PRODUCT DESIGN
2019/2020 COURSE DESCRIPTIONS
(COURSES SUBJECT TO CHANGE)

FALL SEMESTER:

IPPDPD320 - Product Design Experiential Learning, 6 Credits.

Description: With the advance of technological innovation and the increased availability of products, it has become easier to notice when bad product design happens. But what makes a design good or bad? This advanced course in product design allows students to answer such a question by exploring this still-evolving discipline from a number of perspectives. The course objective is for students to demonstrate the knowledge and skills needed to work professionally as a product designer. Students are invited to independently explore the problem area, define relevant design problems and plan the further design work. During the course, students build on previously acquired knowledge relative to the design process and apply their skills by undertaking real-world product design problem-solving projects. As part of the course assessment, students are expected to account for the design process, argue for relevant facts, social context and a user focus to justify the methods, techniques and tools used to perform, explain and visualize the process and the result. This course includes experiential learning hours with our Community Engagement Member Institutions (CEMI). CEMI are dynamic learning environments created to foster learning through a structured interaction with the community. In addition to regular lecture hours, students will be involved in learning by doing through real projects and integration with the local population and territory in order to remove cultural and learning barriers as well as to develop a strong likelihood for success in life. The experiential learning hours are fully supervised by instructors who track students step by step during their learning experience, monitor and advise according to student needs, and support student initiative. This unique learning model allows students to benefit from an all-encompassing educational experience based on theory and practice in real enterprises, learning of comprehensive operational processes, problem-solving, leadership, and management.

DIVCMM340 - Multimedia Studio I, 3 Credits.

Description: This is a studio course that focuses on the experience of producing complete, multimedia works in a project-based environment. Lectures and meetings enhance the knowledge gained through this studio course. Individual creativity is emphasized as well as creative collaboration through individual and group projects. Assignments vary in scale, and focus on appropriate planning, design and execution, as well as acquisition and creation of diverse media content. Previously introduced design and illustration concepts are reviewed with an emphasis on their integration and effective communication in multimedia works. This class includes experiential learning with CEMI.

IDPDDT300 - Design Thinking (session II), 3 Credits.

Description: Design thinking refers to creative strategies designers use during the process of designing. Focused on listening, user empathy, whole-brain thinking, collaboration, and experimentation, design thinking can be applied within any team and in any field from architecture and design to healthcare and product development. This course applies design thinking methodology to everyday problems and provides students with the tools they need to become innovative thinkers. Envisioned as a collaborative lab, this course fosters the integration of research, problem-forming and problem-solving, aesthetics, technology, prototyping, and publishing, with a strong focus on user's needs. Several tools to help students understand design thinking as a problem-solving approach are introduced throughout the course. Case-studies from different organizations that used design thinking to uncover compelling solutions are used to support instruction. This course delves into the fundamentals of th0is creative approach by immersing students in dynamic discussions, relevant readings, and team exercises. Throughout the course, students learn how to empathize with the needs and motivations of the end users, discover new ideas for solving a problem and how to apply strategies and methodologies drawn from a wider range of creative design practices.

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IDPDRD300 - Prototyping and Research in Design (session III), 3 Credits.

Description: This course is aimed at two different audiences. Design students who want to learn to build simple interactive prototypes to illustrate and study their ideas. Research-oriented students, who want to develop skills needed in design research, as well as the ability to illustrate their ideas with simple interactive prototypes, and an ability to develop those ideas through user-centered methods. In this course, students will learn how to design and prototype user interfaces to address the users and tasks identified in research. Through a series of lectures and exercises, students will learn and practice paper techniques and other low-fidelity prototyping techniques; they will learn and apply principles from graphic design, including design patterns; they will learn to write a design rationale; and how to design for specific populations and situations, including principles and practices of accessible design.

IDPDFP315 - 3-D Printing and Fabrication (session IV), 3 credits.

Description: In this advanced 3D and Fabrication course, students will learn about the practical differences between Computer Numerical Control (CNC) machining and 3D Printing and how to select the right technology for different manufacturing needs, volumes, and materials. This course will allow students to master the fundamentals of CNC operations providing learners with a thorough knowledge of CNC principles and machine structures, manufacture planning, manual part programming and editing. Investigation of materials, prototyping and testing, physical mock-ups and the application of new fabrication processes is an integral part of the course.

SPRING SEMESTER:

Course Descriptions Coming Soon!

- Multimedia Studio II Experiential Learning
- New Product Development and Management
- Product Packaging and Labeling
- Brand Management
- Portfolio Development