

# CORCORAN INTERACTION DESIGN (CIXD)

## Explanation of Course Numbers

- Courses in the 1000s are primarily introductory undergraduate courses
- Those in the 2000s to 4000s are upper-level undergraduate courses that can also be taken for graduate credit with permission and additional work assigned
- Those in the 6000s and 8000s are for master's, doctoral, and professional-level students
- The 6000s are open to advanced undergraduate students with approval of the instructor and the dean or advising office

### **CIXD 2015. User Interface and Digital Product Design. 3 Credits.**

Comprehensive introduction to contemporary tools and practices in user experience and interface design.

### **CIXD 2090. Narrative Media and Design Research. 3 Credits.**

Exploration of narrative forms to conceptualize, create, and evaluate interactions across design contexts and media. Use of storytelling as a tool for conducting and communicating user research. Recommended background: Prior completion of CFN 1093 or CGD 1090.

### **CIXD 2091. Systems Thinking and Human-Centered Design. 3 Credits.**

Design processes for identifying, investigating, and communicating complex problems through their underlying structures and root causes using human-centered practices that can be applied to any social challenge and/or industry. Prerequisites: CFN 1093 or CGD 1090 or the permission of the instructor.

### **CIXD 2111. Creative Code. 3 Credits.**

Procedures and methods of code-based strategies for realizing creative ideas; fundamental skills in creative coding languages and environments. Materials fee.

### **CIXD 3085. Design Futures. 3 Credits.**

Explores and contextualizes recent technological advancements, such as machine learning, big data, the internet of things, GPS, and computer vision, in order to better understand their potential for use in design. Prerequisites: CIXD 2111.

### **CIXD 3090. Human Centered Design for Social Engagement. 3 Credits.**

Studio-based introduction to participatory design processes and their application for interaction design and social innovation. Materials fee. Prerequisite: CIXD 2091.

### **CIXD 3091. Prototyping and Fabrication for Interaction. 3 Credits.**

Investigation of prototyping as a method for testing and communicating initial design assumptions and creating platforms for participatory response; refinement of associated fabrication skills. Materials fee. Prerequisites: CIXD 2091 and CIXD 2111.

### **CIXD 3110. Topics in Interaction Design Studio. 3 Credits.**

Issues in contemporary design practice. Topics vary by semester. May be repeated for credit provided topic differs. See department for more details.

### **CIXD 3112. Data Visualization and Sonification. 3 Credits.**

Tools and processes for visualizing and sonifying data sets using current web-based tools; critical analysis of data visualization examples; interactive possibilities of creating user experiences around data. Materials fee. Prerequisites: CIXD 2111 or permission of the instructor.

### **CIXD 3120. Interaction Design Internship. 3 Credits.**

For interaction design majors pursuing an internship directly relevant to program themes and goals. Permission of the major advisor required prior to enrollment. Graded on a Credit/No Credit basis. Restricted to interaction design majors.

### **CIXD 3130. Independent Study in Interaction Design. 3 Credits.**

Independent research or special projects in interaction design. Students must submit a written proposal and obtain approval of the faculty directing the course or the director of undergraduate studies for interaction design. Restricted to juniors and seniors in the interaction design program.

### **CIXD 3820. Engagement Lab. 3-6 Credits.**

Design lab with a focus on social, environmental, and community impact. Project teams collaborate with a community partner to identify and respond to local challenges that might be addressed through interaction design processes and skills. Materials fee.

### **CIXD 3910. Collaborative Design Project. 3 Credits.**

Practical experience in the conceptualization, production, and delivery of a multidisciplinary design project. Materials fee.

### **CIXD 4020. Topics in Design Research. 3 Credits.**

Key theoretical and methodological concepts in the field of interaction design connect research in design innovation with qualitative and quantitative research methods, providing insights into user behaviors, attitudes, and expectations. Prerequisites: CGD 2091 or CIXD 2091.

### **CIXD 4090. Interaction Design Thesis I. 3 Credits.**

The development of a senior thesis project and accompanying research. Student work evolves in a studio atmosphere that stresses user-oriented research, analysis, and prototyping of digital and physical interactive experiences, services, or products with a focus on social and environmental impacts. Materials fee. Restricted to Interaction Design majors. Prerequisites: CIXD 3090 and CIXD 3091.

### **CIXD 4091. Interaction Design Thesis II. 3 Credits.**

Completion of a senior thesis project and accompanying research. Student work evolves in a studio atmosphere that stresses user-oriented research, analysis, and prototyping of digital and physical interactive experiences, services, or products with a focus on social and environmental impacts. Materials fee. Restricted to undergraduate interaction design majors. Prerequisite: CIXD 4090.

**CIXD 4193. Design Leadership and Professional Practice. 3 Credits.**

Experiential study of professional practices of interaction designers and the leadership skills that promote innovative, equitable, and sustainable design solutions. Restricted to undergraduate interaction design majors. Prerequisites: CIXD 3091.

**CIXD 6001. Design Intensive. 1-3 Credits.**

Design processes for students transitioning careers or entering a design graduate program from a non-design background; design thinking, design tools and technologies, digital imaging, sketching, model making and prototyping. Recommended background: No prior experience is necessary.

**CIXD 6005. Systems Thinking and Human Centered Design. 3 Credits.**

Students determine and analyze aspects of design for social impact, identifying leverage points for change. Through the process of human-centered design and systems thinking, unmet needs of customers, workers, and stakeholders are discovered.

**CIXD 6010. Interaction Design for Service. 3 Credits.**

Tools and approaches for developing interactive services and experiences. Students work to define and frame problems, generate innovative proposals, and think comprehensively about the social, ethical, and organizational models surrounding the solutions they design. Restricted to graduate students in the interaction design program or with the permission of the instructor.

**CIXD 6011. Narrative Media Design for Interaction. 3 Credits.**

Exploration of narrative as a method to conceptualize, communicate, and evaluate interactions across design contexts and media; key aspects of narrative and event structure as a method for framing and analyzing designed interaction. Restricted to graduate students in the interaction design program or with the permission of the instructor.

**CIXD 6012. Prototyping Interaction. 3 Credits.**

Investigation of prototyping as a method for testing and communicating initial design assumptions, establishing feedback processes, creating platforms for participatory response, improving design ideas, and assessing the life-cycle implications of design solutions. Restricted to graduate students in the interaction design program or with the permission of the instructor.

**CIXD 6014. Creative Code. 3 Credits.**

Procedures and methods of code based strategies for realizing creative ideas. Students develop fundamental skills in creative coding languages and environments.

**CIXD 6015. User Interface and User Experience in the Twenty-First Century. 3 Credits.**

Comprehensive introduction to contemporary tools and practices in user experience and interface design.

**CIXD 6020. Topics in Human Centered Design. 3 Credits.**

Critical analysis of human-centered design methods in public policy and civic contexts using a case study approach. Topics vary by semester. See department for details. Prerequisites: CIXD 6010, PPPA 6006 and PPPA 6011.

**CIXD 6021. Design Leadership and Professional Practices. 3 Credits.**

A practice-based study of leadership skills that promotes innovative, equitable, and sustainable design solutions while developing organizational understanding, strategies to lead through complex challenges, and communicating the potential of design. Prerequisites: CIXD 6005 and CIXD 6011.

**CIXD 6025. Design Futures. 3 Credits.**

Explores and contextualizes recent technological advancements, such as machine learning, big data, the internet of things, GPS, and computer vision, in order to better understand their potential for use in design. Prerequisites: CIXD 6014.

**CIXD 6080. Engagement Lab. 3-6 Credits.**

Design lab with a focus on social, environmental, and community impact. Project teams collaborate with a community partner to identify and respond to local challenges through interaction design. Restricted to graduate students in the interaction design program or with the permission of the instructor.

**CIXD 6090. Topics in Design Research. 3 Credits.**

Key theoretical and methodological concepts in the field of interaction design; connecting research in design innovation with research methods that offer insight into users' behaviors, attitudes, and expectations. Topics vary by semester. See department for more details. Restricted to graduate students in the interaction design program or with the permission of the instructor.

**CIXD 6110. Studio Topics in Interaction Design. 3 Credits.**

Issues in contemporary design practice. Topics vary by semester. May be repeated for credit provided topic differs. Consult the Schedule of Classes for more details.

**CIXD 6111. Creative Code. 3 Credits.**

Procedures and methods of code based strategies for realizing creative ideas; fundamental skills in creative coding languages and environments. Restricted to graduate students in the interaction design program or with the permission of the instructor.

**CIXD 6112. Data Visualization and Sonification. 3 Credits.**

Tools and processes for visualizing and sonifying data sets using current web-based tools; critical analysis of data visualization examples and interactive possibilities of creating user experiences around data. Students are expected to have foundational knowledge of digital design processes prior to enrollment. Restricted to graduate students in the interaction design program or with the permission of the instructor. Recommended background: Prior experience with digital imaging and web-based tools.

**CIXD 6120. Interaction Design Internship. 1-3 Credits.**

Students in the graduate program in interaction design pursue an internship directly relevant to program themes and goals. Permission of the director of graduate studies is required prior to enrollment. Graded on a CR/NC basis.

**CIXD 6130. Directed Research in Interaction Design. 3 Credits.**

Independent research or special projects in interaction design. Students must submit a written proposal and obtain approval of the faculty member directing the course or the program's director of graduate studies. Restricted to graduate students in interaction design.

**CIXD 6210. Interaction Design Capstone I. 3 Credits.**

Development of project and research, stressing user-oriented research, analysis, prototyping of digital and physical interactive experiences, products. Restricted to graduate students in the interaction design program. Prerequisites: CIXD 6010, CIXD 6011, and CIXD 6012.

**CIXD 6220. Interaction Design Capstone II. 3 Credits.**

Continuation of CIXD 6210. Completion of project and related research. Emphasis on user-oriented research, analysis, and prototyping of digital and physical interactive experiences, services, or products. Restricted to graduate students in the interaction design program. Prerequisites: CIXD 6210.

**CIXD 6999. Interaction Design Thesis II. 3 Credits.**

Completion of thesis project and related research. Emphasis on user-oriented research, analysis, and prototyping of digital and physical interactive experiences, services, or products with a focus on their social and environmental impact. Restricted to graduate students in the interaction design program. Prerequisites: CIXD 6998.