

Course Description:

IDM teaches an integrated approach to creating successful products, businesses, and solutions to hard-to-define problems. You will learn a structured, holistic human-centered design process incorporating the best practices of design, engineering, and business.

This class will help you develop an understanding of qualitative user research and concept generation techniques that will allow you to uncover what people need and develop creative solutions to meet those needs. A deep understanding of customers will maximize the odds of product success and derisk ideas. We will prototype apps and websites using user interface and user experience design principles. These learnings will be applied in a team project exploring services and digital products.

Syllabus (subject to change):

- Week 1
 - Introduction to human-centered design and user experience research
 - The agile process
- Week 2
 - Qualitative research, research planning
 - User research methods: interviews
- Week 3
 - User research methods: observations
 - Debriefing and the future of qualitative research
- Week 4
 - Research analysis, need finding
 - Personas, journey maps, service blueprints
- Week 5
 - Research review presentations
 - Creative concept generation
- Week 6
 - Digital prototyping - wireframing, site blueprinting, structuring information
 - Paper prototype testing workshop
- Week 7
 - Basic finance and pricing
 - Market sizing and business models
- Week 8
 - Go to market strategy
 - Concept design & business model review
- Week 9

- Intellectual property
 - Prototyping and usability evaluation
- Week 10
 - Digital product management
- Week 11
 - Google Material design principles
 - Branding
- Week 12
 - The investor pitch
 - UX case study
- Week 13
 - Presentation feedback and practice
 - Final presentations
- Week 14
 - Class wrap-up and debrief

Teaching Staff:

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Teaching Assistants

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Enrollment Policy:

IDM classes are available by application only.

Class Meetings:

Lecture: Mondays & Wednesdays 2:00PM - 3:30PM

Lab: Mondays & Wednesdays 3:30PM - 5:00PM

Location

IDM Studio: Building 4-013

Office Hours:

Course faculty are available to meet students and teams during lecture/lab sessions and by appointment.

Classroom Standards:

During class, we adhere to [MIT Sloan Professional Standards](#) for academic conduct and academic integrity. Students must comply with all personal conduct and team collaboration standards. You must treat everyone with respect at all times. This also includes coming to class on time, no mobile phone or laptop computer usage during in-person class presentations and discussions, and conducting one conversation at a time. Please use your name card when guests are presenting in-person.

Academic Integrity:

Full group and class collaboration on all aspects of this course is highly encouraged. However, when writing and presenting material (ideas, data, graphics, photos, text, etc.) based on the work of others, it is necessary to cite such sources appropriately.

Class Preparation and Participation:

Reading assignments for each class session are given in the class schedule which is posted in the Canvas course site. You are expected to come to class prepared to discuss the readings and the suggested questions. Any updates to the syllabus and/or schedule will be posted to Canvas.

Design & Research Reviews:

We will conduct several formal design reviews during the semester. Your presentations for these reviews should be professional caliber and should communicate your work in a compelling way, and you should assume that your audience knows very little about your project. Informal design reviews will take place as needed during your lab time ensuring plenty of feedback from the teaching team.

Workload

This is a 12-unit, full-semester MIT course. It is expected that you will spend approximately 12 hours per week on this course. Early design decisions will have a significant impact on the hours required through the semester.

Grading

Your course grade will be determined as follows:

- 25% UX Design Project: Research Review (individual + team effort)
- 25% UX Design Project: Concept Design & Business Model Review (individual + team effort)
- 30% UX Design Project: Final Design Review (individual + team effort)
- 10% Peer Review
- 10% Professionalism

There will be two peer reviews to foster effective communication and teamwork.

Professionalism includes attendance, class participation, respect for all, and adherence to the [Sloan Professional Standards](#).