

Planning and Quality Assurance Affairs

Form (A)

Course Specifications

General Information

Course name	Technology Entrepreneurship
Course number	ITIS4336
Faculty	
Department	
Course type	Major Needs
Course level	4
Credit hours (theoretical)	3
Credit hours (practical)	0
Course Prerequisites	

Course Objectives

- 1 - Understanding of the sources of innovation opportunities and development of the skills to identify and analyze these opportunities for entrepreneurship and innovation.
- 2 - Understanding of the industry dynamics of and factors for developing successful innovations and apply this understanding to innovations in sectors including energy, healthcare and technology.
- 3 - Development of a personal skill set for creativity, innovation and entrepreneurship and specific concepts and tools for combining and managing creativity and innovation in an organization.

Intended Learning Outcomes

Knowledge and Understanding	* a1) Describe the key concepts and characteristics of innovation and technology entrepreneurship.
Intellectual Skills	* b1) Develop an innovative business plan that takes into account socio-technical, economic, and regulatory factors.
Professional Skills	* c1) Apply appropriate business and revenue models to launch a technology venture successfully.
General Skill	* d1) Demonstrate creative problem solving skills in formulating successful business strategies. * d2) Exercise good communication and interpersonal skills in proposing and presenting appropriate business plans.

Course Contents

- 1 - Course Introduction and Overview.
- 2 - Innovation & Entrepreneurship & DGC Intro
- 3 - Systematic Entrepreneurship, Purposeful Innovation
- 4 - Types of Innovation/DGC Selection
- 5 - n Class Activity 1a – Design Thinking Challenge
- 6 - In-Class Activity 1b- Ideation & Prototyping
- 7 - Sources of Innovation: The Unexpected or Incongruous
- 8 - Sources of Innovation: Process Need & Industry Change
- 9 - Sources: Demographics, Perceptions, New Knowledge
- 10 - Opportunity Recognition & Idea Generation Exercise
- 11 - Course Project Kickoff (Ideas/Issues & Team Selection)
- 12 - Guest Lecture: Howard Pedolsky: Intro to Project Management
- 13 - Creative Thinking and Innovation
- 14 - In-class Activity 2 –Creative Thinking/DGC Update
- 15 - Creativity Project-1 Launch: Product/Service Development IDEO
- 16 - Disruptive Innovation & Product/Service Development
- 17 - CP1 Rapid Prototyping Workshop
- 18 - Creativity Project 1 Group Presentations
- 19 - Do Good Challenge Team Project Completion Work time
- 20 - Creativity Project-2 Launch: Marketing & Branding
- 21 - Marketing & Creativity
- 22 - Marketing and Market Research
- 23 - Spreading the Idea / Scaling the Solution
- 24 - Creativity Project 2 Group Presentations
- 25 - Guest Speaker/Special Topic

Teaching and Learning Methods

- 1 - Lectures
- 2 - Tutorials
- 3 - Practical Workshops
- 4 - On-Line Discussion

Teaching and Learning Methods for the Disabled Students

- 1 - The University will provide appropriate accommodations for students with documented disabilities. In order to ascertain what accommodations may need to be provided, students with disabilities must inform faculty of their needs at the beginning of the semester.

Students Assessment

<u>Assessment Method</u>	<u>TIME</u>	<u>MARKS</u>
Final written exam	at the end of the semester	50%
mid-term exam	sixth week	20%
Group Project	sixteenth week	30%

Books and References

Course note	Short course notes available at doctor's office
Essential books	Drucker, Peter F. (2006) Innovation and Entrepreneurship. Harper Paperbacks ISBN-10: 0060851139 Harvard Business School Press (2009) Innovators Toolkit: 10 Practical Strategies to Help You Develop and Implement Innovation (Harvard Business Essentials) ISBN-10: 1422199908
Recommended books	Thomas Byers, Richard Dorf and Andrew Nelson, Technology Ventures: From Idea to Enterprise, McGraw-Hill, 3/e, Jan. 14, 2010. ISBN-13: 978-0073380186. John Bessant and Joe Tidd, Innovation and Entrepreneurship, John Wiley & Sons, Ltd., 2/e, May 16, 2011. ISBN-13: 978-0470711446. Melissa A. Schilling, Strategic Management of Technological Innovation, McGraw Hill, 4/e, Oct. 30, 2012. ISBN-13: 978-0078029233. Napier, A., Rivers, O., Wagner, S., Napier, J., Creating a Winning E-Business, Cengage Learning, 2/e, 2005. ISBN-13: 978-0619217426. Thomas N. Duening, Robert A. Hisrich, Michael A. Lechter, Technology Entrepreneurship: Creating, Capturing, and Protecting Value. Sharma, P (ed.), The Harvard Entrepreneurs Club Guide to Starting your Own Business, Wiley and Sons, 1999.
Other References (Periodical, web sites, etc.)	Course reading materials will be augmented by articles from journals and by whitepapers and other materials available on-line.

Knowledge and Skills Matrix

Main Course Contents	Study Week	Knowledge and Understanding	Intellectual Skills	Professional Skills	General Skill
Course Introduction and Overview, Innovation & Entrepreneurship & DGC Intro, Systematic Entrepreneurship, Purposeful Innovation	1-1	a1	---	---	---
Types of Innovation/DGC Selection, n Class Activity 1a – Design Thinking Challenge, In-Class Activity 1b- Ideation & Prototyping	2-2	a1	b1	---	---
Sources of Innovation: The Unexpected or Incongruous, Sources of Innovation: Process Need & Industry Change	3-3	a1	---	c1	---
Sources: Demographics, Perceptions, New Knowledge, Opportunity Recognition & Idea Generation Exercise	4-4	a1	---	---	d1
Course Project Kickoff (Ideas/Issues & Team Selection)	5-5	---	---	---	d1
Guest Lecture: Howard Pedolsky: Intro to Project Management , Creative Thinking and Innovation, In-class Activity 2 –Creative Thinking/DGC Update	6-6	---	---	c1	d1
Creativity Project-1 Launch: Product/Service Development IDEO, Disruptive Innovation & Product/Service Development , CP1 Rapid Prototyping Workshop.	7-7	a1	b1	---	d1,d2
Creativity Project 1 Group Presentations , Do Good Challenge Team Project Completion Work time	8-8	a1	---	---	d1,d2
Creativity Project-2 Launch: Marketing & Branding , Marketing & Creativity ,	9-10	---	b1	c1	d2
Marketing and Market Research, Spreading the Idea / Scaling the Solution	11-12	---	---	---	d1,d2
Creativity Project 2 Group Presentations , Guest Speaker/Special Topic	13-15	a1	---	---	d2