Description

This half semester course will propel you toward entrepreneurship and the power it has to shape the world we live in. Through experiential learning in a workshop setting, you will start to develop the skillset and the mindset of an entrepreneur. The leadership skills and curiosity of the entrepreneurial mind are qualities that are highly sought after across all industries and throughout the startup space.

Entrepreneurs in the built environment identify problems and opportunities that need to be addressed in order to improve the human condition, and develop an effective solution.

We will first focus on framing a problem (before solving one) in order to understand the needs of people who experience them. This process will include interviews, data collection and analytical observation. You will identify real problems and then work in teams to determine their scope and start to develop a solution.

In 11.345, teams will create new venture proposals for the built environment as a method to understand the role of the entrepreneur in the fields of design, planning, construction, real estate, transportation and other related industries.

The class is taught by MITdesignX – the center for entrepreneurship and innovation at the School of Architecture and Planning. MITdesignX supports students, faculty and researchers in SA+P and across the institute with help in project ideation, startup resources, and an annual accelerator program for selected teams. In past years, several ideas and teams formed in 11.345 have applied and successfully entered the accelerator. *This class is not a prerequisite for the accelerator.

Instruction Team

Svafa Grönfeldt, Professor of Practice SA+P; Faculty Director, MITdesignX
Gilad Rosenzweig, Executive Director, MITdesignX
Kate Mytty, Design Equity Lead, MITdesignX

TA: Joél Carela
Course Schedule

SEPT 8 CLASS 1: STARTUP DYNAMICS

Introduction to human-centered approaches to design solutions and venture creation followed by a discussion about what is an entrepreneur, what drives an entrepreneur, and your entrepreneurial interest and intentions.

In the second part of the class we will discuss how to identify specific needs and problems in the cities, buildings, systems and societies we live in, laying the foundation for your identifying a project to work on throughout the class.

In-class assignment:

- Self-assessment activity for entrepreneurship; Shared reflections on the activity

HW Assignment:

- You will explore (physically or virtually) within a 1-mile radius in the city or place where you live, and identify up to 10 problems/opportunities that you determine need [better] solutions.

  Document your findings with photos, maps, graphs or any data you deem appropriate.

- Then choose one problem/opportunity and quickly propose a solution (a product or service) for it.

  Create a one-minute recorded “micro-pitch”, using an image(s), video or other form of graphic representation to clearly demonstrate why this problem and solution are worth working on.

Deliverables:

- List and document problems/opportunities, including photos, videos, etc.
- Upload a recorded 1-minute pitch (using slides or other media) demonstrating the problem/opportunity and general proposal for a venture. These 1-minute proposals will be presented to the entire class in the next session.
Readings:

- **Four Steps to the Epiphany.** Steve Blank. Chapters 1+2
- **Change by Design.** Tim Brown Introduction + Chapters 1+2
- **Emotional Design: Why We Love (or Hate) Everyday Things.** Don Norman Chapter 5: People, Places and Things
- **The Founder’s Dilemma.** Wasserman, Noam. Chapters 1, 3 + 5

SEPT 15  CLASS 2: IDEAS, MICRO PITCHES AND TEAM SELECTION

The second class will start with a recorded round of “lightning” pitches by all students, identifying the problem/opportunity they selected and their initial “solution”.

We will lead a discussion to reflect on the process used in identifying and selecting a venture proposal.

Students will vote on the proposals, and the top 5-8 projects will be selected. You and a team of approximately 3-4 people will then choose a project to join as a team for the remainder of the course. Keep in mind that the project you work on might not be one that you proposed. The goal of the workshop is to learn the methodology of venture design in order to support your own ventures beyond the class.

**HW Assignment:**

- Organize a team meeting to start the development of the venture
- Establish expectations and goals for the group / individual members
- Begin initial market research to identify the breadth and characteristics of potential customers

**Deliverables:**

- Market research

**Readings:**

- **Creative Confidence.** David Kelley and Tom Kelley, Intro + Chapter 1
SEPT 22 CLASS 3: NEEDS AND MARKETS

In this class, we review techniques to help guide teams to clearly define the needs and goals of each venture proposal and understand who is their customer. Teams will workshop a problem statement and learn how to explore various market segments.

**In-Class Activity:**

Part 1: Needs Analysis

Teams return to the problem and using their market research redefine the needs statement that will steer their venture forward.

Part 2: Market Segmentation

**Deliverables:**

Finalize the in-class assignments:

- Needs/problem statement
- Market Segmentation Chart

**Readings:**

- Disciplined Entrepreneurship, Bill Aulet. Steps 1+2

SEPT 29 CLASS 4: ENTREPRENEURSHIP IN AN ECOSYSTEM

In this class, we will ask you to look at the problem you identified through the larger lens of society – the ecosystem within which we live. All problems require an understanding of the greater context they exist in order to evaluate the causes, stakeholders and drivers of an existing challenge – and to plan for the potential impacts a solution could have.

**In-Class Activity:**

- TBD

**HW Assignment:**

- Stakeholder Map
- Team Values
OCT 6       CLASS 5: SOLUTION EXPLORATION - MISSION DESIGN + VALUE PROPOSITION

In class five you define the mission for your venture and begin to design or outline the solution itself. You will also demonstrate the value that your solution will need to provide, and determine whom you provide that value to.

In-class activity:

- Workshop a mission statement
- Teams work on drafting value proposition statements.

Deliverables:

- Create a set of design specification for your solution. Include a description of what your product or service will do, how people will use it, and what it might look or act like.
- Develop your value proposition

Readings:

- *Creating and Delivering Your Value Proposition*. Barnes et al. Part 1
OCT 13  CLASS 6: VENTURE PITCHING

In this final class before presentations, we review best practices and methods for communicating your venture ideas in a clear and convincing way to different audiences. We will discuss how to narrate and convey the story of your venture, and review what makes a powerful pitch deck.

In class activity:

- Venture storyline workshop
- Storyboard workshop

Deliverables:

- User Journey Sketch
- Final pitch deck (PPT or PDF)

OCT 20  PITCH PRESENTATIONS

Each team will present their developed proposals.

*This syllabus is subject to final changes and adjustments before the start of classes in order to best align with an online teaching format.
COURSE REQUIREMENTS

Work for 11.345 will include class participation, research, presentations, and documentation of business proposal and workshop deliverables. Student grades will be determined as follows:

- Class Participation: 40%
- Group Assignments: 30%
- Final Pitch + Presentation: 30%

Canvas is MIT’s web-based platform that contains all relevant information for the course. You need MIT web certificates installed on your computer. See the Instructors if you have any problems.

Students and all participants are expected to attend each class. Repeated absences or lack of participation on a team project will be noted and, if not resolved, will affect your grade. As the class only meets 7 times, more than 1 absence will not be accepted.

INTELLECTUAL PROPERTY

The work and ideas you develop in this class will not be considered IP of MIT unless ideas were developed prior to the class or current to it as part of research or lab work at MIT, or if any other MIT rules apply to your work. If there are patents in your possession or MIT IP applicable to your ideas please consult with the instruction team.

Any new ideas or technology shared or proposed in the class will be considered open and non-exclusive information for all members of the class. In such case that a team or individual wishes to pursue a venture based on an idea shared in the class, they will not possess exclusive rights to the idea. If you believe you are creating an algorithm, code, or design that could be patented or copyrighted and want to protect your rights as an inventor, please consult with instruction staff prior to disclosing material.

RETURN TO IN-PERSON TEACHING/LEARNING

MIT and DUSP are excited at the opportunity for a return to in-person teaching and learning after 2+ semesters of remote life. To ensure that all classes can and will be delivered in person, MIT has worked hard to put into place policies, procedures and technologies to maximize the likelihood of a safe and uninterrupted semester. That said, the ever-evolving pandemic means we need to be prepared. If any student in class tests positive for covid-19, MIT Medical has established clear procedures for ensuring safety of everyone and MIT’s Class Notification and Support Team will help that student continue learning to with the least possible disruption. If any of the Instructors in this class are unable to attend in person due to covid-19, we will work together with the leadership of DUSP, the School, and the Institute to ensure minimum disruption.

In the case of the need for any remote teaching, we will use this “zoom classroom”: TBD
ANTI-RACISM

In this class, we look carefully at problems and opportunities in the human environment. Moreover, we look at them from the perspective of those who are underrepresented or have suffered from, or continue to suffer from racism or the effects of past racism or social injustice.

LAND ACKNOWLEDGEMENT STATEMENT

MIT acknowledges Indigenous Peoples as the traditional stewards of the land, and the enduring relationship that exists between them and their traditional territories. The land on which we sit is the traditional unceded territory of the Wampanoag Nation. We acknowledge the painful history of genocide and forced occupation of their territory, and we honor and respect the many diverse indigenous people connected to this land on which we gather from time immemorial.

INCLUSIVE CLASSROOM

MIT values an inclusive environment. I hope to foster a sense of community in this classroom and consider this classroom to be a place where you will be treated with respect. I welcome individuals of all backgrounds, beliefs, ethnicities, national origins, gender identities, sexual orientations, religious and political affiliations – and other visible and nonvisible differences. All members of this class are expected to contribute to a respectful, welcoming, and inclusive environment for every other member of the class. If this standard is not being upheld, please feel free to speak with me.

SPECIAL ACCOMMODATIONS

MIT is committed to the principle of equal access. Students who need disability accommodations are encouraged to speak with Disability and Access Services (DAS), prior to or early in the semester so that accommodation requests can be evaluated and addressed in a timely fashion. If you have a disability and are not planning to use accommodations, it is still recommended that you meet with DAS staff to familiarize yourself with their services and resources. Please visit the DAS website for contact information.

If you have already been approved for accommodations, class staff are ready to assist with implementation. Please inform Gilad Rosenweig giladr@mit.edu AND Joel Carela jcarela@mit.edu who will oversee accommodation implementation for this course.

ACADEMIC INTEGRITY

In this course, I will hold you to the high standard of academic integrity expected of all students at the Institute. I do this for two reasons. First, it is essential to the learning process that you are the one doing the work. I have structured the assignments in this course to enable you to gain a mastery of the course material. Failing to do the work yourself will result in a lesser understanding of the content, and therefore a less meaningful education for you. Second, it is important that there be a level playing field for all students in this course and at the Institute so that the rigor and integrity of the Institute’s educational program are maintained.
Violating the Academic Integrity policy in any way (e.g., plagiarism, unauthorized collaboration, cheating, etc.) will result in official Institute sanction. Possible sanctions include receiving a failing grade on the assignment or exam, being assigned a failing grade in the course, having a formal notation of disciplinary action placed on your MIT record, suspension from the Institute, and expulsion from the Institute for very serious cases.

Please review MIT’s Academic Integrity policy and related resources (e.g., working under pressure; how to paraphrase, summarize, and quote; etc.) and contact me if you have any questions about appropriate citation methods, the degree of collaboration that is permitted, or anything else related to the Academic Integrity of this course.

STUDENT SUPPORT

Undergraduate Students: Student Support Services (S3)

If you are dealing with a personal or medical issue that is impacting your ability to attend class, complete work, or take an exam, you should contact a dean in Student Support Services (S3). S3 is here to help you. The deans will verify your situation, provide you with support, and help you work with your professor or instructor to determine next steps. In most circumstances, you will not be excused from coursework without verification from a dean. Please visit the S3 website for contact information and more ways that they can provide support.

Website: https://studentlife.mit.edu/s3

Graduate Students: GradSupport

As a graduate student, a variety of issues may impact your academic career including faculty/student relationships, funding, and interpersonal concerns. In the Office of Graduate Education (OGE), GradSupport provides consultation, coaching, and advocacy to graduate students on matters related to academic and life challenges. If you are dealing with an issue that is impacting your ability to attend class, complete work, or take an exam, you may contact GradSupport by email at gradsupport@mit.edu or via phone at (617) 253-4860.

Website: https://oge.mit.edu/development/gradsupport/