DESIGN INNOVATION COURSE SYLLABUS

Preamble: DIC BHU to run a course where Humanities, Arts, Science and Technology students will work together to solve different design and innovation related problems, existing around us in various sector such as society, education, health, communication, transportation, lifestyle, academy or anywhere. DIC BHU is to be very open to adopt new practical approaches in teaching-learning of this diploma course and students from any field can come and learn new things to enhance innovation for a much better society. DIC BHU believes that when under multidisciplinary approaches in academia under the guidance of Expert / Mentors of all subject related areas and dedicated to help the learners to get the best ways of innovation learning and become an innovator and self-entrepreneur. Our Teaching-Learning process is open to get maximum attention towards better environment to healthy and fruitful learning practices with theory and practical classes for the solving of real problems existing in the society.

Aim: The aim of this course is to give knowledge about design and innovation and best solutions of a given problem by an appropriate and innovative design through the best investigation and design protocol for the particular problem in practical aspects.

Learning Objective: The Students will learn
1. To motivate the student for formulating the design and innovation problems.
2. To develop an understanding in solving interactive design problems and interactive user interface.
3. Basic design Protocol for innovation with the help of prototype and fabrication for user interface and user experience design methodology.
4. Spread the influence of their vision and perspective in society, community, industry, government, and academia field through their design thinking problem.

Course Content -
1. **Design thinking**
   Introduction of design thinking process
2. **Innovation**
   What are innovation and their role in our life.
3. **Ideation**
   Process of thinking in right direction, Incubation, Final ideation
4. **Brain Storming**
   The process of brainstorming, get solution by brainstorming
5. **Creativity**
   What is creativity? How to be creative, Psychological aspect of creativity?
6. **Human and Culture Centered Design**
   Design for Society, Better existing design, Design for change Cultural change, social change, Life style change.
7. **Visual communication and sketching**
   Anyone can sketch, expression of thinking and problem solving through sketch and graphic design.
8. **Prototyping & Fabrication**
   Process of Prototype design, Problems of different stages in prototype design, refines Prototype, Finalize Prototype

9. ***Engineering aspect of design***
    Electrical, Mechanical, Design, Material, Aspect, Safety and Reliability aspect
10. **Introduction of Startup with entrepreneurship approach:**
    What is entrepreneurship, being an entrepreneurship, Challenges and possibilities of Entrepreneurship? How to Start up, Start-up Fundamental, Being Successful.