"What is it we mean by market ‘failure’? Typically, at least in allocation theory, we mean the failure of a more or less idealized system of price-market institutions to sustain ‘desirable’ activities or to stop ‘undesirable’ activities. The desirability of an activity…is evaluated relative to the solution values of some explicit or implied maximum-welfare problem."


"The lessons of history…show conclusively that continued dependence upon relief induces a spiritual and moral disintegration fundamentally destructive to the national fiber."

— U.S. President Franklin D. Roosevelt, 1935 State of the Union address

"[Successful innovation] is a feat not of intellect but of will."

— Joseph Schumpeter (1883-1950), Economist

"Innovation is the specific instrument of entrepreneurship. The act that endows resources with a new capacity to create wealth."

“Entrepreneurship is neither a science nor an art. It is a practice."

— Peter Drucker (1909-2005), Management Guru

“All people are entrepreneurs, but many don’t have the opportunity to find that out.”

— Muhammad Yunus, Founder of the Grameen Bank and 2006 Nobel Peace Prize Winner

---

**INSTRUCTOR**

Tim Zak  
Associate Teaching Professor, Heinz College  
Director—Institute for Social Innovation  
HBH 2112  
TJZAK@ANDREW.CMU.EDU or TJZAK@HOTMAIL.COM (alternate)

**Office:** (412) 268-5945  
**Cell:** (412) 735-4077  
**Home:** (412) 422-8333

**CLASS HOURS**

Tuesday and Thursday—Hamburg Hall 1004, 4:30-5:50 p.m.  
Course site accessed through Blackboard (www.cmu.edu/blackboard)
Office Hours
Tuesday and Thursday—HBH 2112B, 3:30-4:30 p.m. or by appointment.

I’ve established these formal office hours to help reduce uncertainty—now that it’s in my calendar, you can expect me to be in my office at these times unless I announce otherwise in advance. That said I realize that everyone’s schedule is different and I’ll make every effort to accommodate your needs. The best bet is to call or send me an e-mail to make an appointment or, if you’re feeling lucky, just stop by my office.

Also, I’ll be happy to take questions or comments after class on a first-come, first-served basis. Finally, I welcome conversations not necessarily related to SI&E (e.g., career path, course selection) if you think that my time in the “real world” can provide another dimension to your experience at the Heinz College.

Teaching Assistant
None

About This Course
All innovations, big and small, propel society forward and contribute to economic prosperity. We customarily think of innovators and the innovative process as driven primarily by a profit motive.

However, there is a growing class of individuals who are directing their creative and entrepreneurial energies to address the challenges faced by literally billions of people around the world unable to consistently enjoy even the most basic human needs like clean water, adequate food, and suitable shelter. We might even think of these individuals as “extreme innovators” given the magnitude of the problems they are addressing and the need for radical solutions that defy conventional boundaries. They are literally changing commonly held perceptions of "what's possible" in both social and economic impact. In addition, the innovations that they develop often drive entirely new organizational forms to be created; these specialized enterprises are custom-made to both "do well" (be profitable) and "do good" (save the world).

This course provides an introduction to the field for budding social innovators, investors, emerging market business titans, policy makers, and anyone else interested in learning more about the novel ways that some of the world's most pressing problems are being addressed.

The history and context for social innovation, and "power shifts" driving the field, will be presented. An introduction to human-centered design and solutions prototyping will allow participants to begin formulating their own ideas for solving big social problems. Fundamentals in venture planning and development, as well as an introduction to both traditional and emerging capitalization strategies such as philanthropy, government funding, venture capital, microfinance, and competition prizes, will present sustainability options.

There will be emphasis throughout the course on highlighting specific examples of innovative products, services, environments, organizations, and modes of interaction aimed at changing the lives of the least fortunate. Particular attention will be on the efforts of global corporations and related enterprises to introduce new products and services that are specifically designed to address the needs of consumers in emerging markets. Finally, there will be consideration of the role of governments and other global institutions to develop policies, regulations, and legislation that support the formation of “ecosystems” providing “fertile ground” for social innovators.
Although SI&E is grounded in a long history, it is still very much an emergent field (somewhat like “entrepreneurship” was in the early 1970’s) and, as a result, relevant topics are changing rapidly. With this emphasis on “currency”, the course is primarily readings-based with some cases included to further illustrate key concepts, and it relies significantly on active student participation.

Course materials are from a variety of “specialized” publications like Stanford Social Innovation Review and McKinsey Quarterly, more “mainstream” sources such as The Economist and New York Times, as well as selections from more “academic” resources. Although no textbook is assigned for the course, I’ll attempt to draw from among the best books that I’ve come across related to the field such as How to Change the World by David Bornstein and The Fortune at the Bottom of the Pyramid by CK Prahalad, particularly to highlight some of the theoretical underpinnings of social innovation and enterprise.

**COURSE OBJECTIVES**

1. Provide a broad overview of the emerging field of social innovation and enterprise, examining its numerous definitions, driving forces, leading practices, successes and failures, opportunities and constraints, and public policy implications.

2. Introduce some foundational tools and conceptual frameworks that support the development of social innovation ventures.

3. Encourage students to more deeply consider the many opportunities they have, both during their time at CMU and after graduation, to address some of the world’s most pressing problems.

Here’s our challenge for the mini semester: The range of potential SI&E-related topics is vast and a rigorous review of just a single weekly topic could extend beyond the scope of a full semester course. Therefore, this course will act as an overview of the key concepts, contemporary issues, and future direction of SI&E directed at future social innovators, executives, and senior policy makers who might operate in the private, public, and nonprofit sectors. In short, I hope that this course will arm you with a set of topics, tools, and techniques related to SI&E that are both relevant and impactful to your future career plans.

**COURSE CONTENT**

The course is organized into 7 modules:

- **Foundations of Social Innovation and Enterprise** provides an introduction to key concepts, definitions, and issues to be addressed throughout the course.

- **Drivers of Social Innovation and Human-Centered Design Thinking** examines the global trends (e.g., demographic, economic, cultural) driving the field and the impact that approaches originally used to create new consumer products for developed economies are having on the formulation of creative solutions to social problems.

- **Solutions and Enablers to Deliver Basic Human Needs** provides a sampling of a variety of social innovations, examining their development path, their demonstrated and potential impact, and the organizations built to support them.

- **Venture Development and Growth** provides a more detailed overview of the ways that social innovators are getting their concepts into the world and scaling their impact.
• **Capitalization and Impact Assessment for Social Innovations** reviews various ways that social innovators can capitalize their ventures and track “social return on investment”, and how social investors assess funding opportunities.

• **Creating Policies and Ecosystems for Social Innovation** uses the formation of government initiatives like the White House Office of Social Innovation and Civic Participation as mini-case studies on the role of governments and other global policy makers in SI&E.

• **The Future of Social Innovation and Enterprise** profiles a cross-section of approaches, trends, and initiatives that may provide insight on future developments in the field.

**Pre-Requisites**
None.

**Required Readings**
All required readings are available online (links included below) with some supplementary readings distributed as applicable. All readings must be done in advance of the corresponding class session (see Tentative Course Schedule) and concepts will be integrated into lectures and subsequent discussions. Expect “cold calling”, if required, to get things started and provide more rigor and interaction in our review of class topics.

Relevant lecture materials/notes will be made available on Blackboard prior to the lecture for that week. In general, Blackboard will act as the course repository for submitted and corrected assignments, grade postings, class communications, and other “assets” from our time together.

**Course Requirements**
There will be a mix of assignments to provide some flexibility as well as an opportunity to stand out individually:

- One **Group Project** (40%)
- **Group Project** Presentation (15%)
- **Individual Twice Weekly Blog Post Comments** (20%)
- **Class / Course Participation** (25%)

Group size for team-based activities is limited to 3 or less students (pending final determination of class size and approval of professor, as required). All team members will complete a peer review assessment at the conclusion of the course to determine relative contributions to group case efforts. **All submissions should be put in the Blackboard Digital Drop Box.**

The grading policy for this course is based on the premise that expectations regarding student performance at the graduate level are higher. The mean grade in the class will likely be around 3.5 (between A- and B+) although I am more than willing to depart from those guidelines based on extraordinary performance (in either direction) from the class. Grades in the “A-to-A+” range will be reserved for students who perform exceptionally well in all aspects of the course.

Students occasionally request an extension at the end of the semester if they cannot complete their assignments due to unforeseen work commitments, family problems, illness, and so on. An “incomplete” grade will be given only under exceptional circumstances (poor time management is
not considered an “exceptional circumstance”!), at my discretion, and should be discussed with me before the end of the mini-semester so that appropriate paperwork can be completed. Assignments during the mini-semester that are submitted after the deadline will be assessed a “late penalty”.

Finally, you should note that the assigned readings for the course provide only a broad framework for the topics we will discuss. Therefore, in your assignments, you are encouraged to use other research materials, resources, data, and readings.

**A BRIEF WORD ON PLAGIARISM AND CHEATING…**

*Don’t!*—no grade is worth sacrificing your personal integrity, particularly at the grad level! You are responsible to know and adhere to all university policies on academic integrity. The Heinz College provides a booklet on plagiarism and cheating, and the university lists all policies on the web at [www.cmu.edu/policies/documents/Cheating.html](http://www.cmu.edu/policies/documents/Cheating.html). Please acquaint yourself with the contents.

*Any plagiarism or cheating will result in failure in the course and your case will be reported to the Associate Dean who may decide to take further action.*

**GROUP PROJECT**

The group project provides you with an opportunity to explore, through a comprehensive research paper, one of a variety of topics of direct relevance to social innovation and enterprise. Three (3) broad topic areas can be considered:

- **Create an Innovative Social Venture**
  Conceive of a new product, an improvement on an existing product, or a combined product-service solution that addresses a vexing social problem. Areas of investigation are limited to specific basic human needs—food, water, shelter, sanitation, health, education, or information—or select SI&E enablers—energy, transportation, or environment. Solutions must address a distinct problem in a geography where CMU has a presence (including the U.S.), which includes campuses, degree offerings, or in-country partnerships.

- **Define New Policies (or Changes in Existing Policies) to Support Social Innovation**
  Identify specific legislative, regulatory, or related policy implementation mechanisms that would promote more SI&E development, and positive social and economic outcomes. Scope can focus on regional, national, or international institutions and issues. Particular emphasis should be given to the context and drivers supporting (or not supporting) the policy change as well as a comprehensive strategy to implement your proposal.

- **Propose How Technology Trends Will Impact Social Innovation**
  Project how a specific technology, and foreseeable trends in its development, utilization, and availability, will impact (positively or negatively) the growth of global social innovation and enterprise. Limit the time horizon for consideration to technologies that are, or will be, generally available within the next five years. The scope of geographies and social issues to be addressed is up to your discretion although, historically, more focused investigations customarily produce better results.
Sample outlines for examining these topic areas are included below. Note that they are general guidelines. You should feel free to change the structure to best fit your project topic. In addition, it is my expectation that a concise 10-12 page (double-spaced)\(^1\) write-up\(^2\) plus appendices and/or exhibits will be sufficient.

A brief description of your project is due before class on Thursday, September 4\(^{th}\), a brief (~10-15 minute) presentation will be given by your team during final exam week (October 13\(^{th}\), day, time, and order TBD), and the final report will be due by noon on Thursday, October 16\(^{th}\).

The **brief description** should include a relatively detailed description of your topic area, a proposed approach of investigation, its applicability to the field, and your reasons for selecting this topic.\(^3\)

**Create an Innovative Social Venture**
- Executive summary
- Context for the problem being addressed (e.g., country characteristics)
- Justification of need
- Product description
- Competition and substitutes
- Start-up investment needs, scaling, and financial sustainability strategy
- Impact assessment indicators
- Recommended next steps

**Policies to Support Social Innovation**
- Executive summary
- Current situation and impact
- Description of proposed policy change
- Desired / anticipated impact(s)
- Approach and barriers to implementation
- Recommended next steps

**Technology Trends Impact Social Innovation**
- Executive summary
- Description of the technology
- Development, utilization, and/or availability “trajectory”
- Specific examples of where the technology can (or will) be used in the context of social innovation and enterprise
- Primary benefits, costs, and risks of using the technology in that context
- Recommendations for decision makers and social innovators

**Criteria for Grading:**
Submission is clear, complete and compelling (30%), connected to course concepts and readings (20%), reflects rigorous research (40%), creativity and distinctiveness (10%); distribution subject to change and final grades may vary based on individual contribution.

---

\(^1\) Note: The report need not be double-spaced. Use this statement merely as a guideline for report length.

\(^2\) Exceed these guidelines only if you really need the extra space to say something worthwhile or to graphically illustrate your point; go for quality, not quantity!

\(^3\) Two pages double-spaced are probably more than enough.
INDIVIDUAL TWICE WEEKLY BLOG POST COMMENTS

This year, CMU’s Institute for Social Innovation has established an exciting new partnership with the Unreasonable Institute’s Unreasonable.is initiative. The Unreasonable Institute (http://unreasonableinstitute.org/) is a Boulder, CO-based social venture incubator that has launched a news outlet for “entrepreneurs, creative misfits, policymakers, and academics interested in using business to solve the world’s biggest problems.” Every day, they publish original content from some of the most notable social innovators and thought leaders in the world.

Starting in Week #2, students will post a comment at least twice a week to articles on the Unreasonable.is site (http://unreasonable.is/). Every other week, I’ll be sent a spreadsheet indicating your participation with links to posted comments that will be evaluated based on the rubric below. Extra credit will be awarded to students who submit more than the minimum number of required comments by the end of the mini-semester (up to five submissions/week).

CRITERIA FOR GRADING (20 points maximum for all posted comments)—areas that will reduce the grade for submissions include comments that:

- Are not (or “just” poorly) connecting to concepts or points made in the article
- Provide no point-of-view/opinion (e.g., something in your personal experience that relates to the article) or one that is poorly articulated
- Are unclear, incomplete, and/or just poorly written (e.g., excessive poor grammar or spelling, run on sentences)
- Are clearly not very thoughtful or thought provoking (i.e., very general, obviously just “thrown in”)

CLASS / COURSE PARTICIPATION

Participation does not entail simply answering when spoken to. Informed discussions are critical to the learning process and will make this class much more interesting and fun for all of us. Each student is expected to volunteer substantive comments freely. Quality (versus quantity) is important. Your score will be determined by my assessment of your contributions. The “system” that I’ll use is, at the beginning of the course, everyone starts with a score of “100”. Each time you participate in class or interact with me, I’ll update your participation score upwards or downwards by an appropriate amount based on the interaction:

- Absent from class = -10; after missing two classes, your grade drops by a letter grade for each additional class missed
- In attendance, but makes no contribution = +5
- In attendance and participates in the class discussion = +7
- In attendance and makes substantial contributions to the class discussion = +10

Participation does not have to be limited to class sessions only. If, for example, you bring a relevant current newspaper or magazine article to my attention, I’ll count this as part of the participation grade as well. I will make every attempt to involve every student in this process, but it is possible that I may consistently overlook a potential contributor. Please bring this to my attention. This process may be considered somewhat subjective but, through our collective efforts, we can ensure that it is fair. Some criteria for effective class participation include:
1. Is there a **willingness to participate** and is the participant also a **good listener**?

2. Are the points made **relevant** to the discussion and linked to the comments of others? Are comments **well thought out** or just “thrown out”?

3. Do the comments show **evidence of rigorous analysis**?

4. Is there a willingness to **test new ideas**, or are all comments "safe"? For example, repetition of case facts without analysis and inference is "safe", but a somewhat off-the-mark comment that leads to creative discussion will be considered valuable.

5. Do the comments **clarify, highlight, and synthesize** important aspects of earlier comments and lead to a clearer statement of the concepts being covered or to new knowledge/insights?

6. Do the comments identify **overlooked points** and points that turn out to be influential in further discussion?

**Classroom Etiquette**

Cell phones should be turned off. If there is a situation where you need to be able to receive a call during class, you should use the “silent” mode on your phone and quietly leave the room when a call comes in.

Laptop computers are permitted to be open during class but note that it’s relatively easy to identify when students are using devices for non-class-related activities. I reserve the right to ask that laptops be closed at any time and to call on any student using a laptop in class.

I greatly appreciate students arriving on time for class and getting back from breaks. Please let me know beforehand if you must leave class early.

Be respectful of others and generally treat your conduct in this class the same way you would in any other professional situation.

Thanks in advance for your efforts to create a class environment that works for everyone!
TENTATIVE COURSE SCHEDULE (OUR ACTUAL MILEAGE MAY VARY)

First, a caveat:
I’m always introducing new things into the course and I’ll likely try to inject other materials as I come across them during the mini-semester. It is possible that, as we “get into” the material, I’ll want to make some modifications to the course schedule due to timing and/or content issues. My commitment is to give you enough advanced notice on modifications to sufficiently prepare.

Week 1: Foundations of Social Innovation and Enterprise


Article: Rediscovering Social Innovation (Phills, Deiglmeier, and Miller, Stanford Social Innovation Review, Fall 2008, pgs. 34-43); www.ssireview.org/articles/entry/rediscovering_social_innovation

Article: All Entrepreneurship is Social (Schramm, Stanford Social Innovation Review, Spring 2010, pgs. 21-22); www.ssireview.org/articles/entry/1571/

Article: Innovation is Not the Holy Grail (Seelos and Nair, Stanford Social Innovation Review, Fall 2012); http://www.ssireview.org/articles/entry/innovation_is_not_the_holy_grail

In-Class Video: Social Entrepreneurs: Pioneering Social Change (Skoll Foundation, February 18, 2009)

Week 2: Drivers of Social Innovation and Human-Centered Design Thinking


Report: The Next 4 Billion: Market Size and Business Strategy at the Base of the Pyramid (Hammond et al., International Finance Corporation and World Resources Institute, 2007)—read pgs. 2-11; www.wri.org/publication/the-next-4-billion


----------


Article: The Importance of Frugal Engineering (Sehgal, Dehoff, and Panneer, Strategy+Business, Summer 2010); www.strategy-business.com/article/10201?gko=24674
Download: IDEO’s Human Centered Design Toolkit; [www.ideo.com/work/item/human-centered-design-toolkit/](http://www.ideo.com/work/item/human-centered-design-toolkit/)

Download: Development Impact and You (DIY) Toolkit (NESTA, UK); [www.diytoolkit.org](http://www.diytoolkit.org)

**TOUR OF CMU’S CREATE LAB ([HTTP://WWW.CMUCREATELAB.ORG/](http://WWW.CMUCREATELAB.ORG/))—THURSDAY, 9/4**

MEET AT THE ENTRANCE TO CMU’S COLLABORATIVE INNOVATION CENTER (LOCATED HERE: [HTTPS://WWW.GOOGLE.COM/MAPS/PLACE/4720+FORBES+AVE,+CARNEGIE+MELLON+UNIVERSITY,+PITTSBURGH,+PA+15213/@40.444014,-79.946399,147M/DATA=!3M11e314m23m111s0x8834f221444c7d9d:0x6093d39345901424?hl=en](https://www.google.com/maps/place/4720+Forbes+Ave,+Carnegie+Mellon+University,+Pittsburgh,+PA+15213/@40.444014,-79.946399,147m/data=!3m11e314m23m111s0x8834f221444c7d9d:0x6093d39345901424?hl=en))

**GROUP PROJECT TOPIC SELECTED AND BRIEF WRITE-UP DESCRIPTION SUBMITTED BY 9/5**

**Week 3: Solutions and Enablers to Deliver Basic Human Needs**


**Article (Technology / Information):** Where In The World Are The 1.2M Raspberry Pi Microcomputers? (Techcrunch, April 12, 2013); [www.techcrunch.com/2013/04/12/raspberry-pi-global-sales-spread/](http://www.techcrunch.com/2013/04/12/raspberry-pi-global-sales-spread/)


**In-Class Videos (Food, Water, Transportation):**
- A Lifesaver Called PlumpyNut (CBS 60 Minutes, June 24, 2008)
- Fighting Poverty in Kenya by Selling Water Pumps to Poor Farmers (PBS Newshour, July 13, 2010)
- Innovate or Die – Aquaduct: Mobile Filtration Vehicle (IDEO, December 15, 2007)
**Week 4: Venture Development and Growth**


Article: How To Take A Social Venture To Scale (Harvard Business Review Blog Network, June 18, 2012); [http://blogs.hbr.org/cs/2012/06/how_to_take_a_social_venture_t.html](http://blogs.hbr.org/cs/2012/06/how_to_take_a_social_venture_t.html)


In-Class Videos:
- Follow That Dabbawalla: Home Cooked Meals, the Mumbai Way (Economist Magazine Videos, May 17, 2009)
- Share My Dabba—A Small Sticker Trying To Make A Difference (YouTube, May 9, 2013)

**Week 5: Capitalization and Impact Assessment for Social Innovation**


Article: A Place in Society (The Economist, September 26, 2009); [www.economist.com/node/14493098](http://www.economist.com/node/14493098)

Article: Measuring Social Value (Mulgan, Stanford Social Innovation Review, Summer 2010, pgs. 38-43); [www.ssireview.org/articles/entry/measuring_social_value](http://www.ssireview.org/articles/entry/measuring_social_value)

Article: The $5.1 Billion Future of Crowdfunding Is More Than Kickstarter (Fast Company, April 19, 2013); [www.fastcoexist.com/1681808/the-51-billion-future-of-crowdfunding-is-more-than-kickstarter](http://www.fastcoexist.com/1681808/the-51-billion-future-of-crowdfunding-is-more-than-kickstarter)


**Week 6: Creating Policies and Ecosystems for Social Innovation**


Article: Let’s Hear Those Ideas (The Economist, August 12, 2010); www.economist.com/node/16789766


**Week 7: The Future of Social Innovation and Enterprise**

In The News: GE Remodels Businesses in India (Wall Street Journal, April 26, 2011); http://online.wsj.com/article/SB10001424052748704547804576261151497799750.html

Article: The Next Frontier For 3-D Printing: Helping The Disabled (Fast Company, May 20, 2013); www.fastcodesign.com/1672572/the-next-frontier-for-3-d-printing-helping-the-disabled


In-Class Video: Masdar City 2013 (Future 306.tv, 2013)
In-Class Video: Arthur C. Clarke Predicting the Future (BBC Horizons, 1964)

**GROUP PROJECT PRESENTATIONS—WEEK OF OCTOBER 13TH**

**FINAL PROJECT—OCTOBER 16TH**