IE 8943: Launch through Sustainability: Products and Services – Part I (3 Credits)
Course Syllabus - Winter 2015

Instructor(s): Dr. Chinnam, Dr. Rickli, Dr. Murat, and Mr. Kusz.
Industrial & Systems Engineering Department

Classroom: MEB Room 2062, 4815 Fourth Street, Detroit, MI 48202 (ISE Department Conference Room)
Contact: Overall: 313.577.9665 (Voice); 313.577.8833 (Fax); See individual modules for more info.
Offices: 4815 Fourth Street, Detroit, MI 48202
Office Hours: See individual modules.
Web Site: http://blackboard.wayne.edu
Prerequisites: Executive Ph.D. Track Student

Software: None

Web Site: PowerPoint Slides, articles, handouts, syllabus, answers to homework, and online access to grades are available on http://blackboard.wayne.edu. Additionally, announcements will be posted on Blackboard and emailed out to the email addresses registered on Blackboard.

Program Mission: To provide the opportunity for working executives to combine real-world experience with academic skills to create a new class of technical leaders who embrace integrative thinking, are globally aware, and are capable of producing sustainable value to any organization throughout the world.

Course Objectives:
This Executive PhD track core course provides you the opportunity to thoroughly integrate knowledge, theory, and information from every aspect of the decision and management process that a business goes through in launching products and services and sustaining profitability. It also provides you with an excellent avenue to see the broader scope of operations and the consequences of these decisions and actions.

This course examines the time when the finished product/service is ready to hit the market to all the steps/stages involved and necessary to make the product/service sustainable. Course scope: Supply, Manufacturing, Distribution, Sales, Service, and Recycling. Product and services are explored and what a business has to do keep value and improve profitability. This integrated course attempts to provide a framework of leadership principles, best practices, and optimized management methodology of key strategic and operational concepts critical to successful, globally integrated product and service operations. We will study product and service processes with a focus on profitability, life-cycle management, and sustainability. This module will include the integrated and interdependent needs related to sustainable, continually improving processes and operations. We will study how global world class companies accomplish their functions in a manner that provides responsibility for the protection of the environment and the good and welfare of humanity.

The course is developed with a set of core principles. The relevant core principles will be examined in each module and serve as a theme for the course. The principles are human infrastructure, value creation, clock speed, robust & capable processes, balanced and level workflow, and culture. This will give you better cross functional collaboration which can lead to an accelerated product development process and improved planning efforts. This core course will be team taught in a novel and holistic way by a group of faculty from engineering, business, anthropology, and industry leaders. The courses might also involve leading academic and industrial experts from around the globe as guest speakers on a variety of topics.

The total course is split into two parts for convenience (IE8943 and IE8944), carrying a total of 5 credits.

Approach: The Industrial and Systems Engineering Department is taking an integrated approach to the curriculum for the Global Executive Ph.D. Integration in teaching and learning is derived from a systems perspective on both content and delivery that involves students and teachers together in co-creating an educational experience. Students will bring years of
experience to the classroom and an eagerness to learn new approaches to real-world business issues in a global economy. Teachers will contribute integrative models and knowledge from contemporary theory and research to work with students in framing problems and developing applied approaches to solving them. Adopt a modular approach to incorporate functional and specialized knowledge into a holistic and systems-based view of each major topic or course, drawing upon the expertise of development and delivery team members as needed and incorporating the key principles into each module topic.

**Course Format:**
The course is divided into modules. Each module will be led by a team of academic and industrial faculty and will involve: Case studies, Benchmark companies, Guest speakers, Assignments, Text/readings (100+ pages), Studying service sector and sustainability aspects, Review of recent dissertations, and Identification of potential research areas.

**Course Modules:**
The modules map processes from Product Completion through Sustainability Efforts. IE8943 covers the following modules:
- **Product/Service Launch Readiness (Lead: Dr. Ratna Babu Chinnam)**
- **Facilities Planning (Lead: Dr. Jeremy Rickli)**
- **Factory Physics & Production Control (Lead: Dr. Ratna Babu Chinnam)**
- **Lean, Flexible, and Agile Manufacturing (Lead: Dr. Ratna Babu Chinnam)**
- **Global Supply Chain Management: Core Concepts and Best Practices (Leads: Dr. Ratna Babu Chinnam and Dr. Alper Murat)**
- **Sustainability (Lead: JohnPaul Kusz, President, JPKusz, Ltd.; Past Associate Director - Center for Sustainable Enterprise, Illinois Institute of Technology, Chicago)**

IE8944 will cover the following topics:
- **Supply Chain/Network (Re-)Design (Leads: Dr. Alper Murat and Dr. Ratna Babu Chinnam)**
- **Supply Management (Leads: Dr. Ratna Babu Chinnam and Dr. Alper Murat)**
- **Logistics, Distribution & Collection (Leads: Dr. Ratna Babu Chinnam and Dr. Alper Murat)**
- **Service & Customer Relationship Management (Leads: Dr. Ratna Babu Chinnam and Dr. Alper Murat)**
- **Sustainability (Lead: Dr. Ratna Babu Chinnam)**

**Text Books:**
Books generally tend to carry outdated information. Given the nature of the course, we will rely more on journal articles, case studies, conference proceedings, and articles from the business press. See module syllabi for more information.

**References:**
A variety of engineering and business articles and case studies from such sources as Harvard Business Review, Management Science, and Sloan Management Review will be made available through the course website for individual modules. The list is too large and dynamic to be provided in the syllabus.

**Reading Assignments:**
The reading assignments will help you better understand the material covered in class. Read the assigned material prior to class discussion.

**Case Studies:**
Teams of students will have to summarize several cases and suggest solutions to issues raised by the case. Most case studies, as is the case with many problems in the real-world, do not necessarily have a single best solution. All solutions tend to involve tradeoffs. You are responsible for addressing the issues raised in a holistic and integrated way. All case study reports are expected to be typed and the typical report will be between 6 to 10 single spaced pages. The issues/questions to be addressed are posted on the course website or raised within the case document.

**Integration Project:**
Individual learning partners will systematically and comprehensively evaluate a “distressed” company of their choosing with regard to how well the company is managing the functions of sourcing, purchasing, manufacturing, distribution, sales, service, and end-of-life support/disposition (collection, reuse, remanufacturing, and recycling). Given that the project scope is limited to “Launch through Sustainability”, focus should be on companies that manufacture and/or distribute/sell product/services and not on companies that are mostly into R&D and/or production design/development. While the project may not touch upon all topics/modules covered in the Launch through Sustainability Course (IE8943 and IE8944), it is expected that the analysis would involve comparison of the performance of the target company with market leaders in that business segment. Factors such as core competency management, supply management efficacy (in terms of cost, quality, risk management, collaborations, relationships), manufacturing productivity (cost, quality, productivity, flexibility, agility), distribution and logistics management (e.g., employment of 3PL or 4PL solution providers), customer relation management, demand-supply management (e.g., channel supply responsiveness, ability to support build to order, use of advanced planning systems), market share, rate of innovation, sustainability, and financial performance are expected to be studied. Individuals are expected to offer some concrete recommendations.
and an actionable draft turnaround plan for the target company with strong justification and rationale for the recommendations.

It is expected that most of the information necessary for carrying out the analysis will come from public domain sources (including target company website). Assuming that the company is a U.S. publicly traded company, quarterly and annual reports submitted to the U.S. Securities and Exchange Commission (SEC) will be particularly valuable (http://www.sec.gov/edgar/searchedgar/webusers.htm). Corporate financial statements (Income Statement, Balance Sheet, Cash Flow), Corporate News & Info (Headlines, Financial Blogs, Company Events, Message Boards), Company Profile (Key Statistics, Competitors, Industry), Analyst Coverage (Analyst Opinion, Analyst Estimates, Research Reports), Ownership Info (Major Holders, Insider Transactions) can all be good sources of information. Much of this type of information is available from such websites as Yahoo Finance (http://finance.yahoo.com) and Google Finance (http://finance.google.com/finance).

Reports are expected to be between 20 and 30 pages (single spaced, 1" margins, 12 point font), including references and appendices. Here are some milestones for the project: Pick a Company (March 13th), Proposal Outlining Project Scope/Analysis (2 Pages; April 10th), Major Draft Report for Feedback (November 10th), and Final Report (December 8th). All documents should be submitted using the Digital Drop-box function of the course website on Blackboard. Presentations will be tentatively made during the week of December 14th (20 minutes for individual presentations with an additional 5 minutes for Q&A). Reports will be graded by a team of faculty and industry executives.

Some useful references are made available under the Global Executive PhD Track website, including examples of actual corporate turnaround plans from several companies.

### Special Needs
If you have a documented disability that requires accommodations, you will need to register with Student Disability Services for coordination of your academic accommodations. The Student Disability Services (SDS) office is located at 1600 David Adamany Undergraduate Library in the Student Academic Success Services department. SDS telephone number is 313-577-1851 or 313-577-3365 (TDD only). Once you have your accommodations in place, we will be glad to meet with you privately during office hours to discuss your special needs. Please refer to the SDS website for further information about students with disabilities and the services we provide for faculty and students: http://studentdisability.wayne.edu

### Attendance
We strongly recommend that learning partners attend all classes in person. In case of travel, join the class remotely. Contact Mr. Mark Garrison at mark.garrison@wayne.edu for making arrangements for remote participation.

### Honesty
Learning partners registered for this course should obey the rules of academic integrity and follow the code of conduct. Please look at the following document: http://www.doso.wayne.edu/codeofconduct.pdf.

### Grading
The overall grade will be based on performance in individual modules, with each module carrying equal weight. See module specific syllabi for assessment criteria.

### Schedule:

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<th>Time</th>
<th>January</th>
<th>February</th>
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<td>1PM</td>
<td>Product/Service Launch</td>
<td>Facilities Planning</td>
<td>Factory Physics &amp; Production Control</td>
<td>Lean, Flexible, and Agile Manufacturing</td>
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<td>5PM</td>
<td>Facilities Planning</td>
<td>Factory Physics &amp; Production Control</td>
<td>Resume</td>
<td>Global Supply Chain Management</td>
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IE 8943: Product/Service Launch Readiness Module
Winter 2015 Semester

Instructor: Dr. Ratna Babu Chinnam, Associate Professor & Graduate Chair
Email: Ratna.Chinnam@wayne.edu
Telephone: 313-577-4846
Office: Rm 2161 (Manufacturing Engineering Building)
Office Hours: By appointment

Class Hours: January 9 (Friday) 1:00-4:30PM
Classroom: Rm. 2062, Manufacturing Engineering Building
Course Website: http://blackboard.wayne.edu

Module Overview:
Companies are under increasing pressure to reduce time-to-market and the cost of introducing new products. As product lifecycles continue to decrease, compressing development cycles and accelerating new product introductions are becoming critical. Product complexity is also increasing substantially, making development and product introduction even more challenging. Ironically, as companies rely increasingly on new products and services to meet growth targets, new product success rates have been historically very low.

The module will provide a comprehensive overview of the topic and makes strong recommendations that should be considered to reduce time-to-market and fundamentally improve chances of product/service success in the market.

Module Objectives:
- Understand the key reasons why industry is failing to successfully launch products and services
- Learn best practices for launching successful product and managing the launch process

Topics:
1. Product/Service Launch
2. Launch Management

Readings:
Required Reading:

Sample Academic Articles:

Sample Dissertation:

Assignments:
Reading Assignment Summary:
Submit a written summary and critique (about two pages, single spaced) of the four reading assignment articles. Due Date: January 7th by Blackboard (or E-mail)

Application Assignment:
Compare and contrast the material presented in the module to a product or service that you have launched in recent years. Document your experience and any lessons learnt. Would you do anything different? In case you never launched a product/service, select a product or service that is of interest to you and map a launch process! Expected report length: About two typed pages, single spaced. Due Date: January 18th by Blackboard

Grading:
Reading Assignment Summary 40%
Application Assignment 40%
Class Participation 20%
IE 8943: Facilities Planning Module  
Winter 2015 Semester

Instructor: Dr. Jeremy Rickli  
Email: jrickli@wayne.edu  
Telephone: 269-569-0143  
Office: Rm. 2173 (Manufacturing Engineering Building)  
Office Hours: By appointment

Class Hours: January 9 (Friday) 4:30-8:00PM & February 13 (Friday) 1:00-4:30PM  
Classroom: Rm. 2062, Manufacturing Engineering Building  
Course Website: http://blackboard.wayne.edu

Course Overview:  
This module reviews the theory and concepts involved in model formulation and data analysis for facility planning and design. The module covers such areas as facility layout, facility location, warehousing, and material handling system design from a theoretical and practical perspective. Module assignments and readings present quantitative tools and techniques for flow analysis, layout planning, and material handling system planning and their use in modern case studies.

Module Objectives:  
• Explain facilities planning and layout frameworks, concentrating on systematic layout planning, along with auxiliary planning operations  
• Explain the raw-data required to initiate facilities planning and employ analytical methods on an example date set for a distribution center facility design and improvement.  
• Evaluate the current trends in facility design across a variety of fields (healthcare, manufacturing, service, etc.).

Topics:  
1. Fundamentals of facilities planning and historical perspective  
2. Awareness of different types of facilities and their impact on facility planning methods  
3. Product, process, and schedule design impacts on facilities planning  
4. Analytical methods for facility layout, warehouse design, and material handling design

Reading Sources:  
Required Readings:  

Optional/Other Readings:  

Textbook References:  

Web Sites:
1. Material Handling Institute: www.mhi.org
2. European Factories of the Future Research Association: www.efra.eu

Assignments:

**Reading Assignment Summary: Due Date: January 7th by Blackboard (or Email)**
Submit a written summary/critique (maximum 5 pages, single spaced) of the required articles and a one page list of critical questions you required to accomplish the objective in the Fair-Trade Distribution center project description. Your thoughts and views from the summary will be essential to module 1 discussions.

**Application Study or Literature Review Assignment: Due Date: February 20th by Blackboard**
You have the choice of completing one of the two following assignments. The assignment will be accompanied with a short presentation at the beginning of the second half of this module.

**Application Study** - Compare and contrast the material presented in the module to practices at your (current or past) company. Describe your experience, lessons learned, and how facilities planning topics discussed in class did or could have contributed. Expected report length: About three typed pages, single spaced.

**Literature Review** - Read two academic articles recently published (past 5 years) on a topic that is of interest to you and relevant to at least one of the module topics. Prepare a maximum 3 page, single spaced review and submit copies of the two articles.

**Grading:**
- Reading Assignment Summary: 30%
- Application Study or Literature Review Assignment: 50%
- Class Participation: 20%

**Module Preparation & Participation:**
Module project assignments are given for assigned during module 1 and delivered during module 2. Students are expected to come to class prepared and ready to participate in group discussions. Any possible absences should be communicated prior to the modules. Module participation grade will be based on your in-class remarks during discussions.
Module Overview:
“Factory Physics” can be defined as “a systematic description of the underlying behavior of manufacturing systems.” Understanding factory physics enables managers and engineers to work with the natural tendencies of manufacturing systems to:

- Identify opportunities for improving existing systems.
- Design effective new systems.
- Make the tradeoffs needed to coordinate policies from disparate areas.

In this module, we will cover the fundamental concepts for describing manufacturing systems and learn a set of quantitative modeling tools to analyze and gain intuition about the behavior of a manufacturing system. These tools will include modeling techniques, metrics to be used to assess manufacturing performance (cycle time, throughput, WIP, fill rate, etc.), quantitative methods to understand the effect of various elements (such as variability, breakdowns, batching), and means to calculate these performance measures quickly.

The module will provide an introduction to the various technical tools that have been developed over the years for manufacturing management. The following details the contents:

Module Objectives:
- A science of manufacturing: Defining and representing manufacturing systems; Prescriptive vs. descriptive models; Objectives, measures and control; Models and performance measures
- Factory dynamics: Definitions and parameters; Simple self-benchmarking methods to assess manufacturing performance
- Variability: Variability and randomness; Causes and types of variability (processing time, arrivals, flow, breakdowns, etc.); Simple approximations for cycle time and throughput from queuing theory
- Corrupting influence of variability: The Pay Me Now or Pay Me Later Law; Buffering; Effects of serial and parallel batching
- Push Systems versus Pull Systems; CONWIP alternative to Kanban based pull.

Topics:
1. Inventory Management
2. Production Planning and Control: MRP/MRPII/JIT
3. Factory Physics

Readings:
Required Reading - Prerequisite Knowledge:
MRP/MRPII

Just-in-Time

Manufacturing in America

Sample Academic Articles:

**Primary Reference Book:**

**Best Practice Article – GM:**
GM won the prestigious INFORMS EDELMAN AWARD (April 20, 2005) for its entry entitled “Increasing Production Throughput at General Motors.” Using operations research to achieve one of its signature benefits — greater efficiency — GM has saved over $2 billion through improved productivity at 30 assembly plants in 10 countries. The savings have been realized using novel, state-of-the-art algorithms and modeling systems developed for estimating throughput performance, identifying bottlenecks, and buffer allocation, coupled with improved, global deployment of data collection and performance improvement processes.

**Popular Press: Quick Reads**

**Sample Dissertation:**

**Web Sites:**
2. [http://www.productionplanning.com](http://www.productionplanning.com) – Production Planning Portal
4. [http://www.activplant.com](http://www.activplant.com) - Commercial Throughput Analyzer Software

**Assignments:**

**Reading Assignment Summary: Due Date: February 11th by Blackboard**
Submit a written summary/critique (about 3 pages, single spaced) of the four pre-requisite knowledge articles and a two page summary/critique of the GM best-practice article.

**Application Study or Literature Review Assignment: Due Date: March 22nd by Blackboard**
You have the choice of completing one of the two following assignments:
*Application Study* - Compare and contrast the material presented in the module to practices at your (current or past) company. Document your experience and lessons learnt. Would you do anything different? Expected report length: About three typed pages, single spaced.
*Literature Review* - Read two academic articles recently published (in the last 5 years) in scholarly journals on a topic that is of interest to you and relevant to the module theme (Factory Physics) and prepare a two page review including your critique. Do submit copies of the two articles along with your review.

**Grading:**
- Reading Assignment Summary: 40%
- Application Study or Literature Review Assignment: 40%
- Class Participation: 20%
Module Overview:
The module will provide an opportunity to understand and compare/contrast the extremely relevant and complementary practices of Lean, Flexibility, and Agility in the context of manufacturing.

Topics:
1. Lean Manufacturing & Services
2. Flexibility & Flexible Manufacturing
3. Agility & Agile Manufacturing

Readings:
Required Reading - Prerequisite Knowledge:
TPS and Lean Manufacturing

Flexible Manufacturing

Agile Manufacturing

Sample Academic Articles:

Popular Press: Quick Reads

Books: Classics

Sample Dissertation:

ASSIGNMENTS:

Reading Assignment Summary: Due Date: March 11th by Blackboard
Submit a written summary/critique (about 3 pages, single spaced) of the four pre-requisite knowledge articles.
Application Study or Literature Review Assignment: Due Date: April 19th by Blackboard

You have the choice of completing one of the two following assignments:

Application Study - Compare and contrast the material presented in the module to practices at your (current or past) company. Document your experience and lessons learnt. Would you do anything different? Expected report length: About three typed pages, single spaced.

Literature Review - Read two academic articles recently published (in the last 5 years) in scholarly journals on a topic that is of interest to you and relevant to the module theme (Lean, Flexible, and Agile Manufacturing) and prepare a two page review including your critique. Do submit copies of the two articles along with your review.

Grading:

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<td>Class Participation</td>
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IE 8943: Global Supply Chain Management: Core Concepts and Best Practices Module
Winter 2015 Semester

Instructors: Dr. Ratna Babu Chinnam & Dr. Alper Murat
Email: Ratna.Chinnam@wayne.edu & AMurat@wayne.edu
Telephone: 313-577-4846 (RBC) & 313-577-3872 (AM)
Office: Rm. 2161 (RBC) & Rm. 2051 (AM) (Manufacturing Engineering Building)
Office Hours: By appointment

Class Hours: April 10 (Friday) 4:30-8:00PM & April 24 (Friday) 4:30-8:00PM
Classroom: Rm. 2062, Manufacturing Engineering Building
Course Website: http://blackboard.wayne.edu

Course Overview:
Interest in logistics and supply chain management has greatly grown in the past decade. This interest has led many companies to analyze their supply chains, and review and improve their management practices. This module presents the state-of-the-art practices, models, and solution methods important in the design, control, operation, and management of supply chain systems. The module will address a range of supply chain management practices such as transportation managers deciding which models of transportation to use, inventory control managers wanting to ensure smooth production with as little inventory as possible, purchasing/supply managers designing contracts with their suppliers and clients, and logistics managers in charge of supply chain network planning.

Module Objectives:
• Developing an understanding of the key drivers of Global SCM such as Facilities (Manufacturing Plants, Distribution Centers), Inventory, Transportation, and Information Technology.
• Ability to define and analyze the core processes of Supply Chains such as Supply Management (Supplier Relationship Management), Internal SCM and Manufacturing, and Customer Relationship Management.
• Developing an understanding of the impact of global trends and drivers on SCM strategies
• Ability to assess the impact of product design on SCM.
• Understanding emerging trends in SCM best practice such as Global Sourcing, SC Risk Management, SC Contract Design.
• Developing an understanding of the leading SCM Software Systems (SRM, ERP, CRM, SAP-APO, APS)
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• Developing an understanding of the leading SCM Software Systems (SRM, ERP, CRM, SAP-APO, APS)
• Developing an understanding of Supply-Chain Operations Reference-model (SCOR) and ability to describe SCs using the SCOR model.

Sample Topics:
1. SCM Overview: Supply Chain Planning Matrix and SCOR model
2. SC Network Configuration and Site Location
3. Inventory Management and Risk Pooling
4. The Value of Information
5. Supply Chain Integration
6. International Issues in SCM
7. Coordinated Product and SC Design
8. SCM Software Systems

Guest Speaker:
Dr. Sanjay Ramaswamy, Chief Supply Chain Officer, Johnson & Johnson – April 24th (Tentative)

Readings:
Required Reading

Case Study and SCM Practices

Research Issues

Web Sites:
2. APICS: The American Production and Inventory Control Society http://www.apics.org/
3. The National Association of Purchasing Management has become the Institute for Supply Management http://www.ism.ws/
7. Supply Chain Today Portal http://www.supplychaintoday.com/

Assignments:
Reading Assignment Summary: Due Date: April 8th by Blackboard
Submit a written summary/critique (about 3 pages, single spaced) of the four overview articles and a one page summary/critique each for any two case study and SCM practice articles of interest to you.

Application Study or Literature Review Assignment: Due Date: April 30th by Blackboard
Application Study - Compare and contrast the material presented in the module to practices at your (current or past) company. Document your experience and lessons learnt. Would you do anything different? Expected report length: About three typed pages, single spaced.

Literature Review Assignment - Read two academic articles recently published (in the last 5 years) in scholarly journals on a topic that is of interest to you and relevant to the module theme (Global Supply Chain Management) and prepare a two page review including your critique. Do submit copies of the two articles along with your review.

Grading:

Reading Assignment Summary  40%
Application Study or Literature Review Assignment  40%
Class Participation  20%
IE 8943: Sustainability Module  
Winter 2015 Semester

Instructor: JohnPaul Kusz, FIDSA, Past Associate Director - Center for Sustainable Enterprise, IIT Stuart Graduate School of Business, Chicago
Email: JPKUSZ@aol.com
Telephone: 847-721-9590

JohnPaul Kusz is a founder and Associate Director, of the Center for Sustainable Enterprise (CSE), at Stuart School of Business, at IIT, Chicago, and president of JPKusz, Ltd. CSE explores sustainability at the enterprise level with partners in government, industry and other stakeholders focused on innovation at the product, business and systems level. JPKusz, Ltd. provides consulting and business development strategies dedicated to eliminating or reducing the risks associated with the negative unintended consequences of commerce. JohnPaul has authored of over 45 articles on the potential of design to remediate environmental impacts and has served on numerous boards and working groups in the development of national and international environmental standards. He teaches at the Stuart School of Business and the Institute of Design at IIT.

Class Hours: April 24 (Friday) 1:00-4:30PM
Classroom: Rm. 2062, Manufacturing Engineering Building
Course Website: http://blackboard.wayne.edu

Course Overview:
Participants will explore and examine current (real-world) product, business and system models in selected sectors. They will assess the strengths and weaknesses of these as they relate to their long-term economic viability, environmental integrity and their impacts on society. They will further explore alternative models and concepts and scenarios that move to optimize and balance returns to the environment, the economy, and society; those that attend to Revenues, Returns, and Risks (The 3 “Rs” of a Sustainable Enterprise) with a comprehensive, transparent and inclusive strategy.
Also discussed will be on the power of Innovation (Social and Technical), and how we might change our mental models and the behavior of the user/consumer through engagement and dialogue.

Exploration will include:
- The “Sustainability” agenda, and the market and political forces creating a new landscape for businesses and consumers.
- What does this really mean to me; my business; my community? Why is it important?
- Is there such a thing as a sustainable enterprise?
- What might be some of the key attributes of a sustainable enterprise?
- What’s working today? Where? Why? What’s not?
- What do we need to know and learn?
- What are some of the potential costs and benefits (economic/policy…) of developing a sustainable agenda at an enterprise?

Required Reading:

Assignment:
Submit a written summary and critique (about 2 pages, single spaced) of the three required reading articles. Due Date: April 22nd by Blackboard

Grading:
- Reading Assignment Summary: 70%
- Class Participation: 30%