

Columbia University

*The Earth Institute*

Master of Science in Sustainability Management

Sustainable Entrepreneurship

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**Course Title:** Sustainable Entrepreneurship

**Meeting Times:** Saturdays, 11:00-1:00

**Office Hours:** By appointment

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**Course Overview:** This course applies entrepreneurial thinking to different business models as seen through a social, environmental and economic sustainability perspective. The course will explore the relationship between society's need for business development and costs to the environment. You will study ways in which sustainable entrepreneurship can significantly diminish dependency on fossil fuels and toxic substances. The course will challenge you to conceive and 'pitch' a sustainable entrepreneurial or intrapreneurial business concept. Guest lectures, readings, case studies, activities, and group work will support the development of your entrepreneurial venture.

**Instructional, Educational and Learning Objectives:** The course will be divided into three overlapping areas. The first component will examine the elements of entrepreneurial thinking and methodologies used to determine when an idea may be an opportunity. You will explore how your personality aligns with that of an ecopreneur. Secondly, through a live case study, you will demonstrate intrapreneurial know-how by offering viable solutions to challenges found in an eco-business, LRV Environmental. Lastly, you will research and refine a sustainable business opportunity (or advance an existing one) and prepare a marketing plan and executive summary for the idea. Final concepts will be presented to invited guests. The goals of your idea should be to improve the economy, make money, create jobs, and positively influence environmental and social outcomes.

**Course Objectives:**

A. Understanding Entrepreneurship

1. Identify eight elements of the entrepreneurship process
2. Evaluate tolerance for risk and readiness to pursue an entrepreneurial lifestyle of an Eco Capitalist
3. Develop a methodology for idea generation and managing opportunity
4. Identify reasons why teams are more effective than individuals
5. Determine when an idea is financially and psychologically worth pursuing

6. Understand the entrepreneurial process from start-up to infrastructure development to stages of the enterprise
7. Articulate the role of effective communication, networking, perseverance, motivation, commitment, vision, passion, and people management
8. Acknowledge the importance of attitude, willingness to learn and ability to plan
9. Understand the importance of managing multiple aspects of a new business enterprise simultaneously
10. Explore elements of “place” and community when starting a business

#### B. Sustaining the Environment: Challenges and Opportunities for the Ecopreneur

1. Articulate how entrepreneurship can contribute to the goal of sustainable ecosystems
2. Assess and report on current research on the role of entrepreneurship and sustainable development
3. Compare and contrast for-profit and not-for-profit (not for profit but not for loss) entrepreneurial businesses
4. Detail conditions where entrepreneurship creates economic growth, addresses environmental imperatives and improves social well being
5. Identify five socio-ecological problems and suggest solutions
6. Determine ways of entering the market with a new product or service
7. Describe issues to be considered in a sustainability business such as equity, legal structure, organization, ethics, and management. Do sustainable businesses differ significantly from traditional business strategies?
8. Identify an eco-entrepreneurial business model. What does it mean to have a sustainable business model? Identify barriers to entry
9. Discuss how existing businesses can make environmental issues a priority
10. Review the role of public policy as it relates to sustainable business

#### C. Creating a Sustainable Business

1. Define business basics
2. Develop a value proposition
3. Articulate a business idea and “sell” it to the instructor
4. Identify consumer values and purchasing behavior related to sustainability
5. Research the market and examine areas for growth
6. Determine how marketing sustainable products or services are different from mainstream marketing
7. Indicate the degree to which your business idea requires behavioral change from the consumer. What does it take to modify or change consumer behavior?
8. Identify elements of an effective marketing plan
9. Develop an effective “pitch”
10. Learn about business planning and an executive summary

Readings will be of a practical nature as well as research oriented.

**Text:** *The Start-Up of You*. Reid Hoffman and Ben Casnocha, Crown Publishing Group, 2012.

**Suggested Readings:**

*Sustainability, Innovation and Entrepreneurship*. Andrea Larson, 2013  
(ISBN: 978-4533-2725-8) At: [catalog.flatworldKnowledge.com/course/book.54301](http://catalog.flatworldKnowledge.com/course/book.54301)

*All in Startup: Launching a New Idea When Everything is on the Line*. Diana Kander, Wiley 2014.

*Sample Resources:* “The Serial Entrepreneur Who is Tackling E-Waste With EcoATMS”  
At: [www.entrepreneur.com/article/226675](http://www.entrepreneur.com/article/226675)

“The Triple Bottom Line Goal of Sustainable Business”

At: [www.youngentrepreneurs.com/startup/motivation-gunda/do-gooders-the-triple-bottom-line-goal-of-sustainable-business/](http://www.youngentrepreneurs.com/startup/motivation-gunda/do-gooders-the-triple-bottom-line-goal-of-sustainable-business/)

“Young Entrepreneurs Mix Business, Social Responsibility”

At: [www.usatoday.com/story/money/business/2013/03/29/young-entrepreneurs-business-social-responsibility/2028243/](http://www.usatoday.com/story/money/business/2013/03/29/young-entrepreneurs-business-social-responsibility/2028243/)

“The Lean Startup Methodology “

At: [www.theleanstartup.com/principles](http://www.theleanstartup.com/principles)

*The Lean Startup: How Today’s Entrepreneurs Use Continuous Innovation to Create Radically Successful Businesses*, Eric Ries, Crown Publishing Group, 2011 (ISBN: 030-7887898)

“New York City Sustainability Entrepreneurs”

At: [www.new-york-city-sustainability-entrepreneurs.meeting.com/cities/us/ny/astoria](http://www.new-york-city-sustainability-entrepreneurs.meeting.com/cities/us/ny/astoria) (a listing of NYC organizations)

“10 Characteristics of an Entrepreneur”

At: [www.dewyduck.hubpages.com/hub/10-Characteristics-of-an-Entrepreneur](http://www.dewyduck.hubpages.com/hub/10-Characteristics-of-an-Entrepreneur)

“The Mindset of a Future Entrepreneur”

At: <http://www.youtube.com/watch?v=IVsRVcuxxvO>

*The Successful Business Plan, Secrets and Strategies. 5<sup>th</sup> Edition*, Rhonda Abrams, The Planning Shop, Palto Alto, CA

## Course Syllabus

Students are required to read, or have read, *Cradle to Cradle: Remaking the Way We Make Things*. William Mc Donough and Michael Braungart, 2002 (ISBN 0-86547-587-3). Also, be prepared to discuss early on the Jevons Paradox as it impacts environmental entrepreneurship.

Dates	Coverage	Assignments and Evaluations
September 6	Course introduction and student backgrounds; evaluating ones tolerance for risk; principles of entrepreneurship; entrepreneurial thinking	Readings. "When is an Idea an an Opportunity;" "The Question Every Entrepreneur Must Answer; why be an entrepreneur?" "The Entrepreneurial Process;" "SWOT Analysis," entrepreneurial self-evaluation
September 13	Identifying value proposition; SWOT analysis and similar methods; psychological disposition of entrepreneurs; managing change; non-measurable identifiers of entrepreneurs; creative thinking	Readings. "Is Entrepreneurship for You;" Creative Thinking-What is it? And How Can You Start Doing it Now?"; entrepreneurial mindset, "The Essence of Ecopreneurship"
September 20	Methodologies for idea generation; stages of concept implementation; managing multiple tasks at once; infrastructure; environmental factors; opportunity and value creation; lean startup	Discuss articles; exercise, "What do You Think?"
September 27	Connecting entrepreneurship to sustainability; conditions for growth; elements of "creative destruction;" relationship between sustainable innovation and business; motivators for ecopreneurs; changing consumers attitudes; "Cradle to Cradle" and Jevons Paradox	Identify groups; read Ch.1; discuss "Cradle to Cradle and Jevons Paradox
October 4	Ecological "problems" and opportunities; barriers to entry; entrepreneurial vs. intrapreneurial; ecopreneurial business model; public policy; group formation, brainstorming	Read Ch. 2 and on the web: <a href="http://www.Irvinc.com/home.html">http://www.Irvinc.com/home.html</a> <b>Paper due</b>

October 11	Live case study; presentation and challenges by Luis-Rosado-Viana, President and CEO of LRV Environmental	Read Ch. 3; challenge assigned
October 18	Understanding business basics; how to prioritize work; setting milestones and measuring progress; estimating start-up costs; who is the customer? spending ones own time and money; “sole” searching: doing the leg work; “silent” partners; business structure, i.e. sole proprietorship, limited liability; cooperative, corporation, partnership	Read Ch. 4; LVR challenge group work (half of class)
October 25	Folding in eco-business to conform with best business Practices, IP issues	Read Ch. 5; LVR challenge group work (half of class)
November 1	Marketing an eco-business; what do your customers want? Define what “green” means to you and your market; sources for funding, marketing plan essentials	Read Ch. 6 <b>LVR Presentations and review</b>
November 8	Defining your eco business; group formation	Read Ch. 7
November 15	How do you know you will be profitable? identifying marketing mix and population shifts; marketing strategy; identifying geographical and customer segmentation; four components of marketing plan	Group work
November 22	Making the plan work	Group work
December 6	Business marketing plan and executive summary	<b>Presentations</b>

**Grading:** Your grade will be based on level of participation, quality of intrapreneurial solution, research and presentation of an eco-business/service, quality of written executive summary and marketing plan, and viability of the eco-business.

It is assumed that students will respect others in class and strive to contribute to a positive learning experience. *Distractions such as repetitive mobile phone or computer usage that relates to non-course matters should be extinguished.* The course will have a 10 minute break after the first hour. This time can be used to communicate with others.

It is the responsibility of each student to contribute to the class and support fellow students. Keep in mind that a classmate could be a future business partner or employer.

“Innovation is fostered by information gathered from new connections; from insights gained by journeys or places; from active collegial networks and fluid open boundaries.” ~Meg Wheatley~

	<b>Points</b>
Participation and attendance	50
Presentation of Intrapreneurial solution	50
Paper	50
Presentation of value proposition, executive summary and marketing plan	100
	<b>250 POINTS</b>

A 250-240

B 239-229

C 228-215

D 214-195

F 194-

**Paper** The paper should be from 4 to 6 pages in length and respond to the following:

After reading and discussing entrepreneurship for four weeks, how do you see yourself relating to the entrepreneurial way of thinking? Could you be an entrepreneur? Why or why not? What elements in your personality would move you toward an entrepreneurial life-style or keep you from becoming engaged in ecopreneurial work? What is your tolerance for risk? Reinforce your position by quoting from the text and from at least two (2) sources noted on the syllabus or from a source you identify. Show references.

**Attendance:** Class attendance is required. If the instructor is not informed about the circumstances of an absence, it will be considered unexcused. Two unexcused absences will result in a lower grade.

**Accessibility Statement:** Columbia is committed to providing equal access to qualified students with documented disabilities. A student's disability status and reasonable accommodations are individually determined based upon disability documentation and related information gathered through the intake process. For more information regarding this service, please visit the University's Health Services website at: <http://health.columbia.edu/services/ods/support>

## From an Entrepreneurial Perspective: Terms Defined

F. Koe

**Entrepreneurship** From French meaning, “one who undertakes; taking the initiative to bridge.” Entrepreneurship is the ability to intrinsically energize oneself to generate and pursue a novel/innovative idea or fulfill a need identified as an opportunity. The entrepreneurial process requires one to be tenacious, think strategically, accept the realities of change and uncertainty, possess an entrepreneurial mindset, assume yet minimize and manage risk, work with limited resources while discovering ways to expand those resources, and have the skills to start, grow and sustain a for-profit, non-profit or intrapreneurial venture.

**Entrepreneurial Mindset** A specific state of mind that reflects one's conduct toward an idea that may become an entrepreneurial endeavor. Individuals with an entrepreneurial mindset are often drawn to opportunity, innovation and value creation. Individuals with an entrepreneurial mindset view people, the world and what's in it from a highly aware and reflective perspective that allows them to question the way things are and think about how they could be better. Characteristics of an entrepreneurial mindset include the ability to take calculated risks and accept the realities of change and uncertainty.

**Creativity** The (internal) ability to go beyond traditional ideas, recognized rules or patterns to imaginatively generate new and useful ideas.

**Innovation** The (external) process of strategic thinking that leads to the discovery of novel products, services or systems with measurable value and market potential.

**Invention** The act of discovery or the creation of a new product idea, service or system that did not exist before and creates value and has market potential.

**Value Proposition** The promise to deliver and a belief from the customer that value will be or has been experienced. A good value proposition clearly gives the customer a reason to purchase by delivering specific benefits of a product or service. Satisfying customers is the source of sustainable value creation.

