#### **Course Information**

Course Number/SectionPPPE 6365-0W1Course TitleThe Innovation Economy – The Political Economy of InnovationTermFall 2016

#### **Professor Contact Information**

Professor	D.A. Hicks
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Other Information	

**Course Pre-requisites, Co-requisites, and/or Other Restrictions** None

### **Course Description**

This graduate-level course explores the role of innovation – its causes, correlates and consequences. While *innovation* is typically regarded as a technological and/or cultural phenomenon, our primary focus will be on its *political economic* and *organizational* dimensions. We will begin with an historical backswing and explore a time before innovation was "*a thing*," that is, before it was a conceptual tool for describing or categorizing what was going on in the world. Even as the discipline of economics emerged during the 19<sup>th</sup> century and much of the 20th, the role of innovation in theories of economic growth and development -- and related dimensions of economic macro-models – along with endogenous technical change – to account for aggregate growth and productivity. And more recently still, innovation has come to be seen as a key ingredient in *micro*-models whereby firms, industries, regions and even nations design responses to competitive pressures. As a result, in recent years literatures enhanced by conceptual treatments of innovation have grown exponentially. Today, many of the most compelling and accessible treatments of innovation are focused on specific product concepts, business models, emergent and transforming industries, places and the underlying dynamics enabling growth and change. Therefore, it is at that level – between the aggregate macro economy and the micro – even "molecular" -- domain of entrepreneurs and firms that we will spend the bulk of our time.

#### **Student Learning Objectives/Outcomes**

As a student progresses through this course, s/he will be prepared to....

- 1. Discuss the historical emergence of the concept of "innovation" in economic, political and public policy models of economic growth and change.
- 2. Differentiate varieties of innovation and their respective roles in economic disruption, transformation and performance across organizational scales.
- 3. Articulate how economic, political and social/cultural factors can trigger industrial revolutions and propel the emergence and development of new varieties of economic and political activity.
- 4. Discuss the significance of the *spatial* and organizational innovation revealed in economic dynamics and clustered economic and industrial activity.
- 5. Distinguish between *spontaneous* and *strategic* models of technological innovation and the institutions that promote them.
- 6. Demonstrate a developed understanding of the linkages between science and technology, invention and innovation.
- 7. Discuss the role of the research university and its economic and social roles in knowledge creation and dissemination.
- 8. Apply the concepts associated with technical advance to the evolution of economics and across multiple scales (global, national, regional, firm-level).

#### **Course Administration & Performance Evaluation**

Since this is a graduate-level course, I do not need to spend our collective time and effort on building study skills or having you assure me that you done what has been assigned. In practice this means that I will focus instead on introducing you to key concepts, chewy conceptual questions and substantive public policy issues that can benefit from a deep understanding of innovation-influenced patterns, trends, dynamics, impacts and outcomes. You, in turn, will be evaluated not on what you have memorized or can recite on demand but rather on how you can identify, organize and *use* productively the new understanding, knowledge and insight you will gain in this course. Accordingly, at several junctures along the way, I will ask you to *integrate* materials across topics and/or *use* course content to analyze an issue external to the course. You will prepare these in the form of a brief well-organized and polished 1-2 page memo to be shared with course-mates. These memos taken together will constitute roughly 40 percent of your course grade. In addition, I anticipate – but have not yet decided – to require each of you to prepare an expanded written product on a topic of your choice -- in consultation with the instructor – that reflects one or more of the threads of this course. This will take the form of a well-developed "white paper" or policy memo rather than a conventional term paper. Its originality, clarity, organization and the degree to which it reflects major themes in the course and draws on course resources will be paramount in evaluating its quality. This will account for approximately 50-60 percent of one's final course grade. A remaining 10 percent of your final grade will be based on either in-person or videoconference discussions I will schedule with you during the semester. More on this latter item later....

## **Required Textbooks and Materials**

Required Texts

- 1. Baumol, William J. (2004). *The Free-Market Innovation Machine: Analyzing the Growth Miracle of Capitalism*. Princeton University Press. ISBN 0-691-11630-X (paperback) Kindle Edition also available.
- 2. Taylor, Mark Zachary (2016). *The Politics of Innovation: Why Some Countries Are Better Than Others at Science and Technology*. Oxford University Press. ISBN 978-0-19-046413-4 (paperback) Kindle Edition also available.

Additional readings and video background resources will be provided to support our exploration of each topic. Some readings will be largely theoretical, enabling us to understand better how scholars have sought to define their concepts and test their ideas about the role of innovation as a cause, a consequence and/or a contextual factor in multivariate models. A second type of reading will be scholarly research, with emphasis on conceptual distinctions, methodology/measurement, and empirical findings that permit knowledge building and theory-testing. A third type will be more policy-oriented, with its emphasis on analysis and advocacy, issues and interest groups, seeking to address particular problems and build support for different policy positions. Throughout, however, you will soon appreciate that the idea of *innovation* has found a secure home in a wide variety of academic disciplines. In this course, however, we will be free to traverse disciplinary boundaries to follow the essential idea of *newness with commercial potential* from its point of origin to its myriad destinations. In that sense, at times in this course we will be *un*-disciplined, free to follow the emergence of an innovation from inspiration to investment, insertion, implementation and impact in real-world economic, political and social contexts. Readings, related PowerPoint presentation and video files will be posted on eLearning.

*Required Materials* None

# **Suggested Course Materials**

*Suggested Readings/Texts* Additional reading resources will be determined as the course proceeds. Each will be available on eLearning.

Suggested Materials TBD

Textbooks and some other bookstore materials can be ordered online through Off-Campus Books <u>http://www.offcampusbooks.com</u> or the UT Dallas Bookstore <u>http://www.bkstr.com/texasatdallasstore/home</u>. They are also available in stock at both bookstores.

## **Technical Requirements**

In addition to a confident level of computer and Internet literacy, certain minimum technical requirements must be met to enable a successful learning experience. Please review the important technical requirements <u>http://www.utdallas.edu/elearning/students/getting-started.html#techreqs</u> on the Getting Started with eLearning webpage <u>http://www.utdallas.edu/elearning/students/getting-started.html</u>.

### **Course Access and Navigation**

The course can be accessed using the UT Dallas NetID account at: <u>https://elearning.utdallas.edu</u>. Please see the course access and navigation <u>http://www.utdallas.edu/elearning/students/getting-started.html#courseaccessandnav</u> section of the site for more information.

To become familiar with the eLearning tool, please see the Student eLearning Tutorials <u>http://www.utdallas.edu/elearning/students/eLearningTutorialsStudents.html</u>.

UT Dallas provides eLearning technical support 24 hours a day/7 days a week. The eLearning Support Center <a href="http://www.utdallas.edu/elearninghelp">http://www.utdallas.edu/elearninghelp</a> services include a toll free telephone number for immediate assistance (1-866-588-3192), email request service, and an online chat service.

### Communication

This course utilizes online tools for interaction and communication. Some external communication tools such as regular email and a web conferencing tool may also be used during the semester. For more details, please visit the eLearning Tutorials webpage <a href="http://www.utdallas.edu/elearning/students/eLearningTutorialsStudents.html">http://www.utdallas.edu/elearning/students/eLearningTutorialsStudents.html</a> for video demonstrations on eLearning tools.

Student emails and discussion board messages will be answered within 3 working days under normal circumstances.

### **Distance Learning Student Resources**

Online students have access to resources including the McDermott Library, Academic Advising, The Office of Student AccessAbility, and many others. Please see the eLearning Current Students page <a href="http://www.utdallas.edu/elearning/students/cstudents.htm">http://www.utdallas.edu/elearning/students/cstudents.htm</a> for details.

## Server Unavailability or Other Technical Difficulties

The University is committed to providing a reliable learning management system to all users. However, in the event of any unexpected server outage or any unusual technical difficulty that prevents students from completing a time sensitive assessment activity, the instructor will provide an appropriate accommodation based on the situation. Students should immediately report any problems to the instructor and also contact the online eLearning Help Desk <u>http://www.utdallas.edu/elearninghelp</u>. The instructor and the eLearning Help Desk will work with the student to resolve any issues at the earliest possible time.

Note: in the "READING & MEDIA RESOURCES" column below, for each topic I have listed selected readings that will inform my video TOPICs. Each week I will designate a couple of these as required readings. The others are ones I encourage you to skim in order to capture their specific contributions to our overall appreciation and understanding of innovation. I will offer more detailed guidance on which readings will be required as approach each respective topic.

UNIT/ DATES	TOPIC/TOPIC	<b>READING &amp; MEDIA RESOURCES</b>	ASSESSMENT / ACTIVITY	DUE DATE
Week of August 22 <sup>nd</sup>	TOPIC 1 Course overview, Roadmap & Administration ONLINE LECTURE: <i>"COURSE OVERVIEW, OBJECTIVES &amp; TOPIC ROADMAP"</i>	<ol> <li>Johnson, Steven, "The Genius of the Tinkerer," The <i>Wall</i> <i>Street Journal</i>, September 25, 2010.</li> <li>Mcardle, Megan, "Serendipitous Connections," Book Review of Steven Johnson, <i>Where Good Ideas Come From</i>, in <i>Wall</i> <i>Street Journal</i>, October 5, 2010.</li> <li>Atkinson, R. <i>Understanding and Maximizing America's</i> <i>Evolutionary Economy</i>, ITIF, October 2014.</li> <li>Video: Michael Cox, The Fund for America Studies (TFAS) "How Nations Succeed" <u>https://youtu.be/wxo8usuMnuM</u></li> <li>Fallows, James (2013), "The 50 Greatest Breakthroughs Since the Wheel," <i>The Atlantic Monthly</i> Group, <u>http://www.theatlantic.com/magazine/archive/2013/11/innova</u> <u>tions-list/309536/</u> (Skim)</li> <li>Schmidt, Eric (Google), "The Impact of Disruptive Technologies," <u>http://www.mckinsey.com/insights/high_tech_telecoms_inter</u> net/disruptive_technologies</li> <li><i>The Future of Productivity</i> (2015) Organization for Economic Cooperation and Development (OECD) (Skim)</li> </ol>	None	8-29-16

Week of August 29 <sup>th</sup>	TOPIC 2 INNOVATION - AN INTRODUCTION ONLINE LECTURE: <i>"INNOVATION - AN</i> <i>INTRODUCTION"</i>	2. M H 3. S 5. 7 6. A 7. P	<ul> <li>Baumol, "Introduction: On the Engine of Free-Market Growth," Chapter 1.</li> <li>Morris, L., "Innovation Metrics: The Innovation Process and How to Measure It" An InnovationLabs White Paper, November 2008.</li> <li>Smith, E. "The Adjacent Possible," http://www.practicallyefficient.com/2010/09/28/the-adjacent- possible.html</li> <li>Phelps, E. S., "Dynamic Capitalism," A Commentary," <i>Wall</i> <i>Street Journal</i>, October 10, 2006; Page A14.</li> <li><i>The Better World Report: The Positive Impact of Academic</i> <i>Innovations on Quality of Life</i>, AUTM 2010.</li> <li>Adams, N et al, <i>The Demographics of Innovation in the</i> <i>United States</i>, ITIF, 2016.</li> <li>Phelps, E. "Entrepreneurial Culture," <i>Wall Street Journal</i>, September 12, 2007.</li> </ul>	TBD	9-3-16
Week of September 5 <sup>th</sup>	TOPIC 3 The Groundwork for Understanding Growth & Change ONLINE LECTURE: <i>"A MILLENIUM OF EVOLVING ECONOMIC</i> THOUGHT"	E 5 2. A T J 3. K L H 4. A	<ul> <li>Hayek, F. A. "The Use of Knowledge in Society," <i>American Economic Review</i>, Volume XXXV, No. 4, September 1945, pp. 519-30.</li> <li>Atkinson, R., "Globalization, New Technology and Economic Transformation," Chapter 9 in Policy Network 2009), <i>Social Justice in the Global Age</i>.</li> <li>Kirchhoff, B.A., Chapters 1-3 in <i>Entrepreneurship and Dynamic Capitalism: The Economics of Business Firm Formation and Growth</i> (1994). (Skim)</li> <li>Atkinson R. and D. Audretsch, "Economic Doctrines and Policy Differences" ITIF, September 2008.</li> </ul>	TBD	TBD

Week of September 12 <sup>th</sup>	TOPIC 4 The Ascendant Role of "Innovation" in Economic Theory ONLINE LECTURE: <i>"THE ORIGINS &amp; CHALLENGE OF NEW GROWTH THEORY"</i>	<ol> <li>Baumol, Chapter 2.</li> <li>R. Solow (1956). "A Contribution to the Theory of Economic Growth," <i>The Quarterly Journal of Economics</i>, Vol. 70, No. 1. (Feb., 1956), pp. 65-94.</li> <li>P.M. Romer, (1990). "Endogenous Technological Change," in <i>Journal of Political Economy</i>, Vol. 98, No. 5, pp. S71-122.</li> <li>Sachs, J. D. &amp; J. W. McArthur," "Technological Advancement and Long-Term Economic Growth in Asia," in <i>Technology and the New Economy</i>, 2002.</li> <li>Atkinson, R. Understanding and Maximizing America's Evolutionary Economy, ITIF, October 2014.</li> </ol>	
Week of September 19 <sup>th</sup>	TOPIC 5 THE ROLE OF TECHNICAL ADVANCE IN MACROECONOMIC PERFORMANCE ONLINE LECTURE: <i>"THE ROLE OF TECHNICAL ADVANCE IN MACROECONOMIC PERFORMANCE"</i>	<ol> <li>Baumol, Chapters 3.</li> <li>Block, Fred &amp; Matthew R. Keller, "Where Do Innovations Come From?" The Information Technology and Innovation Foundation (ITIF), Washington, D.C. September 2008.</li> <li>The Competitiveness and Innovative Capacity of the United States, U.S Department of Commerce &amp; National Economic Council. January 2012. (Skim)</li> <li>What Is the Impact of Mobile Telephony on Economic Growth? GSM Association, November 2012. (Skim)</li> <li>Hicks, D.A., "Innovation Dynamics and Endogenous Adjustment in the Telecommunications Industry," Economics of Innovation and New Technology, 2001, pp. 69-96. (Skim)</li> <li>Taylor, M.Z., Selections TBD</li> </ol>	

Week of September 26 <sup>th</sup>	TOPIC 6	1.	Sutaria, V. and D.A. Hicks, "New Firm Formation and	TBD	TBD
-	INNOVATION IN		Determinants," <i>The Annals of Regional Science</i> , 2004, Volume 38, pp. 241-62		
	NANO-ECONOMIC	2.	Volume 38, pp. 241-62. Hathaway, I. and R. E. Litan, <i>Declining Business Dynamism</i>		
	PERFORMANCE:	Ζ.	in the United States: A Look at States and Metros," May		
	CAPITALIST DYNAMICS		2014, Brookings Institution. (Skim)		
	AND "CHURN"	2	Motoyama, Y. and J. Bell-Masterson, "Beyond Metropolitan		
	AND CHUKIN	5.	Startup Rates: Regional Factors Associated with Startup		
	<b>ONLINE LECTURE:</b>		Growth," E. M. Kauffmann Foundation, 2014. (Skim)		
	<i>"NANO-ECONOMIC</i>	4	Cortright, J., " <i>New Growth Theory, Technology and</i>		
	DYNAMISM -	4.	Learning: A Practitioner's Guide, "Reviews of Economic		
	ENTREPRENURIAL		Development Literature and Practice: No. 4, 2001.		
	CAPITALISM"	5	The Influence of R&D Expenditures on New Firm Formation		
	CAFITALISM	5.	and Economic Growth, Small Business Administration,		
			October 2002. (Skim)		
		6.			
		0.	2013.		
		7	Fritsch, M., "New Business Formation and Regional		
		1.	Development: A Survey and Assessment of the Evidence,"		
			Foundations and Trends in Entrepreneurship, Vol. 9, No. 3		
			(2013).		
		8.			
		0.	What Creates Jobs" <i>Wall Street Journal</i> , November 6, 2009.		
		9	Accenture, <i>Digital Double-Down</i> , (Digital transformation		
		7.	as a competitive strategy) 2014. (Skim)		
			us a competitive strategy) 2014. (Skiii)		

Week of October 3 <sup>-1</sup> S E E C " S 7	Entrepreneurship & Endogenous Change Online lecture: <i>'spontaneous</i> Sources of	<ol> <li>2.</li> <li>3.</li> <li>4.</li> </ol>	Acs, Z.J. and Catherine Armington, "Endogenous Growth and Entrepreneurial Activity in Cities," Center for Economic Studies, U.S. Census Bureau, CES-03-02, January 2003. Johnson, Steven (2010). <i>Where Good Ideas Come From: The</i> <i>Natural History of Innovation</i> . Riverhead Books. [Skim] Youn, H., et al., "Invention as a Combinatorial Process: Evidence from U.S. Patents," J.R. Soc. Interface 12, June 2014. "Economics Rediscovers the Entrepreneur," <i>Economist</i> , March 9, 2006. "The Wild and Crazy Career Paths of 5 Self-Made Billionaires" <i>Entrepreneur</i> , August 23, 2013 URL: http://www.entrepreneur.com/article/228067 [Skim]	TBD	TBD
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	TOPIC 8	1. Baumol, Chapter 4.	TBD	TBD
Week of October 10 <sup>TH</sup>		<ol> <li>Baumor, Chapter 4.</li> <li>Accenture, <i>The Search for Value: Driving Innovation Beyond</i></li> </ol>	עטו	
	STRATEGIC INNOVATION,	<i>the Product,</i> 2011. (Skim)		
	INVESTMENT, &	3. "Executive Summary," <i>America's Advanced Industries: What</i>		
	<b>CREATING COMPETITIVE</b>	They Are, Where They Are and Why They Matter, Brookings		
	ADVANTAGE	Institution, 2015. Full Report (Skim)		
		4. Warrior, P. "The Future of Innovation" Cisco.		
	<b>ONLINE LECTURE:</b>	5. Clement, D., "Creative Disruption" <i>The Region</i> , The Federal		
	"STRATEGIC	Reserve Bank of Minneapolis, September 2008.		
	INNOVATION -	6. Video: Eric Schmidt (Google) on "Disruptive Technologies"		
	CREATING	http://www.mckinsey.com/insights/high_tech_telecoms_inter		
	COMPETITIVE	net/disruptive_technologies		
	ADVANTAGE"	7. Baily, M, et al., Building a Long-Term Strategy for Growth		
		through Innovation, Brooking, 2011.		
		8. Evans, P. and Patrick Forth, "Navigating the World of Digital		
		Disruption," BCG Perspectives, 2015.		
		9. Rasor, D. "IntrapreneurshipDeveloping a Culture of		
		Innovation," Texas Instruments Presentation. (Skim)		
		10. Cha, M and F. Yu, "Pharma's First-To-Market Advantage,"		
		McKinsey & Company, September 2014.		
		11. Hicks, D.A., The Financial Undertow of Rapid Technical		
		Advance in New Product Development," <i>Journal of</i>		
		Engineering and Technology Management, Volume 1096,		
		2001, pp. 1-23.		

Week of October 17 <sup>th</sup>	TOPIC 9 INNOVATION-ENABLED INDUSTRIAL TRANSFORMATION: HEALTHCARE ONLINE LECTURE: <i>"HEALTHCARE ECOSYSTEM INNOVATION &amp; TRANSFORMATION"</i>	<ol> <li>"Exceptional Returns: The Economic Value of America's Investment in Medical Research," <i>Funding First</i>, The Lasker Foundation, 2000.</li> <li>Lichtenberg, F.R. "Pharmaceutical Innovation as a Process of Creative Destruction," NBER, 1998.</li> <li>"Changing Patterns of Pharmaceutical Innovation," NICHM Foundation. 2002.</li> <li>Christensen, C.M. et al., Will Disruptive Innovations Cure Health Care? <i>Harvard Business Review</i>, 2000.</li> <li><i>Biopharmaceutical Research and Development: The Process Behind New Medicines</i>, PhRMA Innovation Hub http://www.phrma.org/sites/default/files/pdf/rd_brochure_022 307.pdf</li> <li>Video: <i>Cumulative Steps, Big Gains for Patients</i>, PhRMA Innovation Hub, http://innovation.org/video/cumulative-steps- big-gains-for-patients</li> </ol>	TBD	TBD
Week of October 24 <sup>th</sup>	TOPIC 10 INNOVATION-ENABLED INDUSTRIAL TRANSFORMATION: ADVANCED INDUSTRIAL PRODUCTION, LOGISTICS AND SUSTAINMENT ONLINE LECTURE:	<ol> <li>Muro, Mark, et al., America's Advanced Industries – New Trends 2016, the Brookings Institution. Interactive Report, https://www.brookings.edu/research/americas-advanced- industries-new-trends/.</li> <li>Boston Consulting Group (BCG), Industry 4.0: The Future of Productivity and Growth in Manufacturing Industries, 2015.</li> <li>"The Cisco Connected Factory: Powering a Renaissance in Manufacturing" Cisco Manufacturing White Paper, 2014.</li> <li>Innovation Hubs Spur Manufacturing Transformation, Polycom Issue Paper, 2014.</li> <li>Gonce, A. and U. Schrader, "Plantopia? A Mandate for Innovation In Pharma Manufacturing," McKinsey, 2012.</li> <li>Manufacturing the Future: The Next Era of Global Growth and Innovation, McKinsey Global Institute (MGI), November 2012.</li> <li>Atkinson, R. "Globalisation, New Technology and Economic</li> </ol>	TBD	TBD

		Transformation," Chapter 9 in <i>Social Justice in a Global Age,</i> <i>Policy Network</i> , 2009.		
Week of October 31 <sup>st</sup>	TOPIC 11 GOVERNANCE & PUBLIC POLICY INITIATIVES: EVIDENCE OF IMPACTS AND OUTCOMES ONLINE LECTURE: "GOVERNMENT STRATEGIC INVESTMENT IN INNOVATION"	<ol> <li>Block, F. – "America's Stealth Industrial Policy," Longview Institute, 2008.</li> <li>Video: Block, F., "Stim-Novation and the Obama Administration," 2008. https://www.youtube.com/watch?v=BJ3YrqV7El8&amp;ab_c hannel=UCDavis.</li> <li>Odza, M. – "Bayh-Dole &amp; Technology Transfer," Columbia, December 2005</li> <li>Bayhing for Blood or Doling Out Cash – <i>Economist,</i> <i>December 2005.</i></li> <li><i>SEMATECH Overview, Business Model &amp; Impact,</i> Presentation, August 2007.</li> <li>US IGNITE - PRESS RELEASE - Richardson &amp; UT Dallas, September 2014.</li> <li><i>American Formula For Growth,</i> National Commission On Entrepreneurship (NCOE), Kauffman Foundation. October 2002. (Skim)</li> <li>Wessner, C. (Ed.) Best Practices in State and Regional Innovation Initiatives: Competing in the 21st Century, National Research Council, 2013.</li> <li>Dye, R.F. &amp; D. F. Merriman, "Tax Increment Financing: A Tool for Local Economic Development," Lincoln Institute for Land Policy, 2006.</li> </ol>	TBD	TBD

	TOPIC 1		TDD	TDD
Week of November 7 <sup>th</sup>	TOPIC 12	University-Sourced:	TBD	TBD
		1. Milne, C-P & A. Malins - Academic-Industry Partnership for		
	TECHNOLOGY TRANSFER	Biopharmaceutical Research & Development: Advancing		
	POLICIES & PROCESSES:	Medical Science in the U.S., Tufts Center for the Study of		
	University-Sourced	Drug Development, April 2012. (Skim)		
		2. Measuring Innovation, Knowledge Transfer and Economic		
	<b>ONLINE LECTURE:</b>	Impact at Universities & Public Research Institutions: A		
		Whitepaper, Thompson Reuters 2015.		
		3. Roberts, E.B. et al., <i>Entrepreneurship and Innovation at MIT</i>		
		Continuing Global Growth and Impact, December 2015.		
		4. Jones, B. et al., "Multi-University Research Teams: Shifting		
		Impact, Geography and Stratification in Science," Science 21		
		November 2008.		
		5. Gulbranson, C.A. and D.B. Audretsch, Proof of <i>Concept</i>		
		Centers: Accelerating the Commercialization of University		
		Innovation Ewing Marion Kauffman Foundation & Max		
		Planck Institute of Economics, 2008.		
		Government-Sourced, Supported and/or Incented:		
		1. Markoff, J. "The Team That Put the Net in Orbit," <i>New York</i>		
		Times, December 9, 2007. (Skim)		
		2. Flamm, K. "Economic Benefits from Technological		
		Innovation in Microelectronics," Draft 2010.		
		Porter, E., "Do New Drugs Have to Cost So Much?" New		
		York Times, November 14, 2004. (Skim)		
		Industry-University-Government Collaboration:		
		1. Moris, F. "Project Linking Multi-Agency Surveys Produces		
		New Findings on R&D by Multinational Companies"		
		<i>InfoBrief,</i> National Sciences Foundation, September 2012.		
		2. Thune, J. et al., <i>Re-Boot - Reexamining the Strategies Need to</i>		
		Successfully Implement Health IT, US Senate, April 2013.		
		2012,, 2012,		

Week of November 14 <sup>th</sup>	TOPIC 13 National Innovation Systems: Institutions & Infrastructures ONLINE LECTURE:	<ol> <li>Atkinson, R.D., "An Innovation Economics Agenda for the Next Administration" ITIF, September 2008.</li> <li>U.S. Department of Commerce &amp; National Economic Council (January 2012). <i>The Competitiveness and Innovative Capacity</i> <i>of the United States</i>. http://www.commerce.gov/sites/default/files/documents/2012 /january/competes 010511 0.pdf</li> <li>National Research Council (2012). <i>Rising to the Challenge:</i> U.S. Innovation Policy in the Global Economy. Washington, D.C.</li> <li>Hicks, D.A., <i>TI<sup>2</sup>TAN: A Texas Industrial Innovation Testbed</i> <i>for Advanced Networks</i>, Draft Proposal, 2016.</li> </ol>	TBD	TBD
Week of November 21 <sup>st</sup>	Thanksgiving Break			
Week of December 2 <sup>nd</sup>	COURSE CONCLUSIONS & EVALUATION			

# **Comet Creed**

This creed was voted on by the UT Dallas student body in 2014. It is a standard that Comets choose to live by and encourage others to do the same:

"As a Comet, I pledge honesty, integrity, and service in all that I do."

# UT Dallas Syllabus Policies and Procedures

The information contained in the following link constitutes the University's policies and procedures segment of the course syllabus. Please go to <a href="http://go.utdallas.edu/syllabus-policies">http://go.utdallas.edu/syllabus-policies</a> for these policies.

The descriptions and timelines contained in this syllabus are subject to change at the discretion of the Professor.