



Sustainable Technology Commercialization

SEMBA 304.01

Erik Monsen & Corine Farewell

Module 4, Spring 2015, 2 credits

Erik Monsen (BSAD & CEMS)
Office Hours: 2-4pm Tuesday/Thursday
Office: 320 Kalkin Hall
Email: erik.monsen@uvm.edu
Phone: 802 656 8994

Corine Farewell (OTC)
Office Hours: by appointment
Office: E201 Given
Email: corine.farewell@med.uvm.edu
Phone: 802 656 8780

Class Meeting Times

Session 1	March 21	Monday	1:30 pm – 4:30 pm
Session 2	March 23	Wednesday	1:30 pm – 4:30 pm
Session 3	March 28	Monday	1:30 pm – 4:30 pm
Session 4	March 30	Wednesday	1:30 pm – 4:30 pm
Session 5	April 6	Wednesday	1:30 pm – 4:30 pm
Session 6	April 13	Wednesday	1:30 pm – 4:30 pm
Session 7	April 20	Wednesday	1:30 pm – 4:30 pm
Session 8	April 27	Wednesday	1:30 pm – 4:30 pm
Session 9	May 4	Wednesday	1:30 pm – 4:30 pm
Session 10	May 9	Monday	1:30 pm – 4:30 pm

Course Description

Career Motivation:

This class is designed to provide business professionals with skills for and insights into the processes of transferring research from the university to the marketplace, and transforming new technologies into a sustainable products or services that creates new economic, social and environmental value. However, exploiting a new and unproven technology to create value involves substantially more risk and uncertainty than traditional entrepreneurial opportunities, and this class will help you to better engage in and overcome these challenges in your future career, either inside or outside of academia.

Project-Focused Real-World Learning:

In this class students, learn about commercialization in real-time with a real-world technologies:

- At the start of the module, UVM researchers come to class and pitch their technologies.
- Students then form consultant teams around their preferred technology and researcher.
- Over the module, teams collaborate with researchers to develop a commercialization plan.
- By module's end, teams will deliver a portfolio of commercialization analyses and recommendations to their research collaborators.

Course Objectives

Goals & Objectives:

This class attempts to bridge the gap between researchers and the mainstream customer by providing undergraduate students with a better understanding of what it takes to work with both researchers and business folk in order to create new value with new technologies. Specifically, this class provides students with both

- a set of frameworks to better understand and more successfully support and engage in high-technology value-creation opportunities, and
- the real-life experience of evaluating the market viability of and developing a commercialization plan for a cutting-edge university technology.

Regardless of your career ambitions, either in academia, private industry, government, or non-profits, developing a deeper appreciation for technology as well as improving your ability to work with both researchers and business folk is likely to enhance the achievement of your career goals.

Transferable Skills:

Active participation in the course will enable students to:

- Better understand the role of technology and innovation in entrepreneurship.
- Evaluate the technological, market and inventor readiness for a new technology.
- Choose the most appropriate path to commercialize a new technology.
- Develop a technology roadmap to systematically plan technology, product and market developments and to communicate amongst relevant stakeholders.
- Systematically plan for growth despite technological uncertainty and resource constraints.
- Identify and acquire the required financial, human and knowledge resources.
- Appreciate the challenges of translating between researchers, business folks, mainstream customers and other key stakeholders in the commercialization process.
- Engage in technological value-creation in an environmentally and socially-conscious manner.

Books & Materials

See class time-table for recommended readings and video cases for each week. Required readings will include journal and magazine articles that can be downloaded for free from the university library. Publicly downloadable video will also be used to augment the readings and classroom learning experience. Discussion questions to guide your reading are provided in the material folders in Blackboard.

Grading

Assignment	Grade Percentage
Individual : In-Class and Group Participation	25%
Individual: Reflective Learning Essays	25%
Group: Mid-Module - Technology Assessment Presentation	20%
Group: End-of-Module – Commercialization Plan Presentation	30%

Feedback forms for the individual and group assignments which detail the grading criteria and their weighting are included at the end of the syllabus.

Individual: In-Class and Group Participation:

Individual student participation will be evaluated both on the quality of their contributions to each class session (through professor and peer evaluation), as well as their contribution to their in-class and out-of-class group work (through peer evaluation). As we will be engaging in group work during the classroom sessions, it is essential that students attend all class sessions.

Individual: Reflective Learning Essays (Wednesday May 4):

Each individual student is asked to reflect on their learning over the course of the module and write an essay which addresses the following three points:

- What are the two most important lessons you learned through the class and project?
- Why is each lesson particularly relevant for innovation, technology commercialization and entrepreneurship?
- How would you apply each lesson to innovative and entrepreneurial opportunities in the future?

The following rules should be observed in writing your essay:

- The essay should contain a maximum 1000 words (not counting the reference list).
- The word count should be indicated on the essay.
- Include proper references to sources, both lecture slides and/or supporting readings/videos
- It is important that the essay has a clear and balanced structure.
- The content of the essay should be both thoughtful and critical.

Group: Mid-Module - Technology Assessment Presentation (Wednesday April 6):

Following the technology assessment model used by UVM's office of technology commercialization, each student team will present a thoughtful and data-driven assessment of the inventor, technology, intellectual property, and market for their team's chosen technology. The students will be allotted 5 minutes and 5 slides to present their evaluation to the class.

Group: End-of-Module Commercialization Plan Presentation (Monday May 9):

The students are allotted 10 minutes and 10 slides to present the final commercialization plan to the class and their inventors. The presentation will be evaluated both on content (inventor, technology, intellectual property, market, deal structure, technology roadmap and resource plan) and presentation (audio and visual elements; handling of questions) quality.

Detailed Assignments

Date	Topics, Readings and Videos
March 21 Monday 1:30 pm – 4:30 pm	<p>Introduction to Technology Commercialization and Assessment</p> <ul style="list-style-type: none">• Topics:<ul style="list-style-type: none">○ technology commercialization process○ high-tech value creation models & models of knowledge exchange• Readings:<ul style="list-style-type: none">○ Kim, W. C., & Mauborgne, R. (1999). Strategy, Value Innovation, and the Knowledge Economy. <i>Sloan Management Review</i>, 40(3), 41-54.• Video Case:<ul style="list-style-type: none">○ AUTM About Technology Transfer Video http://www.autm.net/autm-info/about-tech-transfer/about-technology-transfer/○ John Doerr & Green and/or Profit (TED Talk) http://www.ted.com/talks/john_doerr_sees_salvation_and_profit_in_greentech

March 23 Wednesday 1:30pm – 4:30pm	Evaluating Inventors & <i>Inventor Technology Pitches</i> <ul style="list-style-type: none"> • Topics: <ul style="list-style-type: none"> ○ motivating and leading scientists and engineers ○ (self)assessment of the scientists and team – Needs? Right people? Best role? • Reading: <ul style="list-style-type: none"> ○ Austin, R. D., & Nolan, R. L. (2007). Bridging the Gap between Stewards and Creators. <i>MIT Sloan Management Review</i>, 48(2), 29-36. • Video Case: <ul style="list-style-type: none"> ○ Melissa Marshall & Talking with Scientists http://www.ted.com/talks/melissa_marshall_talk_nerdy_to_me
March 28 Monday 1:30 pm – 4:30 pm	Evaluating Technology and Intellectual Property <ul style="list-style-type: none"> • Topics: <ul style="list-style-type: none"> ○ intellectual property rights & prior-art research ○ process from provisional patent to patent approved ○ pros and con's of patenting/copywriting versus open science • Video Case: <ul style="list-style-type: none"> ○ Kevin Kelly: How technology evolves (TED Video) https://www.ted.com/talks/kevin_kelly_on_how_technology_evolves ○ Yves Behar & Storytelling Design (TED Talk) http://www.ted.com/talks/yves_behar_on_designing_objects_that_tell_stories
March 30 Monday 1:30 pm – 4:30 pm	Evaluating Markets, Competitors, and Customers <ul style="list-style-type: none"> • Topics: <ul style="list-style-type: none"> ○ market size and potential value ○ high-tech competitor analysis ○ customers and technology adoption lifecycle • Readings: <ul style="list-style-type: none"> ○ Moore, G.A. (1991) <i>Crossing the Chasm: Marketing and Selling High-Tech Products to Mainstream Customers</i>, Chapters 1 & 2 ○ Day & Schoemaker (2011) Innovating in Uncertain Markets: 10 Lessons for Green Technologies. <i>MIT Sloan Management Review</i>, 52(4), 37-45. • Video Case: <ul style="list-style-type: none"> ○ Chris Anderson & Forecasting Technology (TED Talk) http://www.ted.com/talks/chris_anderson_of_wired_on_tech_s_long_tail
April 6 Wednesday 1:30 pm – 4:30 pm	<i>Mid-Module - Technology Assessment Presentation</i> Technology Commercialization Guest Speaker
April 13 Wednesday 1:30 pm – 4:30 pm	Technology Roadmapping <ul style="list-style-type: none"> • Topics: <ul style="list-style-type: none"> ○ Mapping technology and business co-development ○ Commercialization models & trade-offs • Reading: <ul style="list-style-type: none"> ○ Garcia. & Bray (1997). Fundamentals of Technology Roadmapping. Sandia Report SAND 97-0665. Sandia National Laboratories. • Video Case: <ul style="list-style-type: none"> ○ Amory Lovins & Reinventing Fire (Ted Talk) http://www.ted.com/talks/amory_lovins_a_50_year_plan_for_energy

<p>April 20 Wednesday 1:30 pm – 4:30 pm</p>	<p>Prototypes</p> <ul style="list-style-type: none"> • Topics: <ul style="list-style-type: none"> ○ New product/service brainstorming and design ○ Building Low-Fidelity Prototypes ○ Selling High Tech • Reading: <ul style="list-style-type: none"> ○ Bingham, C. B., & Kahl, S. J. (2013). How to Use Analogies to Introduce New Ideas. <i>MIT Sloan Management Review</i>, 54(2), 10-12. ○ Osterwalder (2014) Value Proposition Design - Chapter 2.1 Prototyping Possibilities ○ Osterwalder (2010) Business Model Canvas - pages 160-169 Technique No. 4 Prototyping • Video Case: <ul style="list-style-type: none"> ○ Gever Tulley & Tinkering (TED Talk) http://www.ted.com/talks/gever_tulley_s_tinkering_school_in_action
<p>April 27 Wednesday 1:30 pm – 4:30 pm</p>	<p>Acquiring Resources & Structuring the Deal</p> <ul style="list-style-type: none"> • Topics: <ul style="list-style-type: none"> ○ R&D funding & government grant programs ○ Terms and Conditions for Licensing and Investment Deals ○ Picking the right partners • Reading: <ul style="list-style-type: none"> ○ Perkmann, M., & Salter, A. (2012). How to create productive partnerships with universities. <i>MIT Sloan Management Review</i>, 53(4), 79-88 ○ Pisano (2010). The Evolution of Science-Based Business: Innovating How We Innovate. <i>Industrial and Corporate Change</i>, 19(2), 465-482. • Video Case: <ul style="list-style-type: none"> ○ Ellen't Hoen: Pool medical patents, save lives (TED Video) http://www.ted.com/talks/ellen_t_hoen_pool_medical_patents_save_lives ○ Jay Bradner: Open-source cancer research (TED Video) http://www.ted.com/talks/jay_bradner_open_source_cancer_research
<p>May 4 Wednesday 1:30 pm – 4:30 pm</p>	<p>Technology Commercialization Guest Speakers & Course Round-Up</p> <p><i>Submit Reflective Learning Summary</i></p>
<p><i>May 9</i> <i>Monday</i> <i>1:30 pm –</i> <i>4:30 pm</i></p>	<p><i>End-of-Module – Commercialization Plan Presentation</i></p>

**SEMBA Module 4 – Technology Entrepreneurship & Commercialization
Feedback for Reflective Learning Essay**

Name:

Total Grade

Lesson 1	Rating (1 to 10)	Comments
Depth & thoughtfulness of lesson description (40%)		
Relevance to innovation & commercialization (30%)		
Apply to entrepreneurial opportunity in future (30%)		

Lesson 2	Rating (1 to 10)	Comments
Depth & thoughtfulness of lesson description (40%)		
Relevance to innovation & commercialization (30%)		
Apply to entrepreneurial opportunity in future (30%)		

Additional comments, questions and suggestions:

«GeneralComment»

**SEMBA Module 4 – Technology Entrepreneurship & Commercialization
Feedback for Technology Assessment Presentation**

Team:

Presentation Grade:

Content Criteria (70%)	Rating (1 to 10)	Comments
Understanding Technology		
Protecting Technology (Intellectual Property)		
Evaluating Inventors		
Evaluating Market, Competitors and Customers		
Presentation Criteria (30%)	Rating (1 to 10)	Comments
Audio Quality (voice, confidence, enthusiasm)		
Visual Quality (text, pictures, prototypes)		
Handling of Questions & Answers		

Additional Comments:

**SEMBA Module 4 – Technology Entrepreneurship & Commercialization
Feedback for Commercialization Plan Presentation**

Team:

Presentation Grade:

Content Criteria (70%)	Rating (1 to 10)	Comments
Understanding Technology		
Protecting Technology (Intellectual Property)		
Evaluating Inventors		
Evaluating Markets, Competitors, & Customers		
Commercialization Plan and Deal Structure		
Technology Roadmap and Resource Plan		
Presentation Criteria (30%)	Rating (1 to 10)	Comments
Audio Quality (voice, confidence, enthusiasm)		
Visual Quality (text, pictures, prototypes)		
Handling of Questions & Answers		

Additional Comments:



Driving Innovation from the Base of the Pyramid

MBA 304.02

Professor Stuart L. Hart

Module 4, Spring 2016, 1 credit

Office: 300 B Kalkin
Office Hours: By Appointment
E-mail: stuart.hart@uvm.edu

Class Meeting Times

Session 1	March 22	Tuesday	9:00 AM - 11:00 AM
Session 2a	March 29	Tuesday	1:30 PM - 3:00 PM
Session 2b	March 29	Tuesday	3:30 PM - 4:45 PM
Session 3a	April 12	Tuesday	1:30 PM - 3:00 PM
Session 3b	April 12	Tuesday	3:30 PM - 4:45 PM
Session 4a	April 13	Wednesday	8:45 AM - 10:15 AM
Session 4b	April 13	Wednesday	10:45 AM - 12:00 PM
Session 5	April 27	Wednesday	9:00 AM - 12:00 PM

Course Description

The Base of the Pyramid (BoP) is a socio-economic designation for the more than 4 billion people living on less than \$8 a day. It is also a business strategy that focuses on products, services and enterprises to serve this demographic in a way that is culturally sensitive, environmentally sustainable and economically profitable. There are tremendous potential benefits to companies who begin focusing on the poor as business partners and innovators, as well as, value-demanding consumers. Companies and entrepreneurs who choose to serve these new markets will join a unique group of bold visionaries that not only embrace a new brand of corporate social responsibility, but will also experience a new mode of growth and profitability.

As we witness growing inequality and accelerating environmental degradation around the world, commercial attention in the years ahead will inevitably come to focus more on breakthrough and disruptive innovations that directly confront these challenges. Increasingly, competitive advantage will hinge on innovations incubated at the base of the pyramid (BoP)—the ability to create tomorrow's sustainable enterprises from the bottom up, by commercializing new, disruptive technologies through innovative business models focused on the underserved at the base of the world income pyramid. Ultimately, some of these innovations will also have the potential to “trickle up” to (and transform) the top of the pyramid through reverse innovation.

This course examines the emerging next-generation strategies that will reinvent industries and create new markets around the world in the coming decade—leapfrog, disruptive strategies, and business models that include and lift the four plus billion poor at the base of the income pyramid. Emphasis is placed on the new skills and capabilities that are required to succeed in this challenging new business space, including abilities to engage local communities, co-create new value propositions, design new business models, scale pilot business experiments, and assess triple bottom line impacts.

Through a combination of readings, case discussions, videos, projects, and examples from actual BoP initiatives; this course will critically examine these emerging strategies as vehicles for more effectively positioning companies for the 21st century. The goal is to develop the knowledge and capacity to effectively pursue such strategies, both within existing corporations (as intrapreneurs) and in start-up settings (as entrepreneurs).

Course Deliverables and Grade Assessment

Class participation (40% of the final grade). Class participation is the key factor for not only your success in the class, but also the success of the course itself. Absence from these sessions not only results in missed information for you, but also deprives the rest of the class—including me—of a learning opportunity based on your contribution. Absence will result in a failing grade for participation in that session. If you must miss a class, come late for a class, or leave a class early, please send me an email in advance.

Beyond simply attending, everyone is also expected to make meaningful contributions and openly share their knowledge and perspectives during the class. This will not be a course geared to "passive learning." Quality participation is valued over quantity. Students are expected to read and reflect on readings as well as analyze and discuss cases prior to class, both individually and with their teammates. Unpreparedness or silence will adversely affect one's participation grade.

Team Project (40% of the final grade). Each team will be asked to prepare a *BoP Innovation Assessment*. For this assignment, you will assume the role of consultant, retained to assess some specific BoP Initiative by a venture or company of your choosing. The Assessment will consist of a written documentation of the case and an analysis of the proposed business model and strategy using the concepts, tools, and techniques developed in this class, along with recommendations for improvement. The written documentation of the **case** should be no longer than *20 pages* and the written **analysis** should be no longer than *10 pages* (double-spaced, 12 pitch type, normal margins), exclusive of exhibits and references. It may be possible to use your practicum as the BoP initiative for this class. Kindly discuss this option with the instructor, if interested.

While everyone is expected to contribute to their teams, it is possible that some may not carry their fair share of the load. Accordingly, you will be expected to complete and submit a team evaluation form where you can recognize your peers in the event that they contributed more or less than their fair share of the workload.

Note the following schedule

- We will have an interim "progress report" on the assessment projects on **12 April**.
 - The final presentations and written assessments are due on **27 April**.

You will need to email one copy of both the case documentation and analysis to me and deliver one hard copy of each to my office. Please do not send multiple files. Embed all cover pages, figures, tables, exhibits, and appendices into a single Word file for both the case documentation and the analysis. Please include the names of all group members on the cover page. Please also submit your peer evaluation forms at the same time.

Each team will present their BoP case and analysis as a powerpoint presentation on 27 April in class. Teams should plan on no more than **20 minutes** of presentation followed by questions and discussion.

Individual Assignment (20% of the grade).

You are assigned to submit four **one-page (single space) “blogs”** focusing on your reflections about the readings for each of the four class sessions. These brief documents (which should be written in the tone and style of a “blog”) are due on the Friday after each class meeting day(s). The grade for each will be a simple “thumbs up” or “thumbs down.” The grading for this aspect of the course will be computed as follows:

All blogs “thumbs up”: 20/20

One blog “thumbs down”: 18/20

Two blogs “thumbs down”: 15/20

Three blogs “thumbs down”: 10/20

Four blogs “thumbs down”: 0/20

A blog assignment receives a “thumbs up” when you have (1) turned it in; (2) demonstrated that you have read the assigned material; and (3) assessed or critiqued the readings in a meaningful way based upon your learnings from the class session.

Required Textbook and Course Materials

The course utilizes a combination of cases and readings on this emerging area of business strategy. The specific materials are detailed at the end of this syllabus. Most will be made available on Blackboard. Others will need to be directly ordered. There are also two required books for the class, noted below. Slides from each class will also be made available.

Required

Hart, Stuart (2010). Capitalism at the Crossroads (third edition). Upper Saddle River, NJ: Wharton School Publishing (ISBN 978-0-13-704232-6).

London, Ted and Hart, Stuart (2011). Next-Generation Business Strategies for the Base of the Pyramid. Upper Saddle River, NJ: Financial Times Press (ISBN 978-0-13-704789-5).

Cases

Selco: Harnessing Sunlight to Create Livelihood*

Grameen’s Village Phone in Bangladesh**

Essilor’s “Base of the Pyramid” Strategy in India***

*Available from Harvard Business School Case Service

**Available from www.globalens.com

***Available from HEC Paris (PDF)

Readings

The Economist (2010) The world turned upside down. Special Report, April 17, 2010.
www.Economist.com/specialreports. (PDF)

Kayser, O. and Budinich, V. (2015). Scaling Up: Business Solutions to Social Problems. New York: Palmgrave-Macmillan, Chapters 13 and 14. (PDF)

Larsen, M.L. and Flensburg, A. (2011) Market Creation Toolbox. DI International Business Development, Denmark. <http://www.boplearninglab.dk/bop-learning-lab/trends-markets-cases/market-creation-tool-box.html>. (PDF)

London, T. (2009). Making better investments at the base of the pyramid. Harvard business Review, 87(5), 106-113.

London, T. (2016) Fulfilling the Promise of the Base of the Pyramid. Palo Alto: Stanford University Press, Chapter 4. (PDF)

Prahalad, C.K. and Hart, S. (2002) The fortune at the bottom of the pyramid. Strategy+Business, 26: 54-67. (PDF)

Simanis, E. and Hart, S. (2008) The Base of the Pyramid Protocol (www.bop-protocol.org). (PDF)

Simanis, E. (2012). Reality check at the bottom of the pyramid. Harvard Business Review, 90(6), 6.

Outline

Session 1: 22 March, 9:00-11:00am: Course Overview

Readings: Prahalad and Hart, “The Fortune at the Bottom of the Pyramid”

The Economist, “The World Turned Upside Down”

Blog: “The Real Job Creators” (www.stuartlhart.com)

Session 2a: 29 March, 1:30-3:00pm: *Embedding: Co-Creating the Future*

Readings: Hart, Chapter 9 “Re-embedding Innovation Strategy”

London & Hart, Chapter 4 (Simanis) “Needs Everywhere But Not a Market to Tap”

Simanis and Hart, “The Base of the Pyramid Protocol”

Larsen & Flensburg, “Market Creation Toolbox”

Blog: “Writing the Unfinished Symphony at the BoP” (www.stuartlhart.com)

Session 2b: 29 March, 3:30-4:45pm: Case in Embedded Innovation

Case: Essilor’s “Base of the Pyramid” Strategy in India

Session 3a: 12 April, 1:30-3:00pm: Scaling: From Pilot to Mainstream

Readings: London & Hart, Chapter 7 (Hammond) “BoP Venture Formation for Scale”
Kayser and Budinich, Chapter 14 “Marketing: From Needs to Wants”
Kayser and Budinich, Chapter 15, “Sales and Distribution: The Longest Mile”
Simanis “Reality Check at the Base of the Pyramid”

Blog: “Create a Business Ecosystem: Think Like a Mountain” (www.stuartlhart.com)

Session 3b: 12 April, 3:30-4:45pm: Case in BoP Venture Scaling

Case: Selco: Harnessing Sunlight to Create Livelihood

Session 4a: 13 April, 8:45-10:15am: Measuring: Assessing Societal Impact

Readings: Hart: Chapter 6 “Raising the Base of the Pyramid”
London & Hart, Chapter 3 (Hart) “Taking the Green Leap to the BoP”
London, “Making Better Investments at the Base of the Pyramid”
London, Chapter 4, “Mutual Value Creation”

Blog: “The Dark Side of Reverse Innovation” (www.stuartlhart.com)

Session 4b: 13 April, 10:45am-12:00: Case in Assessing Societal Impact

Case: Grameen’s Village Phone in Bangladesh

Session 5 27 April, 9:00am-12:00: BoP Innovation Assessment Project Presentations



Entrepreneurial Family Business

MBA 304.03

PramoDITA Sharma

Module 4, Spring 2016, 1 credit

Office: Kalkin 300a

Office Hours: By Appointment

E-mail: PSharma@bsad.uvm.edu

Class Meeting Times

Session 1	March 22	Tuesday	1:30 pm – 4:30 pm
Session 2	March 24	Thursday	1:30 pm – 4:30 pm
Session 3	March 29	Tuesday	9:30 am – 12:30 pm
Session 4	March 31	Thursday	1:30 pm – 4:30 pm
Session 5	April 5	Tuesday	1:30 pm - 4:30 pm

Course Description

Family businesses (FB) are the predominant form of business organizations in the world contributing an estimated 70-90% of the global GDP. In the United States, family enterprises contribute over 64% of GDP and generate 62% of employment. And, in other parts of the world, their contribution is even higher. The greatest part of global wealth lies with family controlled firms. These firms are distinguished from other enterprises by the significant influence of the controlling family on the creation, continuity, mode and extent of growth, and exit of a business.

Long-lived family firms that sustain over generations of leaders, economic and industry life cycles, embrace transgenerational entrepreneurship and innovation as part of their culture. Strong relationships with employees and community are a norm for such firms.

In this seminar course, we learn about the unique dynamics and dilemmas of FB. Such an understanding is helpful to work effectively and professionally, in and with enterprising families, to launch and create sustainable new ventures. Course readings and case studies shed light on issues faced and strategies adopted by leaders of the most progressive long lived enterprises. At the end of the course, each study group team will present lessons learnt from a *Henokien* – an association of family firms with over two hundred years of continuous operations.

Course Objectives: Active participation in the course will enable students to:

- Increase awareness of the significance, diversity, and complexity of family enterprises.
- Understand how the long-lived family firms are managed and lead
- How do enduring family firms sensitize themselves to the perspectives of their stakeholders
- What does success / performance mean to these enduring firms? And, how is it measured?

READINGS & CASES

Readings:

- The Dynamics of Family Controlled Firms: The Good and the Bad News (Manfred F. R. Kets de Vries, *Organizational Dynamics*, 1993)
- Analyzing Family Business Cases: Tools and Techniques (Sharma, Blunden, Labaki, Michael-Tsabari, Algarin, *Case Research Journal*, 2013)
- *Entrepreneurs in Every Generation: How Successful Family Businesses Develop Their Next Leaders*. (Allan Cohen & Pramodita Sharma, Berrett-Kohler Publishers, 2016)
- Management Insights from Great and Struggling Family Businesses (Danny Miller & Isabelle Le Breton-Miller, *Long Range Planning*, 2005)

Cases:

- Farm Equipment Dealership (Levy)
- AEL - Creating “The New” Through Portfolio Entrepreneurship (Au & Cheng, 2011)
- Spouse Troubles (Davis)
- Building an Innovation Democracy (Gore, 2007)

GRADING COMPONENTS

Class Contribution (individual)	25%
Discussion Leaders (individual)	20%
Team presentation and report of a Henokien company (study group)	30%
Self-reflection paper (individual)	25%

Class Contribution (25%)

Leaders of entrepreneurial family enterprises are active listeners and participants. The purpose of allocating grades to class contribution is to encourage and assess capabilities for constructive interaction, develop and build confidence to articulate your point of view, critique and debate ideas - all critical skills for entrepreneurial leaders.

The best performers come to each session having closely read the assigned materials and ready with 3-5 points they want to highlight or questions they want discussed in class. These thoughts enable them to make a positive contribution to class discussions while enhancing their learning and making the class more enjoyable for all.

In addition to my assessment of the quality of your contribution, I take peer assessment seriously. Each member of the class will be asked to provide names of up to 5 peers from whose comments they learnt the most. An anonymized list of these comments will be shared with the class with hopes to learn from and under different perspectives on learning and contributions.

Discussion Leaders (20%):

All students are expected to read all assigned materials. In the first class, we will assign two discussants for each reading in the course. On the day of the assigned reading, the discussion leaders will:

- Summarize the key points in the assigned reading
- Critique of the reading – points you agree and/or disagree with, **WHY?**
- Relate and integrate the insights from the assigned reading/s with other ideas you have been exposed to through the SEMBA program
- Practical applications of the readings and ideas that need development

Class discussion will follow after each of the above bullets/segments.

Team Presentation and Report (30%; 5 April 2016):

Learning from bicentenaries family companies - the Henokien's

Suggested length - 15 minutes presentation per team; max. 10 double spaced page report

Explore the [Henokiens](#) website.

Send your first and second choice firms you'd like to research and focus your final presentation and report on.

In your presentation to the class and your report, please clarify the history of the enterprise on both family and business dimensions, current status, your assessment of the reasons for its success and potential for longevity. Lessons Learnt.

Self-reflection (25%; Due – 6 April 2016)

Suggested length – 5 double spaced pages.

Key lessons learnt. What will you do differently based on these new insights?

Names of up to five classmates from whose comments you learnt the most in this course. Say *why* you selected each.

Please send the attachment via email to psharma@bsad.uvm.edu

SESSIONS, READINGS

- **Sessions 1: 22 March, Tuesday**

Nature, Significance & Uniqueness of Long lived Family firms

- READINGS:
 - The dynamics of family controlled firms: The good and the bad news (Kets De Vries, *Organizational Dynamics*, 1993)
 - Analyzing Family Business Cases: Tools and Techniques (Sharma, Blunden, Labaki, Michael-Tsabari, Algarin, *Case Research Journal*, 2013)
- CASE:
 - Farm Equipment Dealership (Levy)

- **Session 2: 24 March, Thursday**

Developing Entrepreneurial Leaders Generation After Generation

- READING:
 - *Entrepreneurs in Every Generation* – Intro, Chapters 1 and 2
- CASE:
 - AEL: Creating “The New” Through Portfolio Entrepreneurship (Au & Cheng, 2011)

- **Sessions 3: 29 March, Tuesday**

Developing Enterprising Families Generation After Generation

- READINGS:
 - *Entrepreneurs in Every Generation* – Chapters 3 and 4
- CASE:
 - Spouse Troubles (John A. Davis)

- **Session 4: 31 March, Thursday**

Developing Entrepreneurial Organizations – Generation After Generation

- READINGS:
 - *Entrepreneurs in Every Generation* – Chapters 5, 6
 - Management Insights from Great and Struggling Family Businesses (Miller & Le-Breton Miller, *Long Range Planning*)
- CASE:
 - Building an Innovation Democracy (WL Gore)

- **Session 5: 5 April, Tuesday**

Learning from bicentenaries family companies - the Henokien's

TEAM PRESENTATIONS

15 minutes per team; max. 10 double spaced page report

SELF REFLECTIONS ARE DUE 6 APRIL 2016



Regulatory Issues for the Entrepreneur and Change Agents

MBA 304.04

Professor Mark Latham

Module #4, Spring 2016, 1 credit

Office Hours: By appointment
E-mail: mlatham@vermontlaw.edu
Phone: 802-831-1226

Required Textbook and Course Materials

There is no required textbook for this course. Class readings will be posted on Blackboard and links to other course materials are included in the syllabus.

Course Description:

Businesses of all sizes and throughout all sectors of the economy are subject to a wide variety of federal regulations implemented by a dizzying array of agencies. For example, the Commodity Futures Trading Commission, Consumer Product Safety Commission, Environmental Protection Agency, Federal Communications Commission, Federal Energy Regulatory Commission, Federal Trade Commission, Food & Drug Agency, Internal Revenue Service, National Labor Relations Board, Occupational Health and Safety Administration and the Securities and Exchange Commission are but a few of the federal agencies that can touch on the lives of businesses and those who are responsible for their management. Consequently, all business managers should have a basic understanding of the regulatory environment in which they operate so that they can not only comply with applicable regulations and avoid costly enforcement and reputational harm but also so that they may have a voice in the regulatory process. This course provides the basic tools needed to understand the federal regulatory process and explores how business leaders can take active roles in shaping the regulations that impact the businesses that they lead. As a specific example of how regulations can impact entrepreneurs, through a hypothetical business situation, students will gain experience in understanding and managing the regulatory hurdles facing a startup attempting to raise capital through crowdfunding.

Class Meeting Times & Readings:

Session 1: Mon. Mar. 21, 2016, 9:00 AM-12:00 PM Justifications for Regulation & The Roles of the Executive, Legislative and Judicial Branches

For the first class each Learning Team should come to class prepared to discuss: 1) a situation where you believe new or different regulations are needed and 2) a situation where regulation has failed. For this exercise please try to coordinate so that each Learning Team presents different examples and you may present examples in any area but not climate change (it's too obvious!).

Reading assignments: W. Fox, *Understanding Administrative Law* (2010), pp. 5-19

W. Eskridge Jr., et al., *Cases and Materials on Legislation and Regulation* (5th ed. 2014), Ch. 8 pp. 995-1011, 1016-1036

For a humorous look at the impact that regulation can have on entrepreneurs review [Why Can't Chuck Get His Business Off the Ground? - YouTube](#).

The following links will take you to materials that summarize the powers granted to the President and Congress under the Constitution [The Federal Power to Regulate Commerce](#) and [Presidential Powers under the U. S. Constitution](#)

Session 2: Mon. Mar. 28, 2016, 9:00 AM-12:00PM Development of Regulations & Role of the Courts

Reading assignments: W. Eskridge Jr., et al., *Cases and Materials on Legislation and Regulation* (5th ed. 2014), Ch. 8 pp. 1039-1059

Noah Feldman, *Scorpions: The Battles and Triumphs of FDR's Great Supreme Court Justices* (2010), pp. 103-121

S. Breyer, *Making Our Democracy Work: A Judge's View*, (2010), pp. 106-120

Should the FDA regulate tobacco? Excerpts from the Supreme Court's opinion in *FDA v. Brown & Williamson Tobacco Corp.*, 529 U.S. 120 (2000)

The economist Milton Friedman shares his views on regulation [here](#). Similarly, this blog post titled *Growth of Regs Threatens Our Liberty* [here](#) also questions the nation's vast regulatory apparatus.

Session 3: Mon. April 4, 2016, 9:00 AM – 12:00 PM Engagement with the Regulatory Process

C. Copeland, *The Federal Rulemaking Process: An Overview*, CRS Research Report RL32240, (Feb. 22, 2011), available at <https://www.fas.org/sgp/crs/misc/RL32240.pdf>

Session 4: Mon. April 25, 2016, 9:00AM - 12:00PM Crowdfunding and Its Regulation

A new venture looks to raise capital through crowdfunding.

Click [here](#) for SEC crowdfunding press release

Using the regulatory research tools that were discussed last class each learning team will make a 10 – 15 minute class presentation that summarizes either a current proposed federal regulation or final federal regulation that was adopted within the last two years. Each presentation should include: 1) the agency that proposed the regulation; 2) the name of statute that authorized the

regulation; 3) a summary of the regulation and 4) why the team selected the particular regulation for its presentation.

Session 5: Mon. May 1, 2016, 9:00 AM – 12:00 PM Protecting the Brand and Bottom Line: The Importance of Regulatory Compliance

Reading assignments: [Criminalising the American Company](#), from The Economist, Section 8B2.1, U.S. Sentencing Commission Guidelines, Effective Compliance and Ethics Programs [available here](#) and [the Holder Memorandum](#)

Course Objectives:

After taking this course students should understand:

- 1) the source of federal regulations and the interplay between the Executive branch, Congress and business;
- 2) the justification for government regulations;
- 3) the federal regulatory process and the role of the courts;
- 4) how business leaders can become engaged in the regulatory process in an effort to shape and influence proposed regulations before they become final;
- 5) the actions required to minimize the harm to a business when regulatory non-compliance is suspected or has occurred.

Course Deliverables and Grade Assessment

Class participation 20%

Analysis of a regulation affecting business 20%

Crowdfunding exercise 30%

Final exam 30%



Sustainable Energy Technology and Policy MBA 304.05

Professor Kevin B. Jones, PhD
Deputy Director, Institute for Energy and the Environment
www.vermontlaw.edu/energy
Module # 4, Spring 2016, 1 credit

Office: Institute for Energy and the Environment, Vermont Law School
Office Hours: By Appointment
E-mail: kbjones@vermontlaw.edu
Phone: 802-831-1054

Class Meeting Times

Session 1	April 7 th	Thursday	1:30-4:30
Session 2	April 14 th	Thursday	1:30-4:30
Session 3	April 21 st	Thursday	1:30-4:30
Session 4	April 28 th	Thursday	1:30-4:30
Session 5	May 5 th	Thursday	1:30-4:30

Course Description

In *Reinventing Fire*, Amory Lovins notes “electricity is poised for a profound leap in importance as the key enabler of the transitions in transportation, buildings, and industry....” This course will explore the challenges and opportunities for transition to smart energy technologies and policies with a primary focus on how a digital energy revolution can lead to global environmental improvement. Based on diverse organizations’ experience launching the digital energy revolution, this course will explore how sustainable energy technologies and associated smart policies offer real promise for supercharging energy efficiency, democratizing demand response, electrifying transportation, and preparing for ubiquitous distributed clean energy technologies -- all in the name of greening our energy footprint and forging environmental progress. The course will include an introduction to the new technologies, a discussion of the key laws and policies impacting these technologies and strategies for economic and environmental success.

Course Objectives:

To have students understand:

- 1) How the electric sector can become a key enabler of our climate, energy access and economic goals.
- 2) The legal and regulatory challenges that firms and governmental organizations face in developing a smarter and greener grid and enabling sustainable energy technologies.
- 3) The policies necessary to supercharge our energy efficiency programs and democratize demand response.
- 4) How to identify and analyze the policy approaches that will lead to our ability to successfully implement the distributed energy technologies necessary for meeting climate mitigation and adaptation goals.
- 5) Both the benefits and key challenges that face the electrification of our transportation sector
- 6) Through a team environment explore how an organization of your choice is facing these challenges and learn from your colleagues' experience how a variety of diverse organizations can succeed.

Required Textbook and Course Materials

1. K. Jones and D. Zoppo, *A Smarter, Greener Grid: Forging Environmental Progress through Smart Energy Policies and Technologies*, Praeger May 2014 will be the main course text.
2. Various articles and reports will be linked within the syllabus.
3. Consider subscribing (free) to Greentech Media or Utility Dive e-newsletters for the duration.

Course Deliverables and Grade Assessment

Sustainable Energy Team Case Presentation:	70%
Group Discussion	15%
Individual Case Memorandum:	25%

Team Case Presentation - Each team will select a business to research and study throughout the class. Teams will begin by researching what role the organization plays in energy sustainability including the technologies or products the organization offers. The team will evaluate the success of their organization in achieving social, environmental

and industry leadership in regards to our energy system and offer a roadmap for how this and similar companies can sustain industry leadership. Each team will present to the class on the initial results during the last class (copy of presentation to be turned in following class).

Group Discussion – Each class we will break into your teams to discuss the group readings assigned for that class. Each team will focus on the key questions identified for the class and will consider the questions from the stakeholder perspective assigned to their team. The four stakeholder perspectives are 1) the regulator(s), 2) the electric utility, 3) the third party service provider (e.g. the competitive entity that may be taking business from the monopoly provider such as SolarCity, Tesla, EnerNOC, Ice Energy) and 4) the elected policymaker. Each group will report back to the full class on their discussion.

Individual Case Memorandum – Each student will write a 1,000 word case memorandum to be turned in following his or her team presentation. The case memorandum will build on the team presentations and address the key challenges facing their companies and strategies for achieving economic, social and environmental leadership.

Class Structure:

Each of the first 4 classes will follow the same structure:

Introductory Lecture and Discussion:	1:30 – 2:30
Team Breakout Discussion and Break:	2:30 – 3:15
Team Reporting:	3:15 – 3:45
Concluding Lecture and Discussion:	3:45 – 4:30

Class Overview and Readings:

Thursday, April 7th, Class One (1:30pm-4:30pm)

- Introduction to Energy Sustainability and Global Energy Access
- The Digital Energy Revolution and its Environmental Promise

This class will provide a brief introduction to issues of energy sustainability and global energy access. We will then discuss why electricity is poised to become key enabler for our economic and climate goals. The class will introduce the elements of a smart electric grid and explore expert opinion on its potential to green the grid and take a cost effective step forward on the global climate. This discussion will identify the key areas for environmental progress to be explored in the later chapters. We will also discuss the Legal and Regulatory Challenges to a Smarter Grid and handout Group Project Assignment.

Readings

- Jones and Zoppo, Chapters 1 & 2,
- Readings for Team Breakout Discussion:
 1. Vermont Energy Burden Report - Read executive summary and skim the report.
<http://www-assets.vermontlaw.edu/Assets/iee/VLS%20IEE%20Energy%20Burden%20Report.pdf>
 2. Listen to the VPR report from energy burden report <http://digital.vpr.net/post/20-percent-vermonters-are-fuel-poor-new-study-shows>
 3. UN Sustainable Energy for All Vision Statement
http://www.se4all.org/sites/default/files/1/2013/09/SG_Sustainable_Energy_for_All_vision_final_clean.pdf
 4. Ten Energy Numbers to Remember from 2014
<http://www.greentechmedia.com/articles/read/10-energy-numbers-to-remember-from-2014>
- Group discussion questions
 1. What are the opportunities and challenges presented to your stakeholder group by the Vermont Energy Burden Report and the SE4All Vision?
 2. What other stakeholder group will present the greatest challenge to your stakeholder group's success in meeting these challenges and why?
 3. For the initial class group discussion stakeholder roles are: Regulator (Team 1), Policymaker (Team 2), Utility (Team 3), Third-Party Provider (Team 4)

Thursday, April 14th, Class Two (1:30pm – 4:30pm)

- Supercharging Energy Efficiency
- Democratizing Demand Response

In this class we discuss how demand response programs were previously only cost effective for large business customers and explore how a smart electric grid expands the benefits of dynamic pricing and innovative programs to all customers. We will discuss what our case study participants are implementing in this area, and lay out the policies necessary to make environmental progress. Finally we will discuss how the digital energy revolution creates new opportunities for expanding customer energy efficiency through improved customer feedback and innovative programs such as pre-pay electric service.

Readings:

- Jones and Zoppo, Chapters 3 and 4
- Readings for Team Breakout Discussion

1. Money vs. Morals: Efficiency
<http://www.greentechmedia.com/articles/read/money-versus-morals-can-politeness-rival-economic-rewards-for-promoting-eff>
2. How Opower is Pushing Behavioral demand response
<http://www.utilitydive.com/news/how-opower-is-pushing-behavioral-demand-response-into-the-mainstream/399790/>
3. No news is good news: OPower <http://www.utilitydive.com/news/no-news-is-good-news-opower-results-show-behavioral-dr-can-be-a-reliable-r/408106/>

Thursday, April 21st, Class Three (1:30pm – 4:30pm)

- Distributed Energy Technologies: Renewables, Storage, and the Microgrid

Class three will investigate the Promise of Distributed Energy Technologies: Renewables, Storage, and the Microgrid. Smart distributed energy technologies offer future promise to revolutionize the grid. Examples of technological leadership as well as policy challenges will be discussed. The opportunities and challenges facing customer use of Solar PV will be a significant topic of discussion.

Readings

- Jones and Zoppo, Chapter 6 and 8
- REC Best Practices and Claims (1page) <http://resource-solutions.org/site/wp-content/uploads/2015/07/REC-Best-Practices-and-Claims.pdf>
- Best Practices in Claims for Solar PV Systems (9 pages) <http://www.green-e.org/docs/energy/Solar%20FAQ%20and%20Claims.pdf>
- Readings for Team Breakout Discussion
 1. Google's Green PPAs: What, How and Why? (6 pages)
<https://static.googleusercontent.com/media/www.google.com/en//green/pdfs/renewable-energy.pdf>
 2. All About the REV <http://www.utilitydive.com/news/all-about-the-rev-how-and-why-new-york-wants-to-develop-distributed-energy/370536/>
 3. The Next Shale: Solar
<http://www.utilitydive.com/news/the-next-shale-how-solar-is-poised-to-transform-americas-energy-markets/365792/>
 4. Community Solar: <http://www.greentechmedia.com/articles/read/community-solar-a-big-idea-with-big-barriers>
 5. Five Energy Storage Trends to Watch in 2016
<http://www.greentechmedia.com/articles/read/5-energy-storage-trends-to-watch-in-2016>

6. Ice Energy Launches the combined rooftop pv/ac energy storage system
<http://www.greentechmedia.com/articles/read/ice-energy-launches-the-combined-rooftop-pv-ac-energy-storage-system>
7. Germany's Second Biggest Utility Plans to Launch a Solar plus Storage Offering
<http://www.greentechmedia.com/articles/read/germanys-second-biggest-utility-plans-to-launch-a-solar-plus-storage-offeri>

Thursday, April 28th, Class Two (1:30pm – 4:30pm)

- Achieving the Promise of the Electric Car

In this class we will discuss how the electrification of transportation while increasing electric energy consumption, offers progress on reducing the nation's carbon footprint. The class describes what is happening today to encourage the adoption of EVs and the smart charging of electric vehicles as well as necessary policies for the future.

Readings:

- Jones and Zoppo, Chapters 5
- Union of Concerned Scientists, Cleaner Cars from Cradle to Grave (read executive summary)
<http://www.ucsusa.org/sites/default/files/attach/2015/11/Cleaner-Cars-from-Cradle-to-Grave-full-report.pdf>
- This Data Shows Why Electric Car Owners are so Different than the Rest of Us
<http://www.greentechmedia.com/articles/read/this-is-what-tesla-owners-are-doing-while-you-sleep>
- SDG&E: Promise of EVs and the Pitfalls of Solar
<http://www.greentechmedia.com/articles/read/Jim-Avery-on-the-Promise-of-EVs-and-the-Pitfalls-of-Solar>
- Why the Future of Electric Vehicles Depends on Utilities and Vice Versa
<http://www.utilitydive.com/news/why-the-future-of-electric-vehicles-depends-on-utilities-and-vice-versa/366336/>

Thursday, May 5th, Class 5 (1:30pm-4:30pm)

Team Presentations and Discussion

Concluding Thoughts on Powering the Green Economy

1. Trends from the Start of the Decade: <http://www.fastcompany.com/1286510/10-trends-will-keep-green-economy-growing>
2. An Illustrated Guide to the State of America's Clean Energy Sector:
<https://www.greentechmedia.com/articles/read/an-illustrated-guide-to-the-state-of-americas-clean-energy-sector>



Systems Tools for Sustainable Enterprise; Concepts, Methods, and Applications

MBA 304.06

Professor Jac Geurts

Module 4, Spring 2016, 1 credit

E-mail: j.l.a.geurts@uvt.nl

Class Meeting Times

Session 1	March 30	Wednesday	8:30 AM - 12:00 PM
Session 2	April 4	Monday	1:30 PM - 4:30 PM
Session 3	April 11	Monday	1:30 PM - 4:30 PM
Session 4	April 19	Tuesday	1:30 PM - 4:30 PM
Session 5	April 26	Tuesday	1:30 PM - 4:30 PM

Course Description

To create sustainable corporations, leaders have to look across traditional strategic borderlines and time horizons. They have to develop a deep understanding of the interconnectedness of the world and select and implement strategies that optimize both the short and the long term and balance the interests of people, profit, and planet. If the words complexity and ambiguity were applicable to corporate strategy making, it seems justified to use these labels for sustainable strategy making in the corporate world.

This course draws from applied social and management science to present a practical approach to the management of complexity in a rapidly changing world. Students will get practical experience in:

- Systems modeling to understand and convey complexity
- Scenarios to explore the future
- Strategy tables to design relevant, integral and consistent strategies
- Policy exercises to inform and test a strategic decision

Since the 1960s and early 1970s, many complex societal and business problems have been analyzed using systems analysis and simulation. Formal modeling techniques were used in different but related research disciplines such as decision analysis, systems dynamics, and operations research. The traditional systems analytic approach emphasized the importance of formal (quantitative) modeling, rational planning, and cost-benefit analysis.

Because these methods failed to capture the dynamic and complex nature of many fundamental problems at the interfaces between business, society, and environment, several forms of “soft systems thinking” emerged, which challenged the conventional paradigm. During the 1980s,

systems analysts realized that much of the understanding of a complex problem is *generated during the actual process of model building*. The key lesson is to involve the client in the modeling process. System dynamics modeling processes are thus seen as helpful in structuring and understanding the vast amount of knowledge that an experienced team shares.

Systems analytical techniques can also be productively combined with gaming techniques. A basic characteristic of a gaming process is that it links the future's orientation of simulation techniques with the creativity and communicative power of serious play and structured group techniques. Modeling and learning have thus become synonyms.

Using readings and cases, this course on strategy making for sustainability introduces the students to modern hybrid interactive processes such as 'systems dynamics group modeling', 'scenario building', 'strategic decision analysis', 'interactive strategic 'journey designs', and gaming/simulation. Students will get to know and apply the tools mentioned above that can be woven together to form systemic and interactive managerial support processes using both systems analytical and collective learning techniques to assist an organization in policy exploration, decision making and strategic change for sustainability.

Course Deliverables and Grade Assessment

Class participation (40% of the final grade). Class participation is a key factor for not only your success in the class, but also the success of the course itself. Class time is our chance to learn about important issues, build a shared knowledge base, develop more insightful questions, and exercise our intellectual curiosity in the hopes of becoming better managers in the future. If you must miss a class, come late for a class, or leave a class early, please send me an email in advance.

Project (Team or Individual) (40% of the final grade). This project may be undertaken by small groups or by individuals.

Each team/person will be asked to prepare a *portfolio of four Sustainability Learning and Decision Aids applied to a real world Strategic Case*. The portfolio will consist of

- a clear problem statement
- a systems analytical schematic
- a set of scenarios
- a strategy table and
- a proposal for a policy exercise.

Students will receive instruction materials for these tools and they will be explained in class. Several handouts of cases produced by my Dutch students will be provided for you to analyze and for your inspiration. The teams/individuals can select the cases for their applications from personal experience or other courses. The only real criterion: the cases should be relevant examples of sustainable strategy making.

However, it is strongly recommended to use your practicum assignment as the project for this class. In the course of last year, the combination of practicum preparation with the team effort for this class proved very fruitful.

The written documents in the portfolio should be no longer than *15 pages* (double-spaced, 12 point font, normal margins), excluding exhibits and references. The portfolio will be due May 3, 16.00 hrs. You will need to deliver one hard copy to Susan Denton in room 336 Kalkin Hall. Please include the names of all group members on the cover page.

Individual Assignment (20% of the grade).

Each student will write to me a letter 4-5 pages long containing your professional and intellectual reaction to the concepts, frameworks, and tools developed in class and in the readings, cases, and discussions. This letter is due on May 5, 16.00 hrs.

Required Textbook and Course Materials

Cases, guidelines, and readings are available as PDF's or via the internet. Several books and other documents are recommended for those seeking additional depth. Because readings have been assigned very sparingly, I will assume that you have read all of the assigned materials before each class. Overheads from each class will also be made available.

Course Program:

Wednesday March 30, 8.30-12 AM Course introduction and Assignment

Session 1: Entering unknown territory: how to create a strategy process for sustainable strategy.

Reading: article: Geurts, Duke and Vermeulen; from Duke&Geurts, Ch 1, Ch 2 and sections 3.1; 3.2; 3.3

Session 2: Systems and models

A revolution in the sixties: Systems thinking and modeling applied to global sustainability: the example of MIT's Limits to Growth Study .

Reading: Meadows et al. ch 3 and 5

Monday April 4, 1.30-4.30 PM Systems Thinking and Systems Analysis

Session 3: An introduction to Systems Dynamics The important concepts of interconnectedness, feedback, delay and nonlinearity. The counterintuitive behavior of complex systems.

Reading: Introduction to System Dynamics; see: <http://www.systemdynamics.org/what-is-s/>

Session 4: The technique of Systems Analysis: Mental mapping, causal modeling and systems schematics

Reading: Duke and Geurts appendix, in PDF

Monday April, 11. 1.30- 4.30 PM *Scenarios, strategies and complex systems*

Session 5: Structuring uncertainty and the exploration of sustainable futures. Theory and practice of the scenario method.

Reading: Sondejker et al.

Session 6: Designing sustainable strategies: how to develop holistic, creative, consistent and doable strategies for sustainability. How to use strategy tables.

Tuesday April 19, 1.30 – 4.30 PM *Learning for Sustainability.*

Session 7: Evaluation of strategic options. The concept of Decision Quality

Reading: Duke&Geurts 3 (browse) Chapter 4 (read)

Tuesday, April 26 1.30-4.30 PM *Designing a policy exercise for a client organization*

Session 8: how to design a policy exercise for sustainability. Getting to know the steps in the design process of gaming/simulations. Writing the specifications for your own sustainability policy exercise

Reading: Duke&Geurts, Ch 7 and 8 (browse).

Policlinics:

To assist students in writing their project portfolio, regular **Q&A sessions** will be held with each team. Registration is necessary! Lists will go around.

Game Demo

To give the students a firsthand experience with the technique of face to face strategic gaming/simulation, we will organize a very entertaining demonstration of the powerful Hexagon game. A description of the game will be made available in advance. The game takes a good two hours to run and needs between 15 and 25 players. So: invite your partners, family, friends! In class we will pick a date and a room for the extracurricular event.

Reading

Duke, R.D. & Jac. L. Geurts (2004) *Policy games for strategic management., pathways into the unknown.* Amsterdam Dutch University Press. (selected chapters available in PDF)

Geurts, J. L. A., Duke, R. D., & Vermeulen, P. A. M. (2007). Policy gaming for strategy and change. *Long Range Planning*, 40(6), 535-558.(PDF)

Introduction to System Dynamics; see: <http://www.systemdynamics.org/what-is-s/>

Meadows, Donella H. , Dennis L. Meadows, Jörgen Randers, William W. Behrens III (1972) *The limits to growth* New York: Universe Boos. Free PDF available, also accessible via <http://www.donellameadows.org/the-limits-to-growth-now-available-to-read-online/>

Sondeijker, S., Geurts, J. L. A., Rotmans, J., & Tukker, A. (2006). Imagining sustainability: The added value of transition scenarios in transition management. **Foresight**, 8(5), 15-30.. PDF

Practical Cases developed by Dutch students and useful *Instructions on the System Tools* will be available as PDF's

A list with further reading will be available as a PDF



Sustainability Toolkit II

MBA 304.07

Professors Stuart Hart & David A. Jones

Modules 3-4, Spring 2016, 1 credit

Professor Stuart Hart
Office: 300B Kalkin Hall
Office Hours: By appointment
E-mail: shart4@uvm.edu
Phone: 802-656-8298

Professor David A. Jones
Office: 311 Kalkin Hall
Office Hours: Wednesdays, 3:30 to 5:30 pm
E-mail: dajones@uvm.edu
Phone: 802-363-9000

Workshops

Employment Relationships and Trust	February 3	1:30 pm – 4:30 pm
LCA Analysis	February 12	1:30 pm – 4:30 pm
Negotiations Skills I	February 22	8:30 am – 12:30 pm
Negotiations Skills II	February 29	8:30 am – 12:30 pm
Scenario Planning	April 15	1:30 pm – 4:30 pm
Biomimicry	April 21	9:00 am – 12:30 pm
Shad Khan Workshop	April 22	1:30 pm – 3:30 pm
Design Thinking for Affordability & Sustainability	TBD	

Course Description

This course is compiled of a series of workshops and is designed to give you exposure to a wide variety of topics that expand upon or supplement the core SEMBA curriculum.

Course Deliverables and Grade Assessment

Students must complete the Workshop Feedback Survey found here:

<http://goo.gl/forms/JLVZov7tQe> after every workshop. Students will be graded based on their attendance and participation at the workshops, the completion of the feedback survey, and a reflection paper that must be submitted by the end of Module 4.

- 20% Attendance and engagement
- 20% Post-workshop feedback and reflections
- 60% Toolkit reflection paper

Attendance

Students are required to attend at least 15 hours of scheduled workshops to complete this course. If you are unable to attend a workshop, please email Susan Denton at susan.denton@uvm.edu in advance of your absence.

Required Textbook and Course Materials

There is no required textbook for this course, but required readings will be assigned by workshop topic and posted on the Blackboard course site. Students must read and be prepared to discuss all readings prior to each workshop.



Service Operations & Sustainability

MBA 304.08

Dr. Jie Zhang

Module 4, Spring 2016, 1 credit

Office: Kalkin 205

Office Hours: MW 1:45-3:15p

E-mail: Jie.Zhang@uvm.edu

Class Meeting Times

Session 1	April 12	Tuesday	9:00 am – 12:00 pm
Session 2	April 19	Tuesday	9:00 am – 12:00 pm
Session 3	April 26	Tuesday	9:00 am – 12:00 pm
Session 4	May 3	Tuesday	9:00 am – 12:00 pm
Session 5	May 10	Tuesday	9:00 am – 12:00 pm

Course Description

Sustainably managing service operations focuses on how firms can achieve the dual goal of service excellent and business success while making a positive impact on the society and environment. To support this focus, it requires a deep understanding of customers, competitors, the firm's internal mechanisms and the larger social and eco systems.

Career Focus

The intent of the course is to provide students with the concepts and tools necessary to effectively manage a service operation with keen emphases on sustainability. This course is appropriate for those planning to work in service firms and for those working in companies that analyze or provide support to service businesses.

This course considers major questions about the role of services in mitigating environmental degradation, including: *What are some of the environmental and social impact as a result of pursuing service excellence? How do we maximize sustainability integration in activities that lead to service excellence?*

Course Objectives:

Through a combination of cases, readings, lectures, videos and simulations, this class engage students in learning and applying conceptual framework and practical tools that incorporate principles of service excellence and sustainability. The course explores how managers can influence customers, employees, and service designs to create and capture triple bottom line value.

Required Course Texts and Suggested Readings:

Required:

- HBSP course pack with selected simulation, notes and cases.
- First five chapters in Essentials of Service Design and Innovation (Second Edition), by Scott Sampson: <http://services.byu.edu/wp/books/> (FREE to download). A copy of the book will be stored in Kalkin 110 from April 12 – May 15.
- Supplemental readings posted in course blackboard.

Suggested:

- Books:
 - *Service Management: Operations, Strategy, and Information Technology, 7th Ed*, by Fitzsimmons, James A., and Mona J. Fitzsimmons, Irwin/McGraw-Hill ISBN-10: 0073403350, IISBN-13: 978-0073403359
 - *Uncommon Service: How to Win by Putting Customers at the Core of Your Business*, by Frances Frei and Anne Morriss (2012).
 - *What's Mine Is Yours: The Rise of Collaborative Consumption*, by Rachel Botsman and Roo Rogers (2010)
- Articles: Chase (1978), Porter, M, and Van der Linde, C (1995), Hart, S. (1997), Spear & Bowen (1999), Goodman (2000), Heskett et al. (2000), Baumann and Tillman (2004), Womack and Jones (2005), Johnson (2006), Frei (2006), Curran, M. and SAIC (2006), Chertow (2007), Maglio and Spohrer (2008), Taylor (2011), Bhatia, Cummis, et al. (2011), Choinard, Y. Ellison, J. and Ridgeway, R. (2011)

Course Expectations:

- **Professional standards of behavior in the classroom.** Mobile devices should be turned off or on silent mode. No Facebooking/twittering/chatting/texting is allowed. Chronic tardiness is not acceptable. You are expected to come to class every session. No food or drink is allowed in the classroom.
- **Participation from every student.** The class is organized to promote dialogue and interaction. You are expected to speak-up, ask questions, challenge, and most importantly think.
- **All readings have been read before class.** In class discussions are better and more meaningful when everyone comes in prepared. If you don't understand the case or reading, bring in a list of questions – we can use them to begin our discussions. The list of readings is just a place to start. It represents a minimum set of readings. Explore and research other sources.
- **Late assignment submissions are not accepted.** Assignments have a deadline for a reason. Deliver when due.
- **All assignments must satisfy the standards of academic integrity.** Plagiarism (not attributing other people's ideas, arguments or phrases properly) and cheating will result in a failing grade.

Performance Evaluation:

Class Participation (individual)	25%
In-class team activities & presentations	25%
Final project pitch	5%
PCN project	15%
Final project presentation	10%
Final project deliverable	20%

Detailed Schedule (updated March 5, 2016):

Session	Content
4/12	<p>Coursepack: https://cb.hbsp.harvard.edu/cbmp/access/48090468</p> <p>Parallel reading: Scott Sampson <i>Essentials of Service Design</i> chapters 1 – 5 (FREE to download)</p> <p>Service operations overview</p> <ul style="list-style-type: none"> • Chase and Apte 2007 JOM article (Big ideas) - BB • Heskett et al. 1994 HBR article (Service profit chain) -BB • Frei, Frances X. "The Four Things a Service Business Must Get Right." Harvard Business Review 86, no. 4 (April 2008). - BB • Final project preview
4/19	<p>Analyze service process</p> <ul style="list-style-type: none"> • Module note on Customer-introduced variability in service operations by Frei – HBP course pack • Case Kaiser Permanente – HBP course pack • Final project proposal pitch
4/26	<p>Design service excellence with social value</p> <ul style="list-style-type: none"> • Malawi's Pizza Catering – BB • Module note on Influencing customer behavior in service operations by Frei and Edmondson – HBP course pack • Chapter 3 of <i>Essentials of Service Design</i> by Dr. Scott Sampson – free download • Assign PCN project (due @11:59pm on 5/4)
5/3	<p>Industry deep dive – data-informed sustainability</p> <ul style="list-style-type: none"> • Determining Materiality in Hotel Carbon Footprinting: What Counts and What Does Not By: Eric Ricaurte – BB • Hotel Sustainability Benchmarking By: Howard Chong Ph.D. and Eric Ricaurte –BB • Signaling Eco-certifications: Implications for service coproduction and resource efficiency By: Jie J. Zhang, Nitin Joglekar and Rohit Verma - BB
5/10	<p>Service innovation for a sustainable future</p> <ul style="list-style-type: none"> • CASE: Airbnb (A)(B) by Edelman and Luca (2012) <p>Final project video showcase and Q&A</p>

Final Project

MOTIVATION

One key learning outcome of this course focuses on understanding how a service mind-set may help companies achieve their sustainability goals. The final project topic is chosen by the team, which could come from team members' practicum projects, prior projects developed in other courses or an original idea proposed by the team members. Regardless of the topic, we are hoping to make real impact through authentic service.



DELIVERABLE (Two-Parts)

The first part of the deliverable is a **final project pitch**, due in class on April 19. The goal of the proposal is to facilitate your team in designing a team work process to conduct functional teamwork and deliver high quality output. This pitch should describe the project scope (subject to refinement based on further research of course), anticipated tasks and their allocation among team members, **protocols** regarding communication, brain-storming and decision-making, timeline etc. This exercise offers a great opportunity to set expectations and uncover constraints.

The final deliverable is a **five-minute video** that describes a solution addressing the question posed in the pitch. In this video, you need to –

- Clearly state the problem scope
- Analyze the needs of the target customer, and present **research findings** on how to efficiently and effectively address the target customer needs
- Clearly outline the process to implement the solution
- Present a cost-benefit analysis to help your audience understand the pros and cons.

In Class #5 on May 10, we will showcase videos from each team, followed by a 5-minute questions and answer period. Then we cast the vote for the **Best Short Film of SEMBA 2016!**