

Economics of Creativity, Entrepreneurship & Innovation

Spring 2015 ECO N 3498 (15255) Thursday 4:00 pm to 6:20 pm Classroom: J.Ray Ryan Building Room 204

Professor: Tim Nguyen, MBA, MPA, MA, MA Office Hours & Location: Thursday 6:30 pm to 7:30 pm and arranged times Email: <u>thanh.nguyen@uconn.edu</u>

Instructor: Andrew Zehner JD, MA Office Hours & Location: Thursday 6:30 pm to 7:30 pm and arranged times Email: andrew.zehner@uconn.edu

Course Description

According to Jonathan Swift (poet, essayist, and satirist), "Vision is the art of seeing things invisible." According to this insight, the entrepreneur is also one who sees the invisible!

Entrepreneurship involves the combinations of ideas, resources, partners, customers—in the effort to create new market space and place. The "entrepreneurial challenge" then is one of selecting among the many potential combinations. Hence, this ambitious course has two overwhelming objectives.

From a **theoretical** perspective, students will study economic theories of entrepreneurship and examine the forces that drive the process of innovation. These forces consist of creativity and creative destruction; the innovator's dilemma; incentives to innovate, competitive advantage; industry evolution; venture capital, and intellectual property.

Simultaneously and from an <u>applied</u> perspective, this unique course attempts to provide frameworks for understanding and making critical decisions in businesses based on innovation and creativity. The course examines (a) the generation of commercializable new ideas situated in both new ventures and existing organizations; (b) the challenges to building and maintaining an organization based on creativity and innovation; (c) trade-offs in making resource allocation decisions in innovative companies; and (d) strategies in industries based on fast-changing creative and innovative products.

With globalization systematically reducing barriers to entry, and increasing quick imitation, organizations (both nonprofit and for-profit) are turning more and more to innovation as a driver for sustainable success. Innovation is the cornerstone of new ventures. Innovation is a way for entrepreneurs to create new and valuable organizations!

Students will investigate the following topics:

• Nature of creativity and creative development

- Dilemmas facing the entrepreneur & the venture capitalist
- The challenges of corporate innovation and resistance to Innovation
- Public policy implications relating to entrepreneurship and venture capital
- The government's role in innovation and entrepreneurship
- The university as an engine for innovation
- Socio-economic principles of E-Commerce
- Networked effects of social media
- The non-profit world as a source of innovation and creativity (including newly created "benefit corporations" that are designed for mission driven organizations)
- Challenges of managing innovation
- Strategy of ecosystems

This course is ideal for those who are interested in pursuing investment banking, investment management, strategic consulting, nonprofit management, public policy, venture capital/private equity, and entrepreneurship.

About Your Professors

Tim Nguyen

Professionally, Tim Nguyen is Director of Investments at the University of Connecticut Foundation. Before beginning his career in institutional investing, Mr. Nguyen had the pleasure of working at the following financial services companies where he learned the art of credit analysis and financial fraud: MBIA, BNP Paribas, Fitch Rating Agency, Texas Commerce Bank, American Skandia, and The Royal Bank of Scotland. Simultaneously, he is the Research Coordinator at the Traumatic Brain Injury Model System at Spaulding Rehabilitation Hospital/Partners Healthcare in Boston, MA. Academically, he holds two undergraduate degrees *(magna cum laude distinction)* from the University of Houston, one in Psychology and one in Political Science. Additionally, he holds advanced degrees from Yale University, Columbia University, Brown University, and The Kellogg School of Management at Northwestern University. Lastly, he is a member of the Dean's Advisory Board at the College of Liberal Arts & Sciences at University of Connecticut.

<u>Andrew Zehner</u>

Andrew Zehner is the Assistant Vice President, Corporate and Business Relations in the Office of Vice President for Research and Counsel in the Office of the General Counsel. Andrew has twenty years of experience providing strategic and business counsel to a wide variety of industries, including life sciences, health care, telecommunications, and information technology. Andrew was most recently Senior Corporate Counsel in the Legal Division of Pfizer Inc., supporting all aspects of pharmaceutical R&D in the U.S. and United Kingdom. He led the negotiations on many research, development and commercialization transactions. Prior to that, he served as in-house counsel for Paradigm4 and People's Choice TV two fast-growing Connecticut technology companies. Zehner received a B.A. degree in American civilization from Middlebury College, an M.A. degree in history from the University of Massachusetts, Amherst, and a Juris Doctor with Honors from the University of Maryland School of Law. He is admitted to practice law in Connecticut and Maryland.

Course Prerequisites

Students must have completed the following prerequisite courses before taking this course:

- a) Intermediate Microeconomic Theory; and/or
- b) Intermediate Macroeconomic Theory

Additionally, as this course utilizes principles from Introductory Finance and Financial Accounting, students who have already taken such courses will have a competitive advantage.

Course Materials

Required: Ron Adner, The Wide Lens: A New Strategy For Innovation, NY: Portfolio Hardcover, 3/1/2011

Additionally, the following required items could be found here:

- ✓ All readings—with the exception of Harvard Business School Case Studies (HBS Case studies)—are posted on UCONN HuskyCT.
- ✓ HBS Case studies could be downloaded from the HBS Case Studies website for a fee: <u>https://cb.hbsp.harvard.edu/cbmp/access/33423824</u>
- ✓ INSEAD Case (for iMotors case only) could be downloaded for a fee at the following website: <u>http://www.thecasecentre.org/students/course/registerForCourse</u>, with course packet code being: C-351-248473-STU

Recommended: Joshua Lerner, <u>The Architecture of Innovation: The Economics of Creative Organizations</u>, MA: HBS Review Press, 9/4/2012

Course Pedagogy

The course involves lectures, student led discussion, and analysis of case studies. Applying the Business School method of learning, I will cold call on students to facilitate discussion and provide meaningful observations.

Honor Code

The University's policy relating to the Honor Code is fully enforced.

Technology Policy

In order to facilitate class discussion, laptops/iPads/cell phones etc. are not allowed in class.

Auditing Policy

Auditing is not permitted.

Grading

Grades will be based on the following:

#	Item	%
1	Class Attendance	10
2	Participation	10

3	3 Student Led Presentation Relating To Readings	
4	3 Group Case Write-Ups	30
5	Final Presentation	40

Late assignments will not be accepted.

Student Led Presentations

Sets of students will be assigned to a reading. Students will highlight key points relating to the reading as well as provide reflection relating to the thesis of the article.

Case Write-ups

Depending on the number of enrollees, students will be working teams, which I will be assigning. The write-ups should be typed and include no more than **three pages** of analysis (plus additional pages with exhibits as necessary), and be written in 12 font and 1.5 space.

Final Group Project

For the Final Project, you can elect one of the following two options:

- a) Choose an existing company that uses the Internet as a critical part of its business and is struggling to achieve a reasonable and sustainable level of profitability in that business; or
- b) Choose a company that would like to start or have already started that uses the Internet as a critical part of its business

You must have your choice of company approved by me.

Please do not choose a company that we are covering in the course.

The final project should answer the following question: *can this company achieve and sustain a reasonable level of profitability or not, and if so, how?*

You could consider creative organizations that are seeking sustainability—universities, other non-profits, benefit corps.

The project should address the following issues:

- 1) Describe the elements of the business model to the extent possible given the available data.
- 2) Which parts of the business model present challenges and why? It is VERY important to use course concepts to explain the sources of your problems. YOUR ANALYSIS USING COURSE CONCEPTS IS THE MOST IMPORTANT PART OF THE PROJECT. In addition, it is helpful to document the challenges using numerical and financial information where possible.
- 3) What options should the company consider in order to address these strategic challenges? How can these options potentially ameliorate problems caused by the underlying strategic drivers of the issues identified in your question 2.

4) Which option(s) do you recommend, if any, and why? Or, if you do not believe that any of the options will enable the business to achieve a reasonable level of profitability, explain your reasoning. Be sure to consider possible counter-arguments to your recommendations and conclusions.

Your project must use strategic principles from this course in your analysis—specifically topics covered on February 19th through April 23rd.

The project consists of 3-5 PowerPoint slides that summarize your analysis, accompanied by 10-20 additional slides that explain the analysis and recommendations in more detail. The additional slides can consist of simple bullet points, and should contain the points that you would make if you were writing a paper.

Readings and Case Assignments

Regarding required readings, please note the following:

Jan 22	Course Introduction
Jan 29	The Process of "Creative Destruction"
	 <i>Required</i>: Schumpeter, Joseph A., <u>Capitalism, Socialism, and Democracy</u>, Chapter 7, "The Process of Creative Destruction", pp. 81-86
	Economics of Creativity
	 <i>Required: of Giftedness, Creativity, and Talent,</i> edited by Barbara Kerr, SAGE Publications, 2009:
	http://www.jonathanfeinstein.com/PDFs/creativity&econsystem.pdf
	• <i>Required:</i> Mandel, Benjamin. "Art as an Investment and Conspicuous Consumption Good," <i>American Economic Review</i> , 2009, 1653 – 1663.
	 Required: "Can't Afford a Picasso? How About a Piece of One?" by Heidi Moore, NY Times: 1/10/11: <u>http://dealbook.nytimes.com/2011/01/10/cant-afford-a-picasso-how-about-a-piece-of-one/</u>
	• <i>Required: "</i> 'Passion Investments' Capture Hearts in Mideast," by Sara Hamdan, NY Times: 2/2/11:
	http://www.nytimes.com/2011/02/03/world/middleeast/03iht-M03BART.html
	• <i>Recommended:</i> Galenson, David W., and Bruce A. Weinberg. 2000. "Age and the Quality of Work: The Case of Modern American Painters." <i>Journal of Political Economy</i> , Vol. 108, Num. 4, pp. 761–777.
	• <i>Recommended:</i> Galenson, David W., and Bruce A. Weinberg. 2001. "Creating Modern Art: The Changing Careers of Painters in France from Impressionism to Cubism." <i>American Economic Review</i> , Vol. 91, Num. 4, pp. 1063–1071.

	• <i>Recommended</i> : Jones, Benjamin F. 2010. "Age and Great Invention." <i>The Review</i> of Economics and Statistics, Vol. 92, Num. 1, pp. 1–14.
	• <i>Recommended:</i> Levin, Sharon G., and Paula E. Stephan. 1991. "Research Productivity Over the Life Cycle: Evidence for Academic Scientists." <i>American Economic Review</i> , Vol. 81, Num. 1, pp. 114–132.
Feb 5	Intersectionality of Creativity & Entrepreneurship
	 Required: Florida, Richard, "Why China Lags on Innovation and Creativity," <u>The Atlantic Cities</u>, April 2, 2012, Internet: <u>http://www.theatlanticcities.com/jobs-and-economy/2012/04/why-china-lags-innovation-creativity/1604/</u>
	 Required: Lim, Jason, "Why China won't be innovative for at least 20 more years," 3/26/12, <u>http://venturebeat.com/2012/03/26/why-china-doesnt-innovate/</u>
	 Required: Shapiro, Gary, "Can China Eclipse the US on Innovation?" <u>Forbes</u>, 7/11/12, Internet: <u>http://www.forbes.com/sites/garyshapiro/2012/07/11/can-china-eclipse-the-u-s-on-innovation/</u>
	• <i>Required:</i> Abrami, Regina; William Kirby, and Warren McFarlan, "Why China Can't Innovate", <i>Harvard Business Review</i> , 3/1/14
	• Skim: Samuelson, Pamela & Scotchmer, Suzanne. "The Law & Economics of Reverse Engineering", Yale Law Journal, April 2002
	 Recommended: Jones, Benjamin F., and Bruce A. Weinberg. 2011. "Age Dynamics in Scientific Creativity." Manuscript. <u>http://www.kellogg.northwestern.edu/faculty/jones- ben/htm/AgeDynamicsText.pdf</u>
	When to become an entrepreneur?
	• <i>Required:</i> Levine, Ross and Rubenstein, Yona, "Smart and Illicit: Who Becomes an Entrepreneur and Does it Pay?", NBER Working Paper No. 19276, Aug 2013
	• <i>Required:</i> Audia, P and Rider C. 2005, "A Garage and an Idea: What more does an Entrepreneur Need?" in <i>California Management Review</i> , Vol 48, p.6-27
	• Case: Career at a Crossroad—Akhil Patel, HBS 812-010 through 013

Feb 12	The Innovator's Dilemma (<i>The challenges of corporate innovation and resistance to</i>
	innovation)
	 <i>Required:</i> Christensen, Clayton M. Introduction and Chapter 1, "How Can Great Firms Fail? Insights from the Hard Disk Drive Industry," of <u>The Innovator's</u> <u>Dilemma: When New Technologies Cause Great Firms to Fail.</u> NY: Harper Business, 2011, p. 3–32.
	• <i>Recommended:</i> Henderson, Rebecca, and Kim B. Clark. "Architectural Innovation: The Reconfiguration of Existing Product Technologies and the Failure of Established Firms." <i>Administrative Science Quarterly</i> , Vol. 35, pp. 9–30, 1990.
	• <i>Recommended:</i> Henderson, Rebecca, and Iain Cockburn. "Measuring Competence? Exploring Firm Effects in Pharmaceutical Research." <i>Strategic Management Journal</i> , Vol. 15, pp. 63–84, 1994.
	Facing the changing basis of competition
	• <i>Required:</i> Afuah, Allan N. and Nick Bahram, "The Hypercube of Innovation", <i>Research Policy</i> 24 (1995), p.51-76 (focus on 51 to 62)
	• Case: Studio Realty, (HBS 9-697-036)
Feb 19	Incentives To Innovate
	The government's role in innovation and entrepreneurship
	• <i>Required:</i> Gilbert, Richard, and David Newbery. 1982. "Preemptive Patenting and the Persistence of Monopoly. <i>American Economic Review</i> , Vol. 72, Num. 2, pp. 514–526
	• <i>Required:</i> Gans, J., Hsu, D., and S. Stern. 2002. "When does start-up innovation spur the gale of creative destruction." <i>RAND Journal of Economics</i> , Vol. 33, pp. 571–586.
	 Required: Coghlan, Timothy, "China's Copycat Culture and Creativity," MAOSUIT, 9/4/12, http://maosuit.com/stores/chinas-copycat-culture-and-creativity/ http://maosuit.com/stores/chinas-copycat-culture-and-creativity/
	 Required: Vartanian, Hrag, "Commissioning Creativity from China's Artisan Imitators,"Hyperallergic: Sensitive to Art & Its Discontents, September 4, 2013, <u>http://hyperallergic.com/81599/commissioning-creativity-from-chinas-artisan- imitators/</u>

	 <i>Required</i>: Howkins, John, "Take Chinese Creativity Seriously—or Lose Out," Financial Times, December 12, 2013, <u>http://www.ft.com/cms/s/0/6ad6d0ae-5e97-11e3-8621-00144feabdc0.html#axzz2oxoCoeld</u> <i>Recommended:</i> Tirole, Jean. 1988. <u>The Theory of Industrial Organization</u>. Chapter 10, "Research and Development and the Adoption of New Technologies." Section 10.1, "Incentives as a Function of the Market Structure: The Value of Innovation," pp. 389–394.
	• <i>Recommended:</i> Gans, J., and S. Stern. 2000. "Incumbency and R&D Incentives: Licensing the Gale of Creative Destruction." <i>Journal of Economics and</i> <i>Management Strategy</i> . Vol. 9, Issue: 4, pp. 485–511.
	 Recommended: Igami, Mitsuru. 2011. "Estimating the Innovator's Dilemma: Structural Analysis of Creative Destruction in the Hard Disk Drive Industry." <u>Manuscript</u>. Sections 1, 2, and 6, pp. 1–16, 35–39.
Feb 26	Innovating in the Social & Nonprofit Sector
	 The university as an engine for innovation The non-profit world as a source of innovation and creativity (including newly created "benefit corporations" that are designed for mission driven organizations) Readings to be assigned
March 5	Economics of Venture Capital
	• <i>Required</i> : Hsu, D. H., "What do entrepreneurs pay for venture capital affiliation?" <i>Journal of Finance</i> , Vol. 59 no. 4, Aug, 2004, pp. 1805-44.
	• <i>Required</i> : Kaplan, S. N. Sensoy, B. A. and Stromberg, P., "Should investors bet on the jockey or the horse? Evidence from the evolution of firms from early business plans to public companies", <i>Journal of Finance</i> , Vol. 64 no. 1, Feb, 2009, pp. 75-115.
	• <i>Required</i> : Kortum, S. and Lerner, J., "Assessing the contribution of venture capital to innovation", <i>Rand Journal of Economics</i> , Vol. 31 no. 4, Winter, 2000, pp. 674-92.
	• <i>Required</i> : Tian, X. and Wang, T. Y., "Tolerance for failure and corporate innovation", <i>Review of Financial Studies</i> , 9/8/11

	 <i>Recommended</i>: Manso, G., "Motivating Innovation", <i>Journal of Finance</i>, Vol. 66 no. 5, Oct, 2011, pp. 1823-1860. <i>Recommended</i>: Gompers, P. and Lerner, J., "The venture capital revolution," <i>Journal of Economic Perspectives</i>, Vol. 15 no. 2, Spring, 2001, pp. 145-168.
	<i>Journal of Economic Perspectives</i> , vol. 15 no. 2, spring, 2001, pp. 145-108.
March 12	Confronting substitute threats
	• <i>Required:</i> Adner, Ron, "A Demand Based Perspective on Technology Life Cycles", <i>Advances in Strategic Management</i> . March 2004, 21:25-43.
	Case: Continuous Casting Investments at USX Corporation (9-697-020)
March 19	Spring Break
March 26	Innovating in Ecosystems
	• <i>Required:</i> Ron Adner, <u>The Wide Lens: A New Strategy For Innovation</u> , NY: Portfolio
	Hardcover, 3/1/2011,
	 Introduction
	 Chapters 1-3
	Restructuring the value chain
	• <i>Required:</i> Subramanian, Rangan and Ron Adner (2001): Profits and the Internet:
	Seven Misconceptions. <i>MIT Sloan Management Review</i> , July 4, p.244.
	Case: "iMotors: New competition in used cars" (A) and (B), INSEAD, 2001
April 2	Structure of the Internet
	 Required: "2013 Internet Trends." Mary Meeker of Kleiner Perkins Caufield and Byers: <u>http://www.kpcb.com/insights/2013-internet-trends</u>
	 Required: "2011 Internet matters: The Net's sweeping impact on growth, jobs, and prosperity." McKinsey & Company: <u>http://www.mckinsey.com/Insights/MGI/Research/Technology_and_Innovation/Internet_matters</u>
	 Required: "The Connected World: The Digital Manifesto: How Companies and Countries Can Win in the Digital Economy." Boston Consulting Group: <u>http://www.bcg.com/expertise_impact/publications/PublicationDetails.aspx?id=</u> <u>tcm:12-96526</u>

	• Recommended: Arthurs, Charles, Digital Wars: Apple, Google, Microsoft and the
	Battle for the Internet, April 28, 2012.
	Chapters 1 & 2
	Business Models Relating To The Internet
	• Required: Osterwalder, A., and Pigneur, Y. "The Business Model Canvas," p, 14 –
	41, in Business Model Generation: A Handbook for Visionaries, game Changers,
	and Challengers, 2010, John Wiley & Sons.
	<i>Case:</i> Pandora Radio: Fire Unprofitable Customers, HBS 9-610-077
April 9	Social Network Effects
	Beguired: Dfoffer, L. A. Noto on Social Naturalis and Naturalis Structure (Stanford
	 Required: Pfeffer, J. A Note on Social Networks and Network Structure (Stanford OB66)
	• Case: HBS: LinkedIn (A) 9-707-406
	Social Strategies
	• Case: mixi (A), HBS 709413)
April 10	Two-sided Markets
April 16	I WO-SIGED MIARKETS
	Read: Eisenmann, Parker, Alstyne. "Strategies for Two-Sided Markets". Harvard
	Business Review, October 2006.
	• <i>Case:</i> Monster.com: Success Beyond the Bubble (9-802-024)
	Effects of "The Winner-Take-All" in Platform Markets
	• <i>Required:</i> Hagiu, A. and Yoffie D., 2010, "Network Effects", <u>Palgrave Encyclopedia</u> .
	 <i>Required:</i> Hagiu, A. and Yoffie D., 2010, "Network Effects", <u>Palgrave Encyclopedia</u>. Number 1201010
	Number 1201010 • Case: Foursquare, HBS 9-711-418
April 23	Number 1201010
April 23	Number 1201010 • Case: Foursquare, HBS 9-711-418 "Free Riding" effect relating to products and services
April 23	Number 1201010 • Case: Foursquare, HBS 9-711-418 "Free Riding" effect relating to products and services • Required: Bryce, Dyer, and Hatch. "Competing Against Free", Harvard Business
April 23	Number 1201010 • Case: Foursquare, HBS 9-711-418 "Free Riding" effect relating to products and services • Required: Bryce, Dyer, and Hatch. "Competing Against Free", Harvard Business Review, 6/1/11
April 23	Number 1201010 • Case: Foursquare, HBS 9-711-418 "Free Riding" effect relating to products and services • Required: Bryce, Dyer, and Hatch. "Competing Against Free", Harvard Business Review, 6/1/11 • "Caught in the web," The Economist, 1999,
April 23	Number 1201010 • Case: Foursquare, HBS 9-711-418 "Free Riding" effect relating to products and services • Required: Bryce, Dyer, and Hatch. "Competing Against Free", Harvard Business Review, 6/1/11

	• Case: The Newspaper Industry in Crisis, HBS 9-709-463
	Economics of Cloud-based Services
	• <i>Required:</i> "MacAfee, Andrew", What Every CEO Needs to Know About the Cloud, <i>Harvard Business Review</i> , 11/1/11
	• Case: Amazon Web Services, HBS 9-609-048
April 30	Student Presentations