

# DD 640 - User Interface/User Experience in Digital Design

Spring 2025

## Course Modality:

This is an online course, which will be conducted fully online, asynchronously via Canvas. For more information on using Canvas and other supported learning tools, visit the IST Service Desk [Knowledgebase](#).

## Instructor Information

| Instructor       | Email  | Office Hours  |
|------------------|--|---|
| Adam Spryszynski | <a href="mailto:as2569@njit.edu">as2569@njit.edu</a> | Instructor office hours via Webex are available by appointment. Please email me to schedule a time to meet. |

I will respond to all emails/Inbox messages within 48 hours. Assignments, discussions, and design journals will be graded every two weeks.

## General Information

### Course Description

Application of theories, research methods, ethics, and design processes of UI/UX (user interface/user experience) design. Students will research, develop, and test basic UI/UX designs. Design strategies will be discussed as they apply to physical, virtual, and hybrid prototype solutions.

### Prerequisites/Co-requisites

None

## Course Learning Outcomes

By the end of the course, students will be able to:

- **CLO1:** Discuss the role that UX plays in design of interactive media.
- **CLO2:** Create and condense design concepts into an actionable goal and establish a clear vision.
- **CLO3:** Distinguish different design models and processes, and justify their application in a project.
- **CLO4:** Design and prototype an interactive media product through multiple stages of fidelity.
- **CLO5:** Evaluate the effectiveness of design.

## Required Materials

While no textbook is required for this course, it is strongly recommended that you select a device that meets the [minimum specifications](#) capable of using design software programs such as [Adobe Creative Cloud](#), [Unity](#), or [Unreal Engine](#).

## Kepler

Kepler is the Hillier College of Architecture and Design's (HCAD) online repository for all undergraduate and graduate work. During this course, you will be required to submit assignments to Kepler in addition to Canvas. For guidance on logging into and using Kepler, please see the [Using Kepler](#) article in the IST Knowledge Base. If you encounter any issues, please submit a request to the [IST Service Desk](#).

## Grading Policy

[NJIT Grading Legend](#)

## Final Grade Calculation

Final grades for all assignments will be based on the following percentages:

|                             |            |
|-----------------------------|------------|
| <b>Discussions</b>          | <b>20%</b> |
| <b>Assignments</b>          | <b>15%</b> |
| <b>Design Journals</b>      | <b>15%</b> |
| <b>Course Reflection</b>    | <b>5%</b>  |
| <b>Project Deliverables</b> | <b>20%</b> |
| <b>Final Project</b>        | <b>25%</b> |

## Course Work

- **Discussions: (20% of grade)** This course will feature many two-tier discussions. You will be placed in a group based on your individual project and interests. As a group, you will discuss readings and other materials and present a unified response

for a class-wide discussion. You will be asked to take turns acting as your groups' representatives from week to week. Please keep in mind that if you don't contribute in this role 3 amount of times, your discussion grade will be lowered by 3 percent.

- **Assignments: (15% of the grade)** The assignments in this course will allow you to practice applying what you have learned hands-on. These will be crucial in solidifying your grasp on the fundamental ideas which you will need to start working on your project.
- **Design Journals: (15% of the grade)** The design journal is an opportunity for you to train your designer's eye. You will document both good and bad design in everyday life and submit one entry per week.
- **Course Reflection: (5% of the grade)** The course reflection is an opportunity to consider and reflect on what you have learned. A great emphasis is placed on personal and professional growth, your experiences overcoming challenges, and how your perspective on design has changed throughout the course.
- **Final Project:** There will be a project that you will work on continuously throughout the semester. You will have opportunities to iterate and revise your work based on peer and instructor feedback through regular **project deliverables** (20% of your final course grade), culminating in the **final project** submission itself (25% of your final course grade).

Regular project work will include creating a design document, a living document that you will be expected to fill out and revise as your project progresses, as well as physical prototyping. You will be expected to construct, test, and iterate prototypes that evaluate the effectiveness of all major features of your final project.

Your final submission will be focused on the digital (or mixed reality) implementation of your idea. You will be evaluated on implementation of your physical prototype, presentation and polish, usability, and meeting the goals that you set for yourself in the design document.

In Canvas, some activities have been integrated with [VoiceThread](#). For guidance, please see VoiceThread's documentation on [how to comment](#) and [how to add slides](#). You may find their guide [Getting around in VoiceThread](#) helpful as well.

## Feedback

I will deliver feedback on each assignment using the comments feature in Canvas.

## Letter to Number Grade Conversions

|   |        |
|---|--------|
| A | 90-100 |
|---|--------|

|    |       |
|----|-------|
| B+ | 85-89 |
| B  | 80-84 |
| C+ | 75-79 |
| C  | 70-74 |
| F  | 0-69  |

### Exam Information and Policies

This course does not have any exams. Per the NJIT [Online Course Exam Proctoring Policy](#), this course will use authentic assessment, meaning you will be assessed and graded on your ability to deliver real-world outputs as well as your participation and feedback to other students.

### Policy for Late Work

Assignments will be accepted late, but they will be marked down ten percent for each day they are late. The final project cannot be more than three days late. If your assignment is late due to an emergency, this must be documented with the Dean of Students ([dos@njit.edu](mailto:dos@njit.edu)) in order for it not to have an impact on your grade.

### Academic Integrity

*“Academic Integrity is the cornerstone of higher education and is central to the ideals of this course and the university. Cheating is strictly prohibited and devalues the degree that you are working on. As a member of the NJIT community, it is your responsibility to protect your educational investment by knowing and following the [NJIT academic code of integrity policy](#).*

*Please note that it is my professional obligation and responsibility to report any academic misconduct to the Dean of Students Office. Any student found in violation of the code by cheating, plagiarizing or using any online software inappropriately will result in disciplinary action. This may include a failing grade of F, and/or suspension or dismissal from the university. If you have any questions about the code of Academic Integrity, please contact the Dean of Students Office at [dos@njit.edu](mailto:dos@njit.edu)”*

## Netiquette

Throughout this course, you are expected to be courteous and respectful to classmates by being polite, active participants. You should respond to discussion forum assignments in a timely manner so that your classmates have adequate time to respond to your posts. Please respect opinions, even those that differ from your own, and avoid using profanity or offensive language.

## Weekly Expectations

This course is organized by weekly modules. Each week, you will watch lecture videos, complete any associated readings and assignments, participate in a class discussion, and submit a design journal entry by Sunday at 11:59 pm (note, initial discussion responses will be due every Thursday at 11:59 pm). You will also work on a project throughout the semester, with opportunities to iterate and revise your work.

## Course Schedule

| Week | Topic                           | Assignments/Due Dates   |
|------|---------------------------------|---|
| 1    | Introduction and Design Process | <ul style="list-style-type: none"><li>● <b>Introduce Yourself</b><ul style="list-style-type: none"><li>○ Due Sunday at 11:59 pm</li></ul></li><li>● <b>Module 1 Assignment: Favorite Toy Design</b><ul style="list-style-type: none"><li>○ Due Sunday at 11:59 pm</li></ul></li><li>● <b>Module 1 Design Journal</b><ul style="list-style-type: none"><li>○ Due Sunday at 11:59 pm</li></ul></li></ul>  |
| 2    | Design Processes and Models     | <ul style="list-style-type: none"><li>● <b>Module 2 Discussion: Design Models</b><ul style="list-style-type: none"><li>○ Initial posts due Thursday at 11:59 pm.</li><li>○ Replies to classmates due by Sunday at 11:59 pm.</li></ul></li><li>● <b>Project Deliverable 1: Project Planning Using the Double Diamond</b><ul style="list-style-type: none"><li>○ Due Sunday at 11:59 pm.</li></ul></li><li>● <b>Module 2 Design Journal</b><ul style="list-style-type: none"><li>○ Due Sunday at 11:59 pm.</li></ul></li></ul>  |
| 3    | Interaction Design              | <ul style="list-style-type: none"><li>● <b>Module 3 Discussion: Categorizing Interactions (VoiceThread)</b><ul style="list-style-type: none"><li>○ Initial post due by Thursday at 11:59 pm.</li><li>○ Replies to classmates due by Sunday at 11:59 pm.</li></ul></li><li>● <b>Module 3 Assignment: Breaking Down Interaction Design</b><ul style="list-style-type: none"><li>○ Due Sunday at 11:59 pm</li></ul></li><li>● <b>Project Deliverable 2: Starting Your Project</b><ul style="list-style-type: none"><li>○ Due Sunday at 11:59 pm</li></ul></li><li>● <b>Module 3 Design Journal</b><ul style="list-style-type: none"><li>○ Due Sunday at 11:59 pm</li></ul></li></ul> |
| 4    | Prototyping and Testing         | <ul style="list-style-type: none"><li>● <b>Meet Your Project Community!</b></li><li>● <b>Module 4 Discussion: Discovering Prototyping Techniques (VoiceThread)</b><ul style="list-style-type: none"><li>○ Initial post and replies to group member due by Thursday at 11:59 pm.</li><li>○ Group representative video by Sunday at 11:59 pm.</li></ul></li><li>● <b>Project Deliverable 3: First Prototypes</b><ul style="list-style-type: none"><li>○ Due Sunday at 11:59 pm</li></ul></li></ul>  |

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|----|---|---|
|    |   | <ul style="list-style-type: none"> <li>● <b>Module 4 Design Journal</b> <ul style="list-style-type: none"> <li>○ Due Sunday at 11:59 pm</li> </ul> </li> </ul>  |
| 5  | User Testing                                      | <ul style="list-style-type: none"> <li>● <b>Module 5 Discussion: Prototype Critique</b> <ul style="list-style-type: none"> <li>○ Initial posts due Thursday at 11:59 pm.</li> <li>○ Replies to classmates due by Sunday at 11:59 pm.</li> </ul> </li> <li>● <b>Project Deliverable 4: Testing Your Prototypes</b> <ul style="list-style-type: none"> <li>○ Sunday at 11:59 pm</li> </ul> </li> <li>● <b>Module 5 Design Journal</b> <ul style="list-style-type: none"> <li>○ Sunday at 11:59 pm</li> </ul> </li> </ul>  |
| 6  | Affordances and Design Metaphors                  | <ul style="list-style-type: none"> <li>● <b>Module 6 Discussion: Discussing Affordances (VoiceThread)</b> <ul style="list-style-type: none"> <li>○ Initial post and replies to group member due by Thursday at 11:59 pm.</li> <li>○ Group representative video by Sunday at 11:59 pm.</li> </ul> </li> <li>● <b>Module 6 Assignment: Identifying Affordances</b> <ul style="list-style-type: none"> <li>○ Due Sunday at 11:59 pm</li> </ul> </li> <li>● <b>Module 6 Design Journal</b> <ul style="list-style-type: none"> <li>○ Due Sunday at 11:59 pm</li> </ul> </li> </ul>   |
| 7  | UX, Human-Computer Interaction (HCI) and Academia | <ul style="list-style-type: none"> <li>● <b>Module 7 Discussion: Collaborative Paper Review</b> <ul style="list-style-type: none"> <li>○ Initial posts due Thursday at 11:59 pm.</li> <li>○ Replies to classmates due by Sunday at 11:59 pm.</li> </ul> </li> <li>● <b>Module 7 Assignment: Learning from HCI Research</b> <ul style="list-style-type: none"> <li>○ Due Sunday at 11:59 pm</li> </ul> </li> <li>● <b>Project Deliverable 5: Project Check-In</b> <ul style="list-style-type: none"> <li>○ Due Sunday at 11:59 pm</li> </ul> </li> <li>● <b>Module 7 Design Journal</b> <ul style="list-style-type: none"> <li>○ Due Sunday at 11:59 pm</li> </ul> </li> </ul> |
| 8  | Minimum Viable Product (MVP)                      | <ul style="list-style-type: none"> <li>● <b>Module 8 Discussion: Critique Session Prior to Implementation</b> <ul style="list-style-type: none"> <li>○ Initial posts due Thursday at 11:59 pm.</li> <li>○ Replies to classmates due by Sunday at 11:59 pm.</li> </ul> </li> <li>● <b>Project Deliverable 6: Planning Your MVP</b> <ul style="list-style-type: none"> <li>○ Due Sunday at 11:59 pm</li> </ul> </li> <li>● <b>Module 8 Design Journal</b> <ul style="list-style-type: none"> <li>○ Due Sunday at 11:59 pm</li> </ul> </li> </ul>  |
| 9  | Interface Design                                  | <ul style="list-style-type: none"> <li>● <b>Module 9 Discussion: Interface Design (VoiceThread)</b> <ul style="list-style-type: none"> <li>○ Initial post and replies to group member due by Thursday at 11:59 pm.</li> <li>○ Group representative video by Sunday at 11:59 pm.</li> </ul> </li> <li>● <b>Module 9 Assignment: Finding Inspiration for Interface Design</b> <ul style="list-style-type: none"> <li>○ Due Sunday at 11:59 pm</li> </ul> </li> <li>● <b>Module 9 Design Journal</b> <ul style="list-style-type: none"> <li>○ Due Sunday at 11:59 pm</li> </ul> </li> </ul>  |
| 10 | Human Factors and Ergonomics                      | <ul style="list-style-type: none"> <li>● <b>Module 10 Discussion: Discussing Ergonomics and Human Factors (VoiceThread)</b> <ul style="list-style-type: none"> <li>○ Initial post and replies to group member due by Thursday at 11:59 pm.</li> <li>○ Group representative video by Sunday at 11:59 pm.</li> </ul> </li> <li>● <b>Project Deliverable 7: Human Factors in Your Design</b> <ul style="list-style-type: none"> <li>○ Due Sunday at 11:59 pm</li> </ul> </li> </ul>  |

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|    |                                    | <ul style="list-style-type: none"> <li>● <b>Module 10 Design Journal</b> <ul style="list-style-type: none"> <li>○ Due Sunday at 11:59 pm</li> </ul> </li> </ul>   |
| 11 | Accessibility and Universal Design | <ul style="list-style-type: none"> <li>● <b>Module 11 Discussion: Problems and Solutions in Universal Design (VoiceThread)</b> <ul style="list-style-type: none"> <li>○ Initial post and replies to group member due by Thursday at 11:59 pm.</li> <li>○ Group representative video by Sunday at 11:59 pm.</li> </ul> </li> <li>● <b>Module 11 Assignment: Accessibility and Universal Design</b> <ul style="list-style-type: none"> <li>○ Due Sunday at 11:59 pm</li> </ul> </li> <li>● <b>Module 11 Design Journal</b> <ul style="list-style-type: none"> <li>○ Due Sunday at 11:59 pm</li> </ul> </li> </ul> |
| 12 | Ethical Design                     | <ul style="list-style-type: none"> <li>● <b>Module 12 Discussion: Ethical Design (VoiceThread)</b> <ul style="list-style-type: none"> <li>○ Initial post and replies to group member due by Thursday at 11:59 pm.</li> <li>○ Group representative video by Sunday at 11:59 pm.</li> </ul> </li> <li>● <b>Module 12 Assignment: Ethical Issues in Design</b> <ul style="list-style-type: none"> <li>○ Due Sunday at 11:59 pm</li> </ul> </li> <li>● <b>Module 12 Design Journal</b> <ul style="list-style-type: none"> <li>○ Due Sunday at 11:59 pm</li> </ul> </li> </ul>                                       |
| 13 | Look and Feel                      | <ul style="list-style-type: none"> <li>● <b>Module 13 Discussion: Identifying Look, Feel, and Polish</b> <ul style="list-style-type: none"> <li>○ Initial posts due Thursday at 11:59 pm.</li> <li>○ Replies to classmates due by Sunday at 11:59 pm.</li> </ul> </li> <li>● <b>Project Deliverable 8: Improving the Look and Feel</b> <ul style="list-style-type: none"> <li>○ Due Sunday at 11:59 pm</li> </ul> </li> <li>● <b>Module 13 Design Journal</b> <ul style="list-style-type: none"> <li>○ Due Sunday at 11:59 pm</li> </ul> </li> </ul>  |
| 14 | Future of UX                       | <ul style="list-style-type: none"> <li>● <b>Module 14 Discussion: Trends and Emerging Technology in UX (VoiceThread)</b> <ul style="list-style-type: none"> <li>○ Initial post and replies to group member due by Thursday at 11:59 pm.</li> <li>○ Group representative video by Sunday at 11:59 pm.</li> </ul> </li> <li>● <b>Module 14 Design Journal</b> <ul style="list-style-type: none"> <li>○ Due Sunday at 11:59 pm</li> </ul> </li> <li>● <b>Course Reflection</b> <ul style="list-style-type: none"> <li>○ Due Sunday at 11:59 pm</li> </ul> </li> </ul>  |
| 15 | Final Projects                     | <ul style="list-style-type: none"> <li>● <b>Final Project Submission</b> <ul style="list-style-type: none"> <li>○ Due Sunday at 11:59 pm</li> </ul> </li> <li>● <b>Final Project Presentation (VoiceThread)</b> <ul style="list-style-type: none"> <li>○ Due Sunday at 11:59 pm</li> </ul> </li> <li>● <b>Module 15 Design Journal</b> <ul style="list-style-type: none"> <li>○ Due Sunday at 11:59 pm</li> </ul> </li> </ul>   |

## Additional Information and Resources

**Accessibility:**

This course is offered through an accessible learning management system. For more information, please refer to Canvas's [Accessibility Statement](#) and [VoiceThread's Accessibility Features](#).

**Requesting Accommodations:**

The Office of Accessibility Resources and Services works in partnership with administrators, faculty, and staff to provide reasonable accommodations and support services for students with disabilities who have provided their office with medical documentation to receive services.

If you are in need of accommodations due to a disability, please contact the [Office of Accessibility Resources and Services](#) to discuss your specific needs.

**Resources for NJIT Online Students**

NJIT is committed to student excellence. To ensure your success in this course and your program, the university offers a range of academic support centers and services. To learn more, please review these [Resources for NJIT Online Students](#), which include information related to technical support.