This course is the first course in a 2-semester course sequence offered to students enrolled in the Fisher Energy and Sustainability Cluster. This year-long sequence of courses provides students with in-depth competence in sustainable business practices.

Clusters at Fisher are designed as an MBA-like experience for academically-strong undergraduates who are highly motivated to jump start their career. The clusters employ an experiential learning model. This involves a high degree of student engagement, case studies, and collaborative problem solving in the form of team projects that help students develop skills in topical research, project management, business presentations, and preparation of business reports. A co-curricular component of the Cluster model provides students with skills in networking, searching for internships and full-time employment, professional engagement, and business etiquette for formal social occasions.

The Cluster is delivered with the support and cooperation of five Industry partners: the Alcoa Foundation, Dow Chemical Company, the General Motors Foundation, Greif and Owens Corning. Students are expected to enroll in both semesters of the Cluster. Students not planning to enroll in the second semester should not enroll in the first semester.

Class Schedule:

Tue & Thu: 7:30 PM – 8:48 PM – Rm: 215 SB

Instructor: Professor Neil L. Drobny, Ph.D.
Phone: (614) 268-6100
Email: drobny.3@osu.edu
There are six sections to this syllabus:

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I. **Course Overview**

How a company interacts with the environment and how it performs as a socially responsible corporate citizen are becoming strategic variables for all organizations – for profit corporations and non-profit organizations alike.

Sustainability captures a broad and diverse set of issues with which organizations must deal to succeed strategically and perform competitively against rising expectations for environmental stewardship and social responsibility. Often the informal metaphor “green” is used synonymously with sustainability, but as will be demonstrated in this course, sustainability is the more comprehensive term.

*BA 3640.01 - Sustainability in Business: Principles and Practices* will trace the historical evolution of present day expectations on corporations and other organizations for taking on environmental and social responsibilities that may seem unrelated to their core mission. Present-day driving forces such as climate change, food vs. fuel, resource depletion, and global poverty mitigation will be studied in detail. Building on that backdrop, the course will acquaint students with the initiatives of several organizations that have integrated sustainability-focused business practices into their operations. Additionally, students will study specific topics that are important building blocks for sustainability initiatives. These topics will include building design and construction, energy conservation and management, substitution of renewable for non-renewable resources, water management, carbon reduction, waste reduction and recycling, stakeholder relationships, and sustainability measurement and reporting. Finally, students will be introduced to advanced concepts including natural capitalism, industrial ecology, ecological footprint, enterprise resilience, codes of conduct, life cycle analysis, and sustainable business certification.

This course is a pre-requisite for *BA 3642.01 - Sustainability in Business: Applications and Project Experience* in Spring Semester 2015.
II. Learning Objectives

These two courses work together to provide EEDS students with skills and knowledge to:

- Comprehend the complexity of matters which interact to create sustainability-related strategic and operating challenges and opportunities for business organizations.
- Frame the diagnosis and solution pathways for business issues with apparent or potential sustainability issues in major business functions.
- Identify and select tools appropriate to analysis of sustainability issues and to generate solution pathways typically faced by private and public sector businesses.
- Develop and argue the business case for solving problems or pursuing opportunities framed from actual circumstances faced by diverse organizations.
- Identify and access information sources pertinent to a rapidly evolving knowledge base on sustainable business practices.
- Communicate to prospective employers how sustainability knowledge can add value to an organization.
- Discuss knowledgeably emerging business models and concepts including the circular economy, B-corporations, zero waste, collaborative consumption, product stewardship, and industrial ecology.

These objectives are reviewed annually to assure relevance to changing requirements and evolving knowledge.
### III. Topic Schedule

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<td><strong>5 Mini Presentations</strong></td>
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<td><strong>Cornerstones of Sustainability in Business</strong></td>
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<td><strong>Corporate Sustainability Strategy</strong></td>
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<td><strong>10/13</strong></td>
<td><strong>Dan Roup, Alcoa:</strong></td>
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<td><strong>Corey Friedman, Dow AgroSciences</strong></td>
<td><strong>Sustainability Strategy at Alcoa</strong></td>
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<td><strong>Climate Change: Impacts on Food Security</strong></td>
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<td><strong>MIDTERM EXAM</strong></td>
<td><strong>Mid-semester break</strong></td>
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<td><strong>In-class midterm (50 min)</strong></td>
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<td><strong>plus</strong></td>
<td><strong>REVIEW OF MIDTERM &amp; MID-PROJECT REVIEWS</strong></td>
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<tr>
<td><strong>5 Mini Presentations</strong></td>
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### Course Schedule

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<th>Date</th>
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<th>Activity</th>
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| Tuesdays 7:30 PM – 8:48 PM | Thursdays 7:30 PM – 8:48 PM | **11/3** | **GUEST LECTURE**  
 Mike Long, Resource 100  
 *Sustainable Materials Management*
| **11/5** | **LECTURE & DISCUSSION**  
 Stakeholder Engagement  
 plus  
 *Case Study #2 – Pyramid Air*
| **11/10** | **LECTURE & DISCUSSION**  
 Product Issues in Sustainability  
 plus  
 *Case Study #3 – Herman Miller*
| **11/12** | **GUEST LECTURE**  
 Jack Hedge, Design Group  
 *The Built Environment*
| **11/17** | **DISCUSSION**  
 *Case Study #4 - The Empire State Building*  
 plus  
 *5 Mini Presentations*
| **11/19** | **LECTURE & DISCUSSION**  
 Business Impacts of Climate Change  
 plus  
 *5 Mini presentations*
| **11/24** | **INDUSTRY PARTNER PRESENTATION**  
 France Guertin  
 *Economics of Ecosystems*
| **11/26** | **No CLASS**  
 Thanksgiving
| **12/1**  | **LECTURE & DISCUSSION**  
 Emerging Business Models Concepts  
 plus  
 *Case Study #5 – Good Water Company*
| **12/3**  | **TEAM PROJECT REPORTS**  
 *4 Project Team Reports*
| **12/8**  | **TEAM PROJECT REPORTS**  
 *2 Project Team Reports*  
 plus  
 *2nd Semester Plans/Projects*
IV. Class Meeting Detail

Thu., Aug. 27 – INTRODUCTION TO THE CLUSTER ORIENTATION
  Introductions and Expectations

Read before class:

- None.

Agenda for Class:

Guest Speakers: In the absence of the instructor who will be out of town, students from last year’s E&S Cluster’s will meet with the class to provide an introduction to the cluster experience, particularly from a student perspective. These students are Honors Contract students who elected the Cluster as a two year experience with the second year providing them with an opportunity to do an E&S-related research project and to support the instructor in other ways such as filling in for this class meeting. The students are Kelsey Rumburg, Trisha Taggart, and Andrea Dempsey.

Tue., Sept. 1 – LECTURE & DISCUSSION
  The Business Case and Agenda for Sustainability

Read before class:

- Be familiar with this syllabus and the Carmen website for the course.
- “Business at its Best: Driving Sustainable Value Creation” (Full Report). Download here.

Agenda for class:

- The instructor will review key curricular and co-curricular aspect of the Cluster, including:
  - Expectations: Mine, yours, Industry Partner companies and speakers.
  - Student feedback from Kickoff event
  - Student feedback on summer reading assignment.
  - Review of syllabus and classroom protocol.
  - Snapshot of Spring Semester.
  - Optional field trips

- Additionally, the instructor will lay out the issues that are driving business interest in sustainability.

Thu., Sept. 3 – LECTURE & DISCUSSION
  Roots of Sustainability in Business and Selection of Mini Presentation Topics

Read before class:

- Chapter 7 Theis and Tomkin Text: Sections 7.1, 7.2 & 7.4 – “Modern Environmental Management”.
“RoHS and REACH Compliance explained”. Click [here](#).
“Costs of Non-compliance” [PDF #1 on Carmen]

**Agenda for Class:**

- “Success” of the Industrial Revolution
- Laws & regulations impact business strategy
  - Hazardous Waste and Toxic Materials Highly Scrutinized
  - Non-compliance begins to “cost”
  - Personal Liability Strengthens Compliance Incentives
- Compliance Becomes the Floor for Sustainability
  - Sustainability Starts With Compliance
  - International Issues Enter the Equation
  - Plant issues expand into the value chain.
- Industry Response
  - Formal Management (Data Management, ISO 14001)
  - Prevention vs. remediation
  - Systems Thinking (life cycle assessment, closed loops, circular economy)
  - Sustainability – Moving Beyond Compliance Toward Performance
- Selection of mini-presentation topics

**Tue., Sept. 8 – TEAM PROJECT INTRODUCTION**

**Materiality**

**Read before class:**

- “Materiality – Why it is Important”. Click [here](#).
- “The Core of Materiality – What Matters Most”. Click [here](#).
- “Getting Materiality Right”. Download [here](#).

**Agenda for Class:**

- Project Scope & Objectives
- Materiality Assessment
  - What is it?
  - Purpose Served
  - Connection to Spring Semester Projects
- Preparation of business reports (content, structure, including examples posted on Carmen)
- Select Project Teams
  - Students will self-select into project teams of 3 or 4 people each.

**Thu., Sept. 10 – INDUSTRY PARTNER PRESENTATION**

**The Auto Industry’s Journey to Sustainability**

**Read before class:**

Agenda for class:

- **Guest Speaker:** David Tulauskas, Director of Sustainability at General Motors, will discuss the journey of the auto industry to sustainability, with particular reference to General Motors.

**Tue., Sept. 15 – INDUSTRY PARTNER PRESENTATION**  
**Demystifying Sustainability for Plastics**

**Read before class:**

- Watch the videos:  
  - “Plastic: Too Valuable to Throw Away.” Click [here](#).
  - “It’s the Total Package.” Click [here](#).
  - “Dow Energy Bag”. Click [here](#).
- Visit Recycle Rally and take the Recycle Challenge. Click [here](#).
- “The Energy Cost to Feed One Person.” [PDF #2 on Carmen]
- “Sustainability in a Package.” [PDF #3 on Carmen]

Agenda for class:

- **Guest Speaker:** Jeff Wooster, Sustainability Leader, Plastics North America, Dow, will discuss packaging issues generally and plastics specifically from the viewpoint of sustainability.

**Thu., Sept. 17 – INDUSTRY PARTNER PRESENTATION**  
**Sustainability of non-Aluminum Operations**

**Read Before class:**

- “Alcoa Sustainability Report 2014”.  Click [here](#).
- “Alcoa Completes Acquisition of RTI International Metals…” C lick [here](#).

Agenda for class:

- **Guest Speaker:** Kevin McKnight, Vice-President of Environment, Health and Safety and Chief Sustainability Officer for Alcoa, will discuss sustainability issues as Alcoa diversifies beyond its primary focus on aluminum.

**Tue., Sept. 22 – TEAM PROJECT - CONTINUED**  
**Library Resources and Execution**

**Read before class:**

None

Agenda for class:

- Review the scope and use of OSU’s extensive library resources pertinent to work that will be assigned in the Autumn and Spring Semesters of the Cluster.
- **Guest speaker:** Mr. Gene Springs, OSU Business Librarian
Thu., Sept. 24 – INDUSTRY PARTNER PRESENTATION
Safety in Sustainability and Business Culture

Read before class:

- “Owens Corning Green Cross Award Application” [ PDF #4 on Carmen ]
- “Safe Companies: An Alternative Approach to Operationalizing Sustainability”. Click here. Note: you will need to use the OSU library to access the full article.

Agenda for class:

- Guest Speaker: Doug Ponsteler, Owens Corning, will discuss the interconnections between sustainability and safety.

Tue., Sept. 29, – LECTURE & DISCUSSION
Supply Chain Issues plus 5 Mini-presentations

Read before class:

- “Sustainability Through the Value Chain”: To Download Click here.
- “From Risk to Resilience – Learning to Deal with Disruption”. [PDF # 5 on Carmen]
- “Watch Story of Stuff”. Click here.
- “Tracing Conflict Minerals Proves Elusive and Expensive”. Click here.

Agenda for class:

- Where Impacts Happen
- Sourcing
  - Conflict Minerals
  - Effects on value chain impacts
- Requirements: Sustainability and Resilience
- Supplier Scorecards
- Supplier Support and Training
- Supplier Accountability
- WalMart Example

➢ The last 30 minutes of class will be reserved for 5 mini-presentations.

Thu., Oct. 1 - LECTURE & DISCUSSION
Cornerstones of Sustainability in Business plus 3 Mini-presentations

Read before class:

- “The Equator Principles”. Click here.
- “Responsible Care Guiding Principles”. Click here.
Agenda for class:

- Organizing Principles
  - Codes of conduct (e.g. Responsible Care, Equator Principles, UN Global Compact)
  - Certifications, standards, rankings, labels
  - Guidelines (e.g. Federal Executive Orders, The Natural Step, CERES Roadmap, Regeneration Roadmap, AIA/2030 Challenge, UN Sustainable Development Goals-very new)

- Strategies
  - Focus on the Value Chain
  - Think Stakeholders vs. Shareholders
  - Target both behavior and technology change
  - Promote closed-loop vs. linear flows
  - Use what already exists
  - Create Shared Value (handprints vs. footprints)
  - Copy nature

➢ The last 20 minutes of class will be reserved for 3 mini-presentations:

**Tue., Oct. 6 - LECTURE & DISCUSSION**

Corporate Sustainability Strategy plus Case Study #1 – GOJO Industries

**Read before class**

- “Dow 2025 Sustainability Goals”. Click here.
- “Unilever Sustainable Living Plan”. Click here.
- Case Study #1: “GOJO Industries: Aiming for Global Sustainability Leadership” Refer to Ivey Publishing Coursepack.

**Agenda for Class**

- What is Strategy?
- Key Drivers of Sustainability Strategy
- Organizing for Sustainability
- Impact of Rankings and Ratings
- Dow and Unilever examples

➢ Discussion of GOJO Industries case. Students should come to class prepared to discuss issues related to the case which are posted on Carmen in the Module titled “Case Studies”.

**Thu., Oct. 8 – INDUSTRY PARTNER PRESENTATION**

Sustainability Strategy

**Read before class:**

Agenda for Class:

- **Guest Speaker:** Dan Roup, Director of Growth and Market Strategy for Alcoa, will discuss the integration of sustainability into Alcoa’s corporate strategy.

**Tue., Oct. 13 – INDUSTRY PARTNER PRESENTATION**

**Climate Change: Impacts on Food Security**

**Read before class:**

- “Realizing a New Vision for Agriculture: A Roadmap for Stakeholders.” Download [here](#).
- “Solutions for the Growing World.” Click [here](#).
- “Extreme weather and resilience of the global food system”. Click [here](#).

Agenda for class:

- **Guest Speaker:** Corey Friedman, Dow AgroSciences, will discuss climate change as it pertains to food security and how it impacts Dow’s strategy for serving that business sector.

**Thu., Oct. 15 – NO CLASS**

**Mid-semester Break**

**Tue., Oct. 20 – MIDTERM EXAM**

**Plus 5 Mini-Presentations**

**Read before class:**

- None

Agenda for class:

- In-class midterm – closed book (50 min)
  - The last 30 minutes of class will be reserved for 5 mini-presentations.

**Thu., Oct 22 – REVIEW OF MIDTERM**

**plus MID-PROJECT REVIEWS**

**Read before class:**

- None

Agenda for class:

- See detail in syllabus re: mid-project reviews
**Tue., Oct 27 – INDUSTRY PARTNER PRESENTATION**

**Corporate Social Responsibility**

**Read before class:**

- “Vision 2050 – The New Agenda for Business” Download [here](#).
- “Sustainability 50 Summit – May 2013 Briefing Book.” [PDF #6 on Carmen] [PDF #6 on Carmen]
- Research the book, Dead Aid, and understand the key concepts.

**Agenda for class:**

**Guest Speaker:** Mr. Scott Griffin, Chief Sustainability Officer of Greif in Delaware, Ohio will discuss the global view of sustainability in business as articulated by the World Business Council on Sustainable Development, with emphasis on the social agenda.

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**Thu., Oct. 29 – INDUSTRY PARTNER PRESENTATION**

**Case Studies in Corporate Social Responsibility**

**Read before class:**

- “Girls, Women and Water”. [PDF #7 on Carmen].
- “Sustainable Development Goal #5: Achieve Gender Equality.” Click [here](#).

**Agenda for class:**

- **Guest Speaker:** Mr. Scott Griffin, Chief Sustainability Officer of Greif in Delaware, OH will discuss a very successful social enterprise that improves access to water in the developing world.

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**Tue., Nov. 3 – LECTURE & DISCUSSION**

**Stakeholder Engagement plus Case Study # 2 – Pyramid Air**

**Read before class:**

- “Best Practices for Stakeholder Engagement”. Click [here](#).
- “Global Reporting Initiative (GRI)”. Click [here](#).
- “Why Disclose to CDP”? Click [here](#).
- **Case Study #2:** “Pyramid Air: “Looking Through the Scope of Values”. Refer to Ivey Publishing Coursepack.

**Agenda for class:**

- Public vs. Private Companies
- Sustainability Reporting ( GRI, integrated reporting)
- Investor perspectives (CERES Roadmap)
• Customer perspectives (Eco labels, greenwashing)
• Enterprise Certifications and Rankings (eEnterprise and facility level)

➢ Discussion of Pyramid Air Case. Students should come to class prepared to discuss issues related to the case which are posted on Carmen in the Module titled “Case Studies”.
➢ The last 30 minutes will be reserved for 5 mini-presentations.

Thu., Nov. 5 – GUEST LECTURE & DISCUSSION
By-Product Synergy as a Tool for Sustainable Materials Management

Read before class:

• “Sustainable Materials Management: The Road Ahead”. Click here.
• “By-Product Synergy and Industrial Ecology” Click here.
• “The End of Garbage.” Click here.
• View the video: “Turning Waste into Profit”. Click here.

Agenda for class:

• Guest Speaker: Michael Long, P.E., President of Resource100 and former Executive Director of the Solid Waste Authority of Central Ohio (SWACO) will discuss advanced methods of solid waste management (being reframed as “sustainable materials management”, with emphasis on Industrial Ecology and By-Product Synergy which are built around the principle of waste=food.

Tue., Nov. 10 – LECTURE & DISCUSSION
Product Issues in Sustainability plus Case Study # 3 – Herman Miller

Read before class

• Chapter 9 – Theis and Tomkin Text (Section 9.2 only – Life cycle Assessment)
• View the video, “Cradle to Cradle Design”: Click here.
• “…Secrets to Take Back Success”. Click here.
• Case study # 3: Herman Miller. “Cradle to Cradle Design—Moving Toward Environmental Sustainability”. Refer to Ivey Publishing Coursepack.

Agenda for class:

• Product certifications (e.g.Cradle to Cradle, Green Seal)
• Design for Sustainability
  - Life Cycle Analysis
  - Caterpillar Example
  - Coldwater Tide example
• Product Stewardship
  - Product takeback (e.g. Levi Strauss, Best Buy, Patagonia)
  - Packaging
• Marketing & Branding
Discussions of Herman Miller Case. Students should come to class prepared to discuss issues related to the case which are posted on Carmen in the Module titled “Case Studies”.

**Thu., Nov. 12 – LECTURE & DISCUSSION**

**The Built Environment**

**Read before class:**

- “The Business Case for Green Building”. Click [here](#).
- Review the website: “Green Globes”. Click [here](#).
- Review the website: “USGBC/LEED”. Click [here](#).

**Agenda for class:**

- Guest Lecture: Mr. Jack Hedge, Principal of the Design Group, will discuss the options and benefits of building green. Examples of green buildings both in Columbus and in other locations will be reviewed.

**Tue., Nov. 17 – DISCUSSION**

**Case Study #4 – Empire State Building plus 5 mini-Presentations**

**Read before class:**

- Review the website: “Energy Star for Commercial and Industrial Buildings”. Click [here](#).
- Case Study # 4: Empire State Building Case Study—“Reawakening the World’s Most Famous Office Building”. Refer to Ivy Publishing Coursepack.

**Agenda for class:**

- Footprint of Buildings
- Options for Improvement
- Certification programs
  - LEED, Green Globes, Energy Star
  - Documented impacts
- Progress & Prospects
- Status at OSU
- Discussion of Empire State Building Case. Students should come to class prepared to discuss issues related to the case which are posted on Carmen in the Module titled “Case Studies”.

- The last 30 minutes of class will be reserved for 5 mini-presentations.

**Thu., Nov. 19 – LECTURE & DISCUSSION**

**Business Impacts of Climate Change plus 5 mini-Presentations**

**Read before class:**

- “Climate Change: Business Risk and Solutions”. Click [here](#).
- “Cost of Inaction”. Click [here](#). *(Read only the Executive Summary and Conclusions)*
• “Climate Pragmatism” (reframing the climate discussion). Click here.
• “Reporting Your Company’s Carbon Footprint Can Save $1.5 million a year”. Click here.

Agenda for class:

• Business impacts atmospheric carbon
  - Mitigation vs. adaptation
  - Voluntary vs. mandated controls
  - Internal pricing of carbon
• OSU and Columbus GHG reduction goals
• Impact Investors (including divestment proponents)
• Role of Business at COP 21 (COP = Conference of Parties)
• Societal issues
  - Social cost of carbon
  - Poverty connection

➢ At the end of class, 30 minutes will be reserved for 5 mini –presentations.

Tue., Nov. 24 – INDUSTRY PARTNER PRESENTATION
Economics of Ecosystems

Read before class:

• “2013 Nature Conservancy Annual Progress.” [PDF #8 on Carmen]
• “Dow-TNC on Ecosystem Services.” [PDF #9 on Carmen]
• “Value of Ecosystem Services.” [PDF #10 on Carmen]


Agenda for class:

• Guest Speaker: France Guertin, Lead EH&S Manager/ SME Biomimicry; Environmental Footprint Solutions Group, will discuss Dow’s efforts to monetize the value of ecosystems.

Thu., Nov. 26 – NO CLASS
Thanksgiving

Tue., Dec. 1 – EMERGING BUSINESS MODELS AND CONCEPTS
Plus Case Study # 5 Good Water Company

Read Before class:

• Case Description: “Good Water and Good Plastic”. Refer to Ivey Publishing Coursepack.

Agenda for class:
• Discussion of Good Water Company case. Students should come to class prepared to discuss issues related to the case which are posted on Carmen in the Module titled “Case Studies”.
• The instructor will highlight numerous emerging sustainable business models and concepts:
  - B Corporation
  - Product Takeback (Best Buy, Levi examples)
  - Circular Economy (BPS, Regeneration Roadmap, industrial ecology)
  - Collaborative Consumption
  - Monetizing Ecosystem Assets
  - Net Positive (e.g. handprints and blueprints, creating shared value)
  - Localization
  - Biomimicry/Natural Step
  - Use of market forces to achieve social goals
  - Financial models (e.g. PACE, power purchase agreements)
  - Organizational Permaculture
  - Impact Investing
  - Product as a service

**Thu., Dec. 3 – TEAM PROJECT REPORTS**

*Agenda for class:*

• Four Project teams will present the results of their investigations to the class. Every team member should have a role in the presentation. To accommodate four presentations in 80 minutes, each team should plan on taking no more than 18 minutes including set up and Q&A.

**Tue., Dec. 8 – TEAM PROJECT REPORTS**

*Agenda for class:*

• Two project teams will present the results of their investigations to the class. Every team member should have a role in the presentation. Each team should plan on taking no more than 18 minutes including set up and Q&A.

• Sponsor project opportunities offered for project work as the primary focus for Spring Semester will be reviewed.

### V. Graded Work

**Graded Deliverables**

Students will be responsible for five graded deliverables described below. Grades on these deliverables will be combined to yield a deliverables grade that will subsequently be adjusted based on the student's engagement in class discussions to yield a final course grade as described later in the syllabus in the paragraph titled “Grading”.

1. **Team Project**
Students will work in teams of three or four people to develop an understanding of an emerging sustainability measurement and reporting tool known as the “Materiality Assessment”. With 50 students enrolled in the course, the plan is to have 10 teams of four people and 2 teams of five people. Briefly, Materiality Assessments are a tool that companies employ to evaluate how well they are aligned with stakeholders on sustainability issues.

Materiality and the specifics of the project will be discussed in class. Here are two short articles that will be assigned reading which provide an introduction to the subject of materiality as it applies to sustainability.

- “Materiality – Why it is Important.” [http://www.sasb.org/materiality/important](http://www.sasb.org/materiality/important)

Working in teams you will take the perspective of an investment committee of a sustainability-focused mutual fund charged with evaluating investment opportunities in the restaurant industry. Each team will focus on three companies chosen from one of the following groups:

<table>
<thead>
<tr>
<th>Retail</th>
<th>Utilities</th>
<th>Grocery</th>
</tr>
</thead>
<tbody>
<tr>
<td>WalMart</td>
<td>AEP</td>
<td>Kroger</td>
</tr>
<tr>
<td>Target</td>
<td>Duke Energy</td>
<td>Giant Eagle</td>
</tr>
<tr>
<td>H&amp;M</td>
<td>First Energy</td>
<td>Whole Foods</td>
</tr>
</tbody>
</table>

The evaluations will consist of preparing a Materiality Assessment, including a materiality matrix, the details of which will be provided in class.

This project will be in lieu of a final exam and will count 35% of one’s overall grade; team members will be given the opportunity to evaluate the performance of other members of their team. The required deliverables include a written report and a formal presentation, in which all team members participate, delivered to the entire class at the end of the semester.

During class on **Thursday, October 19**, after a review of the midterm, the teams will meet with the instructor during class time for approximately 7-8 minutes to review progress and/or to receive guidance for dealing with any difficulties. All team members must be present for his or her team’s review. A schedule for each team’s review will be communicated in advance and students will only need remain in class to attend their team’s review.

Attachment 1 contains additional information regarding delivery of presentations and preparation of the final report. A module on Carmen Titled “Example Project Reports” contains two reports prepared by previous student teams that closely followed these guidelines. A Power Point copy of your presentation will be due via email by 10 PM on the evening of your presentation. A copy of your report will be due in MS Word format by 10 PM on **Thursday, December 10**.

2. **Midterm**

There will be one in-class midterm exam on **Tuesday, October 20** and it will count 35% of one’s overall grade. Students will be given 50 minutes to complete the exam which will consist of a mix of true/false, multiple choice and essay questions.

3. **Mini presentations**
Each student will give a 5-minute, informal mini-presentation (no slides) to the class on a topic that will be assigned by a random drawing early in the semester.

For the last several years Green Biz (www.greenbiz.com), a provider of sustainable business news, has published an annual report titled, “State of Green Business”. These reports contain very short essays on selected sustainable business topics deemed especially pertinent in a given year. Each student will randomly draw one of the topics from either the 2012, 2013, 2014 or 2015 “State of Green Business” reports and present a 5-minute summary and critique of the essay to the class. These presentations will be scheduled throughout the semester; each students’ presentation date will be assigned early in the semester. The presentations will be graded and will count 10 percent of your course grade. Guidelines for presentations are contained in Attachment 1.

The 2012, 2013, 2014 and 2015 “State of Green Business” reports are posted on Carmen. From the four reports there is a total of 81 topics (also posted in Carmen) from which each student will select one in a random drawing.

4. Book Reports

A module on Carmen contains a list of “Books for Review.” from which students must select a book to read and report upon. This is in addition to the summer reading assignment. Written book reports (target length 500 words) will be due via email in MS Word format no later than 10 PM, Friday, November 13. The book reports will count 15 % of the overall course grade. The book reports should not just be a summary of the main points of the book, but should include what the student agreed with (or disagreed with) or liked (or disliked) about the book, and why. If all you do is summarize the book, your grade will be penalized. The instructor has single copies of all the books which may be borrowed.

5. Summer Reading

As previously assigned, you were to read over the summer the book The Necessary Revolution – How Individuals and Organizations Are Working Together to Create a Sustainable World by Peter Senge. The book is available in a wide variety of formats – print, electronic and audio. It is available in paperback (used) for under $7 from Amazon.

Your review will count 5 percent of your overall course grade.

Grading

Course grades will be based on a combination of factors.

Deliverables grade. A deliverables grade will be assigned for the five graded deliverables weighted as follows:

1. Team project 35%
2. Mid Term 35%
3. Mini-presentation 10%
4. Book report 15%
5. Summer reading 5%

Classroom engagement. Additionally, students will be graded on their classroom engagement. Classroom engagement refers to the frequency and quality of the student’s contributions to classroom discussion.
Students who are exceptionally active with thoughtful, non-repetitive contributions to class discussion will receive a one increment increase in the course grade based on the graded deliverables; for example, if a student’s graded deliverables yield a grade of “B”; the adjusted course grade will be a “B+”. Alternatively, students that are very inactive in class discussions, or that are unprepared to contribute when called upon, will receive a one increment grade decrease in the final course grade based on the graded deliverables; for example, if a student’s graded deliverables yield a grade of “B”, the adjusted course grade will be a “B−”.

**Team project work.** In assigning student grades for work on team projects the instructor will take into account input from other team members regarding the work of other team members. Factors to be considered are in the Team Evaluation Worksheet posted in the Carmen.module, Team Project Information.

**Grading criteria.** Letter grades will be assigned to all work using the following criteria.

- **A**  Demonstrates superb understanding of the subject as evidenced by depth of analysis and original thinking about the subject. (4.0)
- **A -**  in between A and B+ (3.7)
- **B+**  Demonstrates complete understanding of the subject as evidenced by thorough analysis and critical thinking about the subject. (3.3)
- **B**  in between B+ and B- (3.0)
- **B -**  Demonstrated understanding of subject matter is somewhat below that which should be attained from information presented in class or in reading assignments (2.7)
- **C+**  in between B- and C+ (2.3)
- **C**  Demonstrated understanding of subject matter is clearly below that which should be attained from information presented in class or in reading assignments (2.0)
- **C -**  in between C and D (1.7)
- **D +**  Demonstrated understanding of subject matter is significantly lacking in one or more significant aspects (1.3).
- **D -**  Demonstrated understanding of subject matter is significantly lacking in many significant aspects (1.0).

**Optional Extra Credit**

For extra credit you may attend one of two planned campus lectures and write a 250-300 word news article reporting on the talk and pitched to a business audience. Your report will be graded S-satisfactory or U-unsatisfactory. If you get an S your course grade as determined by all other factors will be increased one grade increment, i.e. a B would become a B+. There will be no penalty if your article is graded Unsatisfactory. **Reports for extra credit will not be accepted late.** Details on each lecture are as follows:

- **Monday, September 28**, at 3:30 PM in Mershon Auditorium: Lecture by Dr. Gro Harlem Brundtland, lead author of Our Common Future. For a brief background review of Our Common Future, Click [here](#). Read more about Dr. Brundtland [here](#). Your extra credit report will be due Friday, October 2 at 10 PM in MS Word format.
• Monday, November 2, at 7:00 PM in Mershon Auditorium: Lecture by Cardinal Peter Turkson, leader of the team that supported writing of the Pope’s encyclical on climate change released in June 2015. For background read this posting by Ohio State or read this article. Your extra credit report will be due Friday, November 6 at 10 PM in MS Word format.

You may, of course, attend both lectures (and you are highly encouraged to do so) but a report on only one lecture may be submitted for extra credit.

VI. Course Mechanics

Class Attendance

Class sessions will not be limited to a review of assigned reading material, but rather will in addition build upon that reading. Accordingly, consistent, regular attendance will be essential to gaining exposure to material which the student will need to complete assigned work. Also, regular attendance will be a key ingredient to determining whether you receive the one increment grade adjustment (up or down) for classroom engagement.

Absences and Tardiness

Excused absences will be approved by the instructor on a case-by-case basis. Except where an emergency is involved, requests should be made by phone or email at least 3 days in advance. In the case of unexcused absences, the grade for classroom engagement will be diminished.

Classes will start on time. Arriving late is a disruption to the speaker and to the class as a whole. If you have a need to be late, advise the instructor in advance, except when circumstances are unforeseeable. Also enter as unobtrusively as possible if you arrive late and make a direct apology to any guest speaker.

Mobile Devices

Mobile devices, except laptops or tablets for note taking, shall be turned off and out of sight. Violation of this requirement will be cause for dismissal from the classroom.

Reading Material

Advance reading material from various designated sources will be assigned for each class meeting. On the average, plan to spend 2-3 hours reading the assigned material for each class. There three sources of reading material:

- Online articles or articles/videos for which a hyperlink is provided.
- Articles (total of 4) for which PDF files are provided on Carmen
- Selected sections of a free on-line text book: Sustainability a Comprehensive Foundation, by Tom Theis and Jonathan Tomkim. It is on Carmen or you may download it directly from here.

As an option students are encouraged to read one or more of the free daily newsletters that cover sustainable business topics. Two suggestions are available at: www.greenbiz.com and www.environmentalleader.com.

Additionally, two sustainability consulting firms’ websites provide extensive educational material:
Case Studies

Several class sessions will involve case studies. These are typically detailed (20 or so pages) descriptions of true circumstances faced by companies in pursuing sustainable business practices. The case studies are written for the most part by business school faculty from a wide range of business schools. The case study documents are marketed and sold (online) by various providers. Every student in a class that uses a case study is expected to purchase his or her own copy. Sharing is a violation of copyright law.

During the semester we will discuss a total of five cases. The cases must be purchased from Ivey Publishing which has assembled the cases for the class into a coursepack which costs $17.00 ($3.40 per case). Attachment 2 to the syllabus contains instructions for downloading the coursepack.

Students are expected to come to class sessions having read an assigned case and having thought about discussion questions that are posted on Carmen for each case. In class, students will be called upon at random to kick off a discussion of one of the case questions. Participation in these discussions will be a factor in evaluating your classroom engagement.

The cases comprise a major portion of the assigned outside reading. It is recommended that you not wait until the night before a scheduled class discussion to read the case. Ideally, read the case a week or so ahead of time and review it and reflect on the discussion questions (on Carmen) a day or two prior to the class discussion.

Late Submissions

Written work submitted late will be penalized one letter grade increment for each 6 hours it is late. For example, a deliverable submitted 6 hours late that would otherwise receive an A will instead receive a grade of A minus.

Key Dates:

- **Tuesday, October 20** – In-class midterm exam
- **Friday, November 13** – Book reports due via email in MS Word format by 10 PM.
- **Evening of Project Presentation** – Copy of Power Point slides due via email by 10 PM.
- **Thursday, December 10** – Final Reports due via email in MS Word format by 10 PM.

Optional Field Trips

Several optional field trips are planned during the two-semester course sequence subject to student interest and availability.

*All-Cluster trip to Chicago.* March 31 – April 2, 2016 all clusters will travel to Chicago for two days of professional development and fun. Students visit businesses and organizations whose missions and activities align with the focus of their cluster.
**One-day trip to Alcoa in Cleveland.** This trip is typically scheduled for a Friday in February or March and entails a visit and tour at an Alcoa plant in Cleveland which highlights Alcoa’s commitment to sustainability and safety.

**Local visits.** Local visits of about 2 hours each are scheduled (typically on Friday afternoons) to two facilities in Columbus whose operations align strongly with sustainability. One is the plant where all collected recyclables are processed and the other is a plant which converts organic “waste” into energy and soil amendments.

**Carmen Modules**

Considerable course detail supporting the syllabus is in Carmen. The Carmen modules are titled as follows to help guide you to specific information.

- Syllabus
- PDF Files
- Theis & Tomkin Text
- Lecture Notes
- State of Green Business Reports and Mini Topics Presentation Schedule
- Books for Review
- Case Studies Discussion Questions
- Team Project Information
- Sample Project Reports
- Industry Partner and Guest Speaker Bios

**V. Administrative Matters**

**Diversity**

We will, as a group and as individuals, hold ourselves accountable for demonstrating an openness to and appreciation for ideas of others. This means being conspicuously respectful of each other on all occasions and in all of our class transactions.

**Disability**

Every effort will be made to provide each student with a meaningful learning opportunity. If there are any obstacles that could prevent you from learning effectively, please set an appointment with the instructor so that we might jointly figure out how to circumvent those obstacles. Any student who feels s/he may need an accommodation based on the impact of a disability should contact the instructor privately to discuss specific needs. The Office for Disability Services, 614-292-3307, in room 150 Pomerene Hall can assist with coordinating reasonable accommodations should there be a need.

**Academic Misconduct**

All students are expected to abide by the university’s Code of Student Conduct which may be found on the website of the Office of Academic Affairs, Committee on Academic Misconduct (COAM): [http://oaa.osu.edu/coam/home.html](http://oaa.osu.edu/coam/home.html). Your attention is particularly called to guidance on plagiarism: [http://oaa.osu.edu/coam/hownottoplagiarize.pdf](http://oaa.osu.edu/coam/hownottoplagiarize.pdf). The instructor is obligated by University policy to report to COAM all suspected cases of academic misconduct.
If you are unclear regarding any aspect of University policy on the above matters, discuss your questions with the instructor.

**Non Attendance Policy**

In accord with University rule 3335-8-33, any student may be disenrolled from a course for failure to attend by the first Friday of the term, or by the 3rd instructional day of the term, or by the second class meeting, *whichever occurs first.*
ATTACHMENT 1

Guidelines for Presentations and Reports

To help your grades in delivering presentations and preparing formal reports follow these guidelines:

Presentations

- Introduce self/selves and state topic
- Speak loud enough to be heard – clearly and distinctly.
- Tailor the detail to be conveyed to the time allotted.
- Organize your thoughts.
- Stick to the allotted time.
- Make eye contact with your audience.
- Limit reliance on note cards.
- Monetize the impact of any recommendations
- Close/summarize the presentation – don’t just stop
- Ask for questions – time permitting.
- Dress for success.
- In team presentations, design in smooth handoffs.
- Practice in advance.

If using slides

- Don’t choose a design that distracts from content.
- Minimize word density – choose key phrases to emphasize key points.
- Make eye contact with the audience.
- Show some energy/enthusiasm for your message.
- Don’t read slides.
- Make sure verbal delivery tracks content on slides.
- Design slides so they can “stand alone,” if necessary
- Employ one or more closing slides.

Formal Reports

- Use a cover page indicating report title, date, names of authors.
- Include a table of contents including a list of figures and tables.
- Include an Executive Summary at the beginning, immediately following the table of contents.
- Number the pages.
- Number tables and figures and refer to them in the text.
- Use a consistent voice throughout the report – don’t switch from “I concluded” to “we concluded” to “It was concluded”, etc.
- Employ headings and subheadings to break up major blocks of text.
• Include a summary/conclusions section or whatever is appropriate to the project to bring the report and your work to conclusion.
• Use APA format for references. Click here.
• Use spell check software to avoid spelling and grammar errors.

**In Team Project Reports**

Include in the report as the last section 100-word summaries written by each student summarizing his or her contribution to the project.

Reports will be graded on the following factors:

- Organization and content.
- Depth of thought.
- Clarity of expression.
- Adherence to the above guidelines
ATTACHMENT 2

Instructions for ordering the Coursepack from Ivey Publishing

Course: Introduction to Sustainability in Business – Principles and Practices
Professor(s): Professor Neil L Drobny, Ph.D.
Created July 30, 2015

1. Go to the Ivey Publishing website at www.iveycases.com
2. Log in to your existing account or click "Register" to create a new account and follow the prompts to complete the registration. If registering, choose the "Student User" role.
3. Click on this link or copy into your browser: https://www.iveycases.com/CoursepackView.aspx?id=6922
4. Click "Add to Cart".
5. You may choose to order in either print or digital format.
   o To order the material in digital format, check "digital download" and click "OK".
   o To order a printed copy for delivery, enter the print quantity required and click "OK". Please note that shipping charges will apply.
6. Go to the Shopping Cart (located at the top of the page), click "Checkout", and complete the checkout process.
7. When payment has been processed successfully, an Order Confirmation will be emailed to you immediately and you will see the Order Confirmation screen.
   o If you ordered digital copies: Click "Download your Digital Items" or go to "My Orders" to access the file.
   o If you ordered printed copies: Your order will be printed and shipped within 2 to 3 business days.

IMPORTANT: Access to downloadable files will expire 30 days from the order date, so be sure to save a copy on your computer. The downloadable file is a PDF document that can be opened using Adobe Reader.

This material is for your personal use only and is not to be shared or distributed in any form.

Questions? Contact Ivey Publishing during business hours.

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Business Hours:
Monday to Thursday: 8:00am-4:30pm (ET)
Friday: 8:00am-4:00pm (ET)