22 BA 3L1-DESIGNTHINKING

Course Code	22 BA 3L1	Course Delivery Method	Class Room / Blended Mode
Credits	4	CIA Marks	30
No. of Lecture Hours / Week	05	Semester End Exam Marks	70
Total Number of Lecture Hours	75	Total Marks	100
Year of Introduction :1987	Year of Offering :2017	Year of Revision :2019	Percentage of Revision :10%
Course Focus	Employability	Entrepreneurship	Skill Development.

Course Description: The word "design" has traditionally been used to describe the visual aesthetics of objects such as books, websites, products, interiors, architecture, and fashion. But increasingly, the definition of design has expanded to include not just artifacts but strategic services and systems. As the challenges and opportunities facing businesses, organizations, and society grow more complex, and as stakeholders grow more diverse; an approach known as 'Design Thinking' is playing a greater role in finding meaningful paths forward. This course will demystify design thinking beyond the media and business buzzword and provide students with the tools to integrate design thinking into their own public service practice.

Course Outcomes: By the end of the course students will be able

- CO-1 To understand and be able to explain the design thinking process;
- CO-2 To advocate for design thinking in an organizational context;
- CO-3 To understand and embody the dynamic mindset necessary for effective design thinking;
- CO-4 To understand the historical and cultural context of design thinking;
- CO-5 To facilitate and run a design thinking process in a team or organizational context;

COURSE CONTENT

UNIT – I: Introduction to Design Thinking: Concept, Purpose, Process, Principles; Stages of Design Thinking, Importance of Design Thinking, and Benefits of Design Thinking, Design Thinking and Innovation, Design Thinking Mindset. (10 Hours)

UNIT-II: Design Thinking Approach: Fundamental Concepts: Empathy, Ethnography,
Divergent Thinking, Convergent Thinking, Visual Thinking, Assumption Testing, Prototyping;
Design Thinking Resources – People, Place – Materials- Organizational Fit. (12 Hours)

UNIT-III: Design Thinking Methodology: Process Stages of Designing for Growth -What Is, What If- What Wows -What Works; Design Thinking Tools and Methods: Purposeful Use of Tools and Alignment with Process, What Is: Visualization- What Is: Journey Mapping- What Is: Value Chain Analysis, What Is: Mind Mapping- What If: Brainstorming- What If: Concept Development, What Wows: Assumption Testing- What Wows: Rapid Prototyping, What Works: Customer Co-Creation- What Works: Learning Launch. (15 Hours)

UNIT-IV: Design Thinking Processes: Double Diamond Process, 5 Stage d. School Process: Empathize, Define, Ideate, Prototype, and Test, Designing for Growth Process, Design Thinking impact on the Workspace dynamics, Designing the collective experience. **(10 Hours)**

UNIT-V: Design Thinking Application: Design Thinking in Manufacturing, Design Thinking in Service Sector, Design Thinking in Social Sector; Time for Learning and Validation; Future-Forward: Design Thinking for Co-Creation. (10 Hours)

PRACTICAL COMPONENT:

- Build a Design Thinking Framework The Design Thinking Team, What Constitutes a Design Thinking Team?
- Create a Design Thinking Team Design Thinking Workshops and Meetings Characteristics Types of Workshops
- Define the Point of View Ideate, Develop Potential Solutions, Feedback on the Solutions Prototype Alternate Solutions.
- Setting Up the Observation Showing Empathy Define and Ideation Techniques Unpacking Exercise: Unpack to the Wall Personas
- Create Personas for the Case Study Pattern Recognition and Connecting the Dots Prototype and Test Techniques Types of Prototypes
- Revise Franken Prototype to Refined Prototype Forms of Testing in Design Thinking
- Create an Empathy Map, Revisit the Wall
- Create an Affinity Diagram
- Create a Mind Map
- Create a Journey Map Story Telling Techniques Story Telling Throughout the Design Thinking Process Improvisation
- Tell a Story Scenarios
- Create a Set of Scenarios for the Case Study K-Scripts
- Perform Role Playing of Scenarios for the Case Study

REFERENCES:

1. John.R.Karsnitz, Stephen O'Brien and John P. Hutchinson, —Engineering Designl, Cengage learning (International edition) Second Edition, 2013. Page 100 of 154

- 2. Roger Martin, "The Design of Business: Why Design Thinking is the Next Competitive Advantage", Harvard Business Press, 2009.
- 3. Hasso Plattner, Christoph Meinel and Larry Leifer (eds), "Design Thinking: Understand Improve Apply", Springer, 2011
- 4. Idris Mootee, "Design Thinking for Strategic Innovation: What They Can't Teach You at Business or Design School", John Wiley & Sons 2013.
- 5. Yousef Haik and Tamer M.Shahin, —Engineering Design Process, Cengage Learning, Second Edition, 2011.
- 6. Book, Solving Problems with Design Thinking, Ten Stories of What Works (Columbia Business School Publishing) Hardcover 20 Sep 2013 by Jeanne Liedtka (Author), Andrew King (Author), Kevin Bennett (Author).

MODEL QUESTION PAPER

PARVATHANENI BRAHMAYYA SIDDHARTHA COLLEGE OF ARTS & SCIENCE M.B.A. (REGULAR) DEGREE EXAMINATION

Third Semester

22 BA 3L1-DESIGNTHINKING

W.e.f 2022-2023

Duration: 3 hours Maximum Marks: 70 marks

SECTION - A

 $5 \times 4 = 20 \text{ Marks}$

Answer the following

1. a) Define the term Design Thinking. (CO1) (L1)

(OR)

- b) State the purpose of Desing Thinking (CO1) (L1)
- 2. a) What is Ethnography? (CO2) (L1)

(OR)

- b) What are the resources for Design Thinking? (CO2) (L1)
- 3. a) List out different Design Thinking Tools. (CO3) (L1)

(OR)

- b) What is Learning Launch? (CO3) (L1)
- 4. a) State any two tools of Empathy. (CO4) (L1)

(OR)

- b) Differentiate ideation and prototype? (CO4) (L1)
- 5. a) What is Design Thinking Co-creation? (CO5) (L1)

(OR)

b)Define Learning.(CO5) (L1)

SECTION - B

Answer All Questions.

 $5 \times 8 = 40 \text{ Marks}$

6. a) Identify the importance and benefits of design thinking in digital organizations.(CO1) (L3)

(OR)

- b) How do you make use of the stages of design thinking in the organizations. (CO1) (L3)
- 7. a) Examine the role of Divergent Thinking, Convergent Thinking, Visual Thinking in design thinking approach. (CO2) (L4)

(OR)

b). Analyzevarious design thinking resources available for attaining organizational fit. (CO2) (L4)

- 8. a)Determine the concepts of What Is, What If- What Wows -What Works(CO3) (L5) (OR)
 - b) Appraise different design thinking tools and methods and explain purposeful use of tools and alignment with process. (CO3) (L5)
- 9. a) Describe the 5 stage Stanford process model and explain them.(CO4)(L2)

(OR)

- b) Explain Design Thinking impact on the Workspace dynamics. (CO4)(L2)
- 10. a) Examine the impact of design thinking in the manufacturing sector. Illustrate with example (CO5) (L4)

(OR)

b) Analyze the significance of design thinking in the service sector. (CO5) (L4)

SECTION-C $(1 \times 10 = 10 \text{ marks})$

CASE STUDY (COMPULSORY)

- 11. Mr. Senthil a B.Tech student with an MBA degree as well, One day noticed that around his place there were heaps of plastic bottles. Senthil was very upset with the entire thing and wanted to remove the plastic bottles as he was aware of the hazardous effects of the plastic to the environment. An innovative idea came to his mind to come up with a recycling machine which would reduce plastic waste to 80%. He wanted to build the machine, but the cost incurred on the same was huge, so he borrowed money from his parents which was not sufficient. To encourage the public, he had another idea in his mind. He thought of providing money to the ones who come up with plastic bottles which would help him serve the purpose of reducing plastic waste.
- 1. Generate the importance of being creative and following innovation with possible differences.
- 2. Integrate the guidelines to be followed during all the design thinking steps.
- 3. Derive as design thinkers the steps Mr. Senthil can take to come up with the product.
