficiency, human productivity, innovation and intangible value issues (15%). Each group project will include a brief written report and a presentation version to share and discuss with the class.

Tutorial Forum

Each week we will offer optional tutorial sessions where you can pose your questions about the weekly readings, lecture or project activities.

5. Evaluation and Grading

Specific grading criteria are posted on the course site for each of the assignments described above. We will grade your work with the stated criteria in mind, on a 100-point scale, and post your grade and our feedback in the course gradebook. We typically finish grading your exercise assignments about a week after their due date, and will post an announcement to let you know when to check the gradebook.

Exercises	30%
Analyst Report	30%
Group Project I: Applying Willard Model	15%
Group Project II: ROI and Business Case	15%
Participation	10%

GRADING SCALE

A+	98 - 100
A	93 - 97.9
A-	90 - 92.9
B+	87 - 89.9
B	83 - 86.9
B-	80 - 82.9
C+	77 - 79.9
C	73 - 76.9
C-	70 - 72.9
D	60 - 69.9
F	00 - 59.9

6. Course Policies

Attendance

Regular attendance is required. Students are expected to have done the readings for each session prior to the live lectures.

Participation

Participation in class, during group project activities and online is required. We expect your contributions to enhance the quality of the class experience for yourself and others. This involves making relevant, useful and non-obvious comments, or posing pertinent questions, in clear and succinct language. During the live sessions, come prepared to actively discuss the readings and course assignments.

Participation in practice problem forums or tutorial sessions are optional.

Late work

All assignments must be submitted on the published due dates. Deadlines are important! Without a compelling excuse before the due date, I will deduct 5 points from written assignment grades score for each day that you are late in submitting it.

7. School Policies

Academic Integrity

All work is expected to be original either from team effort or individual design; cheating and plagiarism will not be tolerated. Columbia University expects that its students will act with honesty and propriety at all times and will 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 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>

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