Interaction Design (IXD)

IXD 1200. Foundations in Interaction Design. 3 Hours.
This course introduces the various design principles that come together to create a user's experience when using a product or service. Students will gain a solid understanding of the different aspects of user experience, user behavior, cognitive processing, personas while developing a user-centered design. **COURSE LEARNING OUTCOMES (CLOs) At the successful conclusion of this course, students will be able to: 1. Explore the different areas of study within the practice of interaction design. 2. Create original images using analog and digital mediums. 3. Explain how psychological principles and cognitive processes underlie human-computer interaction. 4. Demonstrate the process of creating a successful user-centered design. 5. Explain and distinguish between good and bad design and how it affects user experiences. FA, SP.

IXD 1300. Web for Designers. 3 Hours.
This course introduces interface design principles and the production tools for building websites. Students learn the basics of HTML, CSS and other platforms used in website creation. Students will learn user experience concepts, principles and workflows including wireframes and digital prototyping. **COURSE LEARNING OUTCOMES (CLOs) At the successful conclusion of this course, students will be able to: 1. Explore the basics of HTML and CSS for building websites. 2. Create compelling user interfaces for the web using common practices and principles. 3. Develop comprehensive sitemaps and wireframes within current web design workflows. 4. Apply fundamental interface design including digital image creation and prototype development. 5. Explain and distinguish the connotation and/or denotation meaning of an image. 6. Demonstrate competency and quality of craftsmanship, ideas, and design. Course fee required. FA, SP.

IXD 2000. Intro to Tangible Interaction. 3 Hours.
This course is an introduction to the use of tangible interaction and emerging technologies. Learn about rapid prototyping, microcontrollers, and basic electronics to create unique technology interfaces. Tangible Interaction blends art, design, and technology, creating interactive spaces and experiences. **COURSE LEARNING OUTCOMES (CLOs) At the successful conclusion of this course, students will be able to: 1. Demonstrate the ability to analyze, synthesize, and develop probable solutions. 2. Describe and discuss new and innovative tangible interfaces and current technologies. 3. Demonstrate the process of planning and executing tangible interactive work. 4. Practice proficiency with various prototyping techniques and tools. 5. Demonstrate competency in the use of microcontrollers, basic circuits, and simple programming. 6. Design, implement, and communicate tangible interaction concepts. Course fee required. FA, SP.

IXD 3500. Interface Design. 3 Hours.
Students will learn a user-centered approach and process to design interfaces for web, mobile and software applications successfully. Exploration of grid structures, layouts, signs and symbols, branding, and typography as they relate to interface design. **COURSE LEARNING OUTCOMES (CLOs) At the successful conclusion of this course, students will be able to: 1. Demonstrate an understanding of the design process as it relates to User Interface design through iterative, user-centered design practices and implementations. 2. Demonstrate proficiency in the evaluation, presentation, design, and delivery of a successful User Interface. 3. Demonstrate use of appropriate layout, typography, color and visual hierarchy for User Interface design. 4. Demonstrate the ability to analyze, synthesize, and develop probable solutions. 5. Demonstrate excellent craft and strong conceptual abilities through design artifacts. 6. Collaborate on projects while working in teams. Course fee required. Prerequisites: IXD 1300 (Grade C or higher) or SE 1400 (Grade C or higher) or IXD 1200 (Grade C or higher); AND DES 2710 (Grade C or higher). FA.

IXD 4100. Interaction Design. 3 Hours.
Exploration of advanced User Interface and User Experience design. Students will learn how to use words, visual representations, objects or space, time and behavior to create successful interaction between a user and a product which enables the user to achieve their objective(s) in the best way possible. **COURSE LEARNING OUTCOMES (CLOs) At the successful conclusion of this course, students will be able to: 1. Demonstrate the ability to analyze, synthesize, and develop probable solutions. 2. Explain the process of interaction design, including crafting user flows, site mapping, sketching, wireframing, prototyping, and creating mock-ups. 3. Perform user research, develop user stories, and implement user testing. 4. Create and evaluate interactive prototypes and/or high-fidelity prototypes. 5. Demonstrate excellent craft and strong conceptual abilities through design artifacts. Course fee required. Prerequisites: IXD 1200 (Grade C or higher); AND IXD 1300 (Grade C or Higher) or SE 1400 (Grade C or higher); AND DES 2100 (Grade C or higher); AND IXD 3500 (Grade C or higher). SP.

IXD 4200. Tangible Interaction. 3 Hours.
This course explores the use of tangible interaction in relationship to emerging technologies. Students will explore the how humans interact with technology while creating tangible objects that affect how we work, play, communicate and learn. **COURSE LEARNING OUTCOMES (CLOs) At the successful conclusion of this course, students will be able to: 1. Demonstrate the ability to analyze, synthesize, and develop probable solutions. 2. Describe the process of planning and executing tangible interactive work. 3. Demonstrate excellent craft skills with strong conceptual abilities. 4. Collaborate on projects while working in teams. 5. Criticize and discuss tangible artifacts through low and high resolution prototypes. 6. Design, implement and communicate tangible interaction concepts. 7. Demonstrate practical and conceptual ways of utilizing tangible interaction. Course fee required Prerequisites: IXD 1200 (Grade C or higher); AND IXD 2000 (Grade C or higher); AND IXD 1300 (Grade C or higher); AND DES 2100 (Grade C or higher); AND DES 2780 (Grade C or higher). FA.

IXD 4995. Design for VR/XR Internship 01. 3 Hours.
Course for students seeking a certificate in Design for VR/XR. This is the first of two Seminar Courses in which students will work collaboratively with ART students and Computer Science students on VR/XR projects. Design students in this course will create interface assets for VR/XR deployment and participate in the creative process of planning, synthesizing, assembling and publishing VR/XR projects. **COURSE LEARNING OUTCOMES (CLOs) At the successful conclusion of this course, students will be able to: 1. Generate pipeline-compatible assets for VR/XR applications. 2. Revise VR/XR assets to account for feedback from team members and clients. FA.

IXD 4996. Design for VR/XR Internship 02. 3 Hours.
Follow-on course from IXD 4995. For students seeking a certificate in Design for VR/XR. This is the second of two Seminar Courses in which students will work collaboratively with ART students and Computer Science students on VR/XR projects. Projects in this course may be continuations of larger projects from ART 4995, or they may be new, more advanced projects. Design students in this course will create interface assets for VR/XR deployment and participate in the creative process of planning, synthesizing, assembling and publishing VR/XR projects. **COURSE LEARNING OUTCOMES (CLOs) At the successful conclusion of this course, students will be able to: 1. Collaborate with interdisciplinary teams to create VR/XR applications. 2. Produce VR/XR applications based on client and instructor instructions and feedback. Prerequisites: IXD 4995 (Grade C or higher). SP.