ENTREPRENEURSHIP LAB

15.399 – MIT Sloan School of Management, Spring 2022

E51-325, TUESDAY 7-10pm
Preliminary Syllabus
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E-Lab is a project-based action learning course, in which teams of students are matched to startups to work on problems of strategic importance to the venture.

E-Lab goals include

- Gaining experience with fast-paced, massively scalable startup companies
- Applying academic knowledge to the problems faced by entrepreneurial firms in a context of uncertainty, extreme time pressure and decision making based on limited information
- Learning quickly about a new industry, technology, market
- Strengthening your ability to analyze technical feasibility, to identify early-adopters and the right target market, and define a path to commercialization, ultimately delivering real value to the startup

- Learning key tools and skills needed in entrepreneurial ventures, including the ability to effectively coordinate work in a diverse team
- Providing exposure to entrepreneurial environments to inform future career decision

Quick Overview

E-Lab is a 12-unit course and involves a significant body of independent work in a fixed time period. Projects vary widely, but typically involve investigating potential markets for a new technology using primary market research, evaluating the competitive and strategic landscape, finding the right path to commercialization E-Lab is a hands-on course, so be prepared to spend a lot of time with customers and experts.

The course includes both MIT Sloan students, non-Sloan graduate students, and students from Harvard (and beyond). Each team will include a mix of students with business and non-business backgrounds.

Logistics
Course website: https://mitsloan.mit.edu/action-learning/e-lab
Canvas website: https://canvas.mit.edu/courses/14296

At this time, this is expected to be an in-person class only. E-Lab involves significant independent initiative. You should regularly check the course website for any updates or information.

Grading
The grading this term will be a letter grade. The main learning from E-Lab takes place outside the classroom, when students apply the frameworks and tools discussed in class to real world problems. The grading is meant to reflect your ability to work with your team to effectively deliver value to your startup. Final grades will be based on the following components:

- **Class attendance and participation (10%)**
- **Weekly pre-class assignments (10%)**
- **Team peer evaluations (25%)**
- **Project scope (10%)**
- **Intermediate in-class presentation (15%)**
- **Final in-class presentation, executive summary, and appendix (30%)**

Final presentation to host companies will take place *after* your final in-class project presentation. While the course faculty will follow-up with host companies, host companies are *not* part of the grading process.

Class Format

Teams will spend the semester working on their E-Lab project, with frequent, regular company contact. Several sessions will be dedicated to giving you feedback on your progress. Faculty will also arrange meetings outside of class time to provide additional input to the teams and check-in with the startups.

Each session has been designed to cover tools and concepts that every entrepreneur should understand, and students should be able to apply these tools and concepts to their host companies. Given the diversity in project objectives however, not every class session may be directly relevant to your specific project.

Attendance and Participation
- Class participation and attendance are together 10% of your grade. It is important that you attend and participate in every class.
- One excused absence will be allowed. Please email the TA in advance to be granted an excused absence.

Weekly Pre-Class Assignments
- Weekly pre-class assignments are 10% of your grade and will typically be due right before class at 7pm (unless stated otherwise). Some assignments will be individual and some will be team assignments.
- These assignments are designed to be brief and meant to help you make progress with your projects by asking you to think about how frameworks we learn in class apply to your projects.
- These pre-class assignments will be graded pass/fail. Late submissions (even by 1 minute! no exceptions) will get half credit. If you have an excused absence, you have until the following class to submit the pre-class assignment; any later submission will get half credit.

Team Peer Evaluations
- Team peer evaluations make up a big portion of your grade (25%), as team dynamics are essential to a startup and to this course.

Working with Your Host Company

We will assist you with companies to establish a weekly touch point. You should factor this into your selection of the project.

The first and most important task following the formation of E-Lab teams is setting up the first follow-up meeting with your matched host company. The aim of this meeting is to specify project objectives, agree to major milestones, and define how you will measure success.

We have found that teams that spend the time upfront learning as much as possible about

their host company have better outcomes. There are three critical issues that you will need to manage with your host company – expectations, access, and timing.

Expectations - Successful E-Lab projects are those that are able to focus on a well-defined, relatively narrow, but critical problem for the host company. Given the turbulent life of a startup, E-Lab projects often change or refine their scope during the semester. During your first meeting with your host company, the entire team should work hard to identify what aspects of the project are of direct interest to the host company, and what barriers are anticipated in terms of access, analysis, and implementation.

Access - All E-Lab host companies are expected to offer access and engagement by the company leadership to help shape the overall objectives of the project and allow you to get your project completed in a timely and effective way. Frequent high-level contact has been a key element of past successful E-Lab projects (meet with your host company every week or at least once every two weeks). Access to prospective or actual customers is also essential for E-Lab projects. You must address this issue up-front with your host companies.

Timing - Front-load the project! The semester goes by very quickly and involves a lot of work. Most teams will be working with outsiders, and so you will not have control over scheduling issues. During the semester, remain in close contact with your company and the course faculty.

> ⚠️ **Please reach out to the faculty if there is a problem setting expectations and getting access to your startup: we would rather intervene early!**

Your final formal presentation to the host company typically occurs after your final MIT presentation/feedback session. After your final presentation to the company, the course faculty will close the loop with the founders to see how they felt the project went. **Your course grade will depend only on your internal MIT evaluation, not on the views of the company**. But we encourage you to ask for feedback from the company as you proceed.

Working with Your E-Lab Team

One of the objectives of E-Lab is to have students gain experience in working within a diverse team. In E-Lab, each student is also a teacher. Engineering and science students will be important in helping their teams understand the relevant technology. MBA students will help others understand how to analyze business performance. All team members will complete an intermediate and a final 360-degree evaluation of their team.

Professionalism and Ethics

You are a representative of MIT. Your behavior will affect people's opinions of you and of MIT. As a representative of the MIT community, it is your responsibility to be competent, ethical, professional, and polite. Ethics require special attention with startups and technology companies. You have already agreed to maintain the confidentiality of the company

information on the course website. **Host companies may ask you to sign a non-disclosure agreement (NDA). When this happens, please reach out to the course faculty, as MIT has a special process for NDAs.** Ask the company to be clear on the information you can or cannot share, whether or not MIT signs an NDA on your behalf. In general, the more openly you can discuss what you are doing, the more insights you will generate, and the more useful your project will be to the company; but the company must weigh this against protecting their key information. Some companies may be in stealth mode, and cautious of revealing too much.

You absolutely may not work on a company or project where you have any conflict of interest, such as connection to a competitor. Please do not take any chances about this requirement; if there is any question whatsoever, speak with the course faculty before you choose a company.

You may face ethical issues when you interview customers, competitors and others during your field research. Start by saying that you are an MIT student working on a course project with a company. If an interview subject asks which company, tell them. If an interview subject asks for additional information, be careful with the information you release. If a potential subject refuses - or demands inappropriate information as the price of cooperation - politely thank them and decline. You'll find that most people will be happy to help, especially if you are straightforward with them, and make it clear why you value their opinions and what you will do with them.

Class Schedule - Tuesdays, 7-10pm

#	Date	Topic
1	2/1	- Introduction (Speed Dating, Review Questions to Ask Startups) – Kim - Meet & Greet with Startups
2	2/8	- NDA (Guest Lecture by Ellen Baum) - Scoping Your E-Lab Project & Team Dynamics - Umar - Project team time
3	2/15	- Secondary Market Research, PMR, and Leveraging Your Network - Dip - Review project scopes with faculty
	2/22	- NO CLASS: MONDAY SCHEUDLE
4	3/1	- Disciplined Entrepreneurship - Kim - Project team time
5	3/8	- Team Meetings with Faculty (All Virtual)
	3/15	- NO CLASS: SIP WEEK
	3/22	- NO CLASS: SPRING BREAK
6	3/29	- Storytelling & Fundraising - Dip - Project team time
7	4/5	- Intermediate Team Presentations

8	4/12	- Entrepreneurial Strategy (Guest Lecture by Erin Scott) - Project team time
9	4/19	- Entrepreneurial Founding Teams (Guest Lecture by Kit Hickey) - Panel of Founders - Umar
10	4/26	- Team Meetings with Faculty (All Virtual)
11	5/3	- Designing Your Entrepreneurial Journey - Kim
12	5/10	- LAST CLASS: Final In-Class Presentations
	5/17	- NO CLASS: Final Host Company Presentation

CLASS 1: Introduction / Meet & Greet with Startups

Welcome to E-Lab! It is crucial that you attend the first class as we will provide rich content to get you started on your E-Lab experience. In the first half of class, we will introduce the course with time for speed dating. In the second half of class, we will have the host companies come in remotely, and you will have a chance to meet with each founder. You should have questions ready to ask (see weekly homework #1 below).

Weekly pre-class assignment #1 (due before class at 7pm): We have recruited some great startups: each company is relatively young, has a "real" technology or prototype, may have raised early-stage funding, and, more importantly, has the potential of being massively scalable. Carefully review the startups' profiles and come up with 1-2 questions to ask each startup during meet & greet. This is an individual assignment.

Students will have to submit their ranking of the top 5 startups they would like to work with and why (300 words max) by Wednesday, February 2nd at 11:59pm. Based on your preferences, we will form teams and match each team to a startup before the second class.

CLASS 2: Scoping Your Project, Team Dynamics, and NDA

Scoping your project requires you to identify the problem you would like to solve with your host company and building a roadmap for the semester. Coming up with a clear scope is a key ingredient towards launching a successful E-Lab project. Another important aspect of E-Lab is teamwork: many of your teammates will be from different programs and institutions. Learning to work together in diverse teams forms the heart of E-Lab experience. We will ask each team to discuss norms and set expectations. Finally, Ellen Baum will discuss NDA processes.

Weekly pre-class assignment #2 (due before class at 7pm): Contact your host company and schedule your first meeting; let us know when you will be meeting with them. This is a team assignment.

Your project scope is due on Monday, February 14th at 9:00am.

CLASS 3: Secondary Market Research, Primary Market Research, and Leveraging Your Network

We will first introduce you to library research resources that will be helpful for you during the semester. We will then discuss primary market research (PMR), as most of your final recommendations to your host company will be based on PMR. We will explore qualitative and quantitative methods for collecting and analyzing original data for your E-Lab project and discuss the importance of beachhead market/persona.

Weekly pre-class assignment #3 (due before class at 7pm): In preparation for our discussion on PMR and leveraging your networks, each team should brainstorm 3 pie-in-the-sky, home-run connections you'd like to make for your projects and briefly explain why in 1-2 sentences. For example, if you were writing a book, maybe it's Oprah. If you're building a space propulsion tech, maybe it's Elon Musk. This is a team assignment.

Recommended readings: "*Talking to Humans* and *Testing with Humans*, by Giff Constable and edited by Frank Rimalovski. Ask for a free digital copy as a student here. Learn about the books here.

CLASS 4: Disciplined Entrepreneurship

We will learn about the 24 steps of "Disciplined Entrepreneurship" and discuss how the framework could apply to your projects.

Weekly pre-class assignment #4 (due before class at 7pm): Review https://www.d-eship.com: write one paragraph on where you think your project stands in the DE framework. Which steps are the most relevant for your project? This is an individual assignment.

⚠️ **Intermediate Peer Team Evaluations are due on Friday, March 4th at 5:00pm.**

CLASS 5: Team Meetings with Faculty

Each team will have a 20-minute meeting with the faculty team over Zoom to review their progress.

Weekly pre-class assignment #5 (due on day of class at 9am): In preparation for your meeting with faculty, send us a) 1-page agenda, focusing on current bottlenecks in your project and b) a list of people you contacted (even if you never received a reply) for PMR, as well as those you're planning to contact. This is a team assignment.

CLASS 6: Storytelling & Fundraising

We will learn about how to tell your story behind your company – storytelling is all about focus, emotion, and rapid iteration. Then we will learn about one application of storytelling: fundraising.

Weekly pre-class assignment #6 (due before class at 7pm): You will be asked to watch two videos and brainstorm a few bullet points on how you might tell your host company's story and

what kind of funding they might seek. This is an individual assignment.

⚠️ **All teams have to submit their intermediate presentation slides and supporting materials by Sunday, April 3rd at 11:59pm.**

CLASS 7: Intermediate Presentations
Each team will give a presentation, summarizing your research to date and provide preliminary insights. We will ask the class to give feedback to each other.
Weekly pre-class assignment #7: None.

CLASS 8: Entrepreneurial Strategy
Erin Scott, Senior Lecturer at Sloan, will focus on the broader question for startup ventures of how to develop and implement an effective entrepreneurial strategy. We will focus on the key strategic tradeoffs entrepreneurs face in choosing an entrepreneurial strategy, and how effective E-Lab projects can help a startup to establish and then sustain competitive advantage.
Weekly pre-class assignment #8 (due before class at 7pm): Read Gans, Scott, and Stern, Harvard Business Review, "Strategy for Start-Ups." Write one paragraph on which of the four strategies your startup is pursuing. This is an individual assignment.

CLASS 9: Entrepreneurial Founding/Teams & Panel of Founders
First half of the class will discuss founder issues in starting a venture with guest lecturer Kit Hickey, Founder of Ministry of Supply and Senior Lecturer at Sloan. We will then have a panel of guest speakers and former Sloanies who will share their experience of founding a startup.
Weekly pre-class assignment #9 (due before class at 7pm): We will have a panel of fantastic guest speakers who will discuss founder's journey. Come up with a list 1-2 questions you'd like to ask each founder. You should ask any question that may come up regarding how these folks grew/scaled their business. This is an individual assignment.

CLASS 10: Team Meetings with Faculty
Each team will meet with faculty over Zoom to review their progress. During the meeting we will discuss your progress in your final presentation and address any issues in completing the project.
Weekly pre-class assignment #10 (due on day of class at 9am): Send us a 1-page agenda for your meeting with the faculty. This is a team assignment.

CLASS 11: Designing Your Entrepreneurial Journey
This class will focus on connecting your understanding of self and your potential entrepreneurial journey using the Knowledge, Skills, and Abilities (KSAs) framework.
Weekly pre-class assignment #11 (due on Monday before class at 9am): We will ask you to complete a KSA exercise. This is an individual assignment.

All teams need to submit their slides, executive summary, and supporting appendix by Sunday, May 8th at 11:59pm. Final team evaluations are due on Monday, May 9th at 5pm.

CLASS 12: Final In-Class Presentations
This will be the final formal meeting of E-Lab. Each E-Lab project team will make a formal presentation, followed by Q&A.
Weekly pre-class assignment #12: None.

Final Week (NO CLASS): Presentations to Host Company
Each E-Lab team will arrange a mutually convenient time to arrange a presentation to senior members of the executive team at your host company. After your final presentation to the host, course faculty will close the loop to see how they felt the project went. Your course grade depends only on your internal MIT evaluation, not on the views of the company.