Course title: Design Thinking				
Course code: PPM 179	**No. of credits:** 2	**L-T-P:** 10-18-0	**Learning hours:** 28	
Pre-requisite course code and title (if any): NA				
Department: Department of Business and Sustainability				
Course coordinator: Dr. Akash Sondhi		**Course instructor:** Dr. Akash Sondhi		
Contact details: akash.sondhi@terisas.ac.in				
Course type: Open Elective		**Course offered in:** Semester 3		

Course Description

This course will be an introduction to Design Thinking (DT). This course will let the learners understand the underpinnings of design thinking, and work with the DT framework and tools to help them understand design thinking as a creative problem solving approach. We will also explore unique stories from organizations and teams that used design thinking to uncover compelling solutions.

Course objectives

The course aims to:

Instil the Design Thinking approach

Develop the understanding and implementation of Design Thinking framework

Apply Design Thinking tools to solve a problem

Conceive and ideate persuasive solutions using Design Thinking approach.

Course Content

S No	Topic	L	T	P
1.	**Problem Solving** Visual problem solving Experience economy and the context of Digital	2	2	0
2.	**Design Thinking Philosophy** The three lenses of Innovation Why Design thinking Rudiments of Design Thinking	2	2	0
3.	**Design Thinking Framework and Tools** Five (5) phases of Design Thinking Framework Design Thinking Framework: Empathy, Define, Ideate, Test, Prototype Design Thinking Tools: Storyboarding, Build Measure Learn Feedback DIY: Design Thinking Tools	2	3	0
4.	**Design Thinking Experience** Problem identification in the context of the Design Thinking Framework. Problem Identification DIY – Design Thinking Process Empathy, Define, Ideate, Test, Prototype Blog: DT Phases to solve a problem.	1	4	0
5.	**Design Thinking in Practice** Design Thinking Solution Working as teams of four (4) they will work on aspects of using DT with appropriate tools to solve the problem. Design Thinking for Business Sustainability, Product, Service, Consultancy and Social Domains DIY – Design Thinking Process for the Proposed problem	2	3	0
6.	**Design Thinking Unique Case Studies** Group Presentation: Minimum Viable Product for the proposed problem The Way Forward	1	4	0
	Total	10	18	

Evaluation criteria

Test 1 Quiz (Module 1, 2 and 3): (30%) end of module 3

Test 1 will be a paper based exam which with multiple option questions and descriptive questions. The exam will evaluate the student understanding on the Design Thinking Approach, Philosophy, Framework and Tools.

Assignment - Blog (Individual + Group) (Module 3 and 4):15% (assigned at the beginning of module 2 and will evolve of the course duration)

The Design Thinking blog component is equivalent to the assignment and will be evaluated by the course coordinator. The blog creation assignment will be. The blog will be based on application of Design Thinking Framework and Tool and will be document a DT experience, the blog will be evaluated on process, inferences, creativity, clarity. This blog will be hosted in the blog website "Medium" and will remains as an artefact in the web domain for future evolution.

Test 2 Group Presentation: Problem in Context with DT Phases (Module 3 and 4): 20% will be conducted during module 4

The group presentation component will be evaluated by the course coordinator (40 %), an external faculty (40 %) from the department of business studies, and peer evaluated (20%).

Test 3 DT Use Case (Minimum viable Product Unique Case) (Module 5 and 6):   35% will be conducted during module 6.
Each team will create a present and submit a use case: a minimum viable product they developed for their problem using design thinking The final presentation minimum viable product and report submission will be assessed by a three-member panel, course coordinator (50 %), internal observer and an external faculty (30 %) (course reviewer / industry domain expert). A peer contribution component will be a part of the individual assessments.

Learning outcomes:

By the end of the course, students will be able to:

1.   conceive and articulate the Design Thinking approach
2.   contextualize a complex problem in the purview of Design Thinking
3.   ideate solution based on the Design Thinking framework
4.   create and present a unique solution based on Design Thinking

Pedagogical Approach – The course will be delivered through lectures, Interactive and experiential learning will be enabled by brainstorming, Case studies, Group Discussion, Videos, and Audio. Visual problem solving is an important part in Design Thinking, the course will use, Post it Notes (Mix Colour) methods to accomplish this.

Materials

Books

Required text: Liedtka, J. and Ogilvie, T. (2011). Designing for Growth – a Design Thinking Toolkit for Managers. Columbia Business School Publishing

Compulsory Readings

- Design Thinking for the Greater Good: Innovation in the Social Sector by Jeanne Liedtka (Columbia Business School Publishing) Hardcover – September 5, 2017
- The Back of the Napkin (Expanded Edition): Solving Problems and Selling Ideas with Pictures by Dan Roam Paperback – February 26, 2013
- Design Thinking 101, Sarah Gibbons, 2016, https://www.nngroup.com/articles/design-thinking/
- Brown Tim, (2008) Design Thinking, Harvard Business Review
- Liedtka Jane, The Essential Guide to Design Thinking - Generate new solutions with design thinking: a problem-solving process that combines creative and analytical thinking, E-Book, Darden Executive Education, University of Virginia.
- Cross Nigel, Design Thinking: Understanding How Designers Think and Work, Link: https://books.google.co.in/books?id=F4SUVT1XCCwC&lpg=PT5&ots=7PTAzYVs0j&dq=Design%20Thinking&lr&pg=PT22#v=onepage&q=Design%20Thinking&f=false

Weblinks

- Designit - https://www.designit.com/
- Mind Tools : https://www.mindtools.com/pages/article/design-thinking.htm

Additional information (if any)

Recommended Audit of Course – Design Thinking for the Greater Good: Innovation in the Social Sector

https://www.coursera.org/learn/uva-darden-design-thinking-social-sector/home/welcome

Student responsibilities

The students are expected to submit assignments and all evaluation component within the timelines and come prepared with readings when provided. Attendance and Participation in Group Presentation sessions is mandatory, and course feedback is obligatory.

Course reviewers
1. Dr. Gerrit De Waal, Department of Management, RMIT University, Melbourne City Campus.
2. Mr. Shashank Deshpande, Chief Design Officer, Globant India, Pune
3. Mr. Praveen Bhond, Agile Consultant, Pune

Action Taken Report: Course: Design Thinking

Comment Received from the Academic Council	Response of the Course Coordinator
Suggestion to increase the number of credits from 1 to 2 to cover the course content intensively.	The course credit has been increased to 2. The course has been made in-depth with additional focus to the Design Thinking Framework, Process, Experience and Practice. The course now includes four learning objectives and outcomes
Learning outcomes to be linked with evaluation components	Learning Outcomes has been mapped to the Evaluation following the guidelines and template. The course evaluation encompasses the philosophy of the continuous evaluation with four separate test components interspersed during the course.

How the proposed evaluation criteria (Below description is included as Annexure 1 in the course outline)

| meets the USP of our University - continuous evaluation system that has been adopted since its inception; | The proposed design thinking course assessment incorporates the continuous evaluation system with four (4) evaluation components interspersed during the duration of the course. Being an experiential and groupwork based course, the course uses alternate evaluation methods in lieu of conventional evaluation methods (paper based exams) and terminology, I have updated the nomenclature of the assessment to incorporate the TERI-SAS terminology.

Evaluation criteria

Test 1 Individual Quiz (Module 1, 2 and 3): (30%) end of module 3

Assignment - Blog (Individual + Group) (Module 3 and 4):15% (assigned at the beginning of module 2 and will evolve of the course duration)

Test 2 Group Presentation: Problem in Context with DT Phases (Module 3 and 4): 20% will be conducted during module 4 |

	Test 3 DT Use Case (Minimum viable Product Unique Case) (Module 5 and 6): (35%) will be conducted through module 6.
is mapped with the Learning Outcomes; and	The evaluation component has already been mapped with learning outcome of the course. **Evaluation criteria** - Test 1 - Individual Quiz (LO-1): (30% - Assignment - Blog (Individual + Group) (LO-3 and LO-4):15% - Test 2 - Group Presentation: Problem in Context with DT Phases (LO-2): 20% Test 3- DT Use Case (Minimum viable Product Unique Case) (LO-3 and LO-4): 35%
is fair, transparent and unbiased."	The question set included in Test 1 will be same and objective / close ended. Further student will be given opportunity to review their answer-sheets. Details to incorporate fairness and transparency in the assessment component is as follows **Test 1** Individual Quiz (Module 1, 2 and 3): (30%) end of module 3 Test 1 will be a paper based exam which with multiple option questions and descriptive questions. The exam will evaluate the student understanding on the Design Thinking Approach, Philosophy, Framework and Tools. **Assignment** - Blog (Individual + Group) (Module 3 and 4):15% (assigned at the beginning of module 2 and will evolve of the course duration) The Design Thinking blog component is equivalent to the assignment and will be evaluated by the course coordinator. The blog creation assignment will be. The blog will be based on application of Design Thinking Framework and Tool and will be document a DT experience, the blog will be evaluated on process, inferences, creativity, clarity. This blog will be hosted in the blog website "Medium" and will remains as an artefact in the web domain for future evolution. **Test 2** Group Presentation: Problem in Context with DT Phases (Module 3 and 4): 20% will be conducted during module 4 The group presentation component will be evaluated by the course coordinator (40 %), an external faculty (40 %) from the department of business studies, and peer evaluated (20%). **Test 3** DT Use Case (Minimum viable Product Unique Case) (Module 5 and 6): 35% will be conducted during module 6. Each team will create a present and submit a use case: a minimum viable product they developed for their problem using design thinking The final presentation minimum viable product and report submission will be assessed by a three-member panel, course coordinator (50 %), internal

	observer and an external faculty (30 %) (course reviewer / industry domain expert). A peer contribution component will be a part of the individual assessments.