ENTREPRENEURSHIP LAB

15.399 – MIT Sloan School of Management, Fall 2020

E62-350, TUESDAY 9:30am-12:30pm
PRELIMINARY SYLLABUS - Subject to change
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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: Link TBD

At this time, this is expected to be an online and in-person class. 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. You may opt to take the class pass/fail; however, your teammates on projects will need you to participate fully. 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 status check-ins (10%)**
- **Project scope final draft (10%)**
- **Intermediate in-class presentation (15%)**
- **Final in-class presentation, executive summary, and appendix (30%)**
- **Team peer evaluations (25%)**

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. Classes are scheduled weekly from 9:30am-12:30pm on Tuesday mornings. 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.

While the precise rhythm will vary, below is the typical structure of the class:

- At the start of every class, we will randomly ask two teams to present project updates (this weekly status check-ins count 10% of your grade). The purpose is for the faculty to provide real-time feedback, as well as to facilitate discussions with the rest of the class.
- Then we will have a lecture or a workshop on the topic of the week, as well as project time for teams

Attendance and Participation

- Class participation and attendance is key because we only have twelve classes, it is extremely important that you attend and participate in every class.
- Participation will be graded each class on a scale of 0, 1, and 2. You receive a score of zero if you do not participate; a score of one if you participate, and a score of two if you participate and move the class discussion in a meaningful way
- For those of you joining remotely, we ask that you turn on your cameras barring wifi issues.
- Team dynamics are essential to a startup and to this course. Team peer evaluations are 25% of your grade.

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 and the TA 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. **The team evaluation contributes to 25% of the total class grade.**

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

Tuesday 9:30am-12:30pm

#	Date	Topic
1	September 1st	Introduction, Speed Dating, NDA, and DE Framework
2	September 8th	Meet & Greet and Primary Market Research
3	September 15th	Ecosystem Resources, Scoping Your E-Lab Project and Team Dynamics
4	September 22nd	Open topic: Evaluating a market or strategy (depending upon needs of class)
5	September 29th	Leveraging Your Network
6	October 6th	Team Meetings with Faculty
	October 13th	No Class: MONDAY SCHEDULE DUE TO COLUMBUS DAY
7	October 20th	Intermediate Team Presentations
8	October 27th	Entrepreneurial Strategy
9	November 3rd	Startups and Funding
10	November 10th	Team Meetings with Faculty
11	November 17th	Self-Understanding and Entrepreneurship
	November 24th	No Class: Thanksgiving
12	December 1st	Final In-Class Presentations – LAST CLASS
	December 8th	No Class: Final Host Company Presentation

Pre-Course Work: Exploring Ventures and Teams
We have recruited some great startups: each company is relatively young, has a "real" technology or prototype, may have raised early-stage funding but, more importantly, has the potential of being massively scalable.

Before the first class, students are required to carefully read the profiles of the startups that will pitch (material at Canvas website). Students should also read the following articles on Disciplined Entrepreneurship: Bill Aulet's "The Most Overrated Thing in Entrepreneurship" and "Avoid Stagnation: How Acceleration Trumps Incubation."

CLASS 1: Introduction, Team Formation, NDA, Startup Pitches, and DE Framework
Welcome to E-Lab! It is crucial that you attend the first class as we will a) provide rich content to get you started on your E-Lab experience and b) begin matching you to startup teams. In the first half of class, we will introduce the course and discuss team formation (maximum 4-6 people) with time for speed dating. We will then learn about the 24 steps of "Disciplined Entrepreneurship" framework. We will also go over the NDA process.

In the second half of class, the startups will present video pitches to you to present the strategic problems they are facing.

CLASS 2: Meet & Greet and PMR
In the first half, we will have the startups come in remotely, and students will have a chance to meet with each host company. Students should have questions ready to ask during breakout rooms with each founder. In the second half, Nick Albaugh will discuss resources in the ecosystem, and then we will learn about primary market research. Most of your final recommendations to your host company will be based on primary market research. In this session, we will explore qualitative and quantitative methods for collecting and analyzing original data for your E-Lab project.

Required 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. **Suggested reading:** Anderson & Simester, Harvard Business Review, "A Step-by-Step Guide to Smart Business Experiments" **Suggested lecture:** David vs. Goliath (Ted Talk and audio commentary on NPR by Malcolm Gladwell)

Students will have to submit their ranking of the top 3 startups they would like to work with and why (300 words max) by Wednesday, September 9th at 11:59pm. Based on your preferences, we will form teams and match each team to a startup.

CLASS 3: Scoping your E-Lab Project and Team Dynamics
Three of the key challenges of E-Lab are (a) scoping a mission-critical project with your host

company that nonetheless can be achieved within the constraints of a single semester and (b) working effectively with your host company as a team in order to achieve a strong final result and (c) working effectively with your team. In this class, we will provide key tools to address these challenges.
Required readings: "All the Things You're doing Wrong in Negotiations" & "Actually, Do Let Them See You Sweat: The Science Behind Why Sweating Before Negotiating Is Good"

Panel of previous E-Lab students with recommendations

The final project scope slide is due on Monday, September 21st at 9:00am.

CLASS 4: Open Topic
Depending on student needs and interests, we will cover one of the two potential topics below:

- **Evaluating a Market:** Considerations when evaluating a market: size, concentration, complexity, competition, regulatory/legal impediments are key areas that will be discussed. Go to market strategy will be reviewed and exercises will include top down and bottoms up market sizing, calculating TAM, SAM and SOM. **Required reading:** Matrix Partner David Skok's article on TAM sizing.
- **Strategy**

CLASS 5: Leveraging Your Network
We will discuss how to leverage your network and reach necessary experts. We will also invite a panel of founders and investors for discussion.

Peer Team Evaluations are on Friday, October 2nd at 5:00pm.

CLASS 6: Team Meetings with Faculty
Each team will meet with faculty to review their progress. During the meeting we will discuss primary market research or experimental data deliverable and review content for intermediate presentations that will be due the following week. 30 minutes with faculty.

CLASS 7: Intermediate Presentations

All teams have to submit their slides and supporting materials by Sunday, October 18th at 11:59pm.

CLASS 8: Entrepreneurial Strategy
The first part of the session (guest lecture by Erin Scott) 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 trade-offs entrepreneurs face in choosing an entrepreneurial strategy, and how effective E-Lab projects can help a startup to establish and then sustain competitive advantage. **Required reading:** Gans, Scott, and Stern, Harvard Business Review, "Strategy for Start-Ups"

CLASS 9: Startups and Funding
This class will discuss founder issues in starting a venture with guest lecturer Kit Hickey. In addition, we will cover funding with a panel on how startups at different stages of their evolution can fund their growth. We will briefly discuss crowdfunding, angel and venture capital investment, and discuss how the E-Lab startups could benefit from different sources of capital. **Required reading:** "A Guide to Seed Fundraising" and Sequoia's pitch template. **Required watch:** Airbnb's pitch.

CLASS 10: Team Meetings with Faculty
Each team will meet with faculty to review their progress. During the meeting we will discuss your progress in your presentation and address any issues to complete the project.

CLASS 11: Self-Understanding and Entrepreneurship
This class will focus on connecting your understanding of self and your potential entrepreneurial journey. **Required watch:** A TED talk on being an entrepreneur.

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.

All teams need to submit their slides, executive summary, and supporting appendix by Sunday, November 29th at 11:59pm. Final team evaluations are due before the final presentation.

CLASS 13 (NO CLASS): Final Presentations – 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.