Entrepreneurship Laboratory (E-Lab)

Course Note for 2015

Draft Dated December 14th 2015 (Version 1.0)

E-Lab is a project-based course, in which teams of students work on projects for local (typically high-tech) start-up firms. E-Lab host companies already have people, outside funding and working technology (although sometimes not a specific application for it). Some have products and revenues; others do not. E-Lab's objectives include:

- Teaching skills needed in entrepreneurial ventures, especially "customer discovery," which includes analyzing target markets, defining customer value propositions, assessing product requirements and developing go to market strategies;
- Understanding what it is like to work in fast-paced entrepreneurial firms;
- Providing an opportunity to apply academic knowhow in an entrepreneurial setting;
- Allowing you to learn quickly about an unfamiliar industry, technology, and market;
- Providing experience of managing a project in the face of many unknowns.

E-Lab firms represent a diverse range of industries and technologies, including Web2.0, Mobile, Software, Clean Tech, Healthcare and Medical Devices. We look for firms that are relatively small (<40 employees) to maximize potential impact. We focus on local ventures, to maximize the opportunity for face-to-face interactions. We recruit more host firms than teams, so students have a wide choice of possible projects.

Projects vary widely, but a typical project might involve investigating potential markets for a new technology, matching a technology/solution to particular customer needs, defining and quantifying the value proposition for target customers, and/or developing a market entry strategy. Projects are rigorously screened to fit course objectives.

E-Lab is a hands-on course, where students learn by doing. You should be prepared to spend a lot of time meeting and talking with your host firm, potential customers and industry/technology experts. We meet as a class once a week for 2.5 hours. The remainder of your time should be spent on activities that will contribute to your project. In total, we expect students in E-Lab to devote about one day a week to the course.

In-class sessions will focus on teaching practical tools and skills required to complete your projects. The emphasis will be on exploring the process of what has been called "customer discovery". This includes identifying attractive target market(s), defining robust customer value propositions, specifying early market/product requirements and developing go to market strategies. Class sessions will combine the use of cases, interactive lectures (from both faculty and outside guests), team exercises (in which you are asked to apply specific tools to your project) and team presentations.

Course Information

Classroom: Batten Hall 205. (Some classes will be held in the iLab classroom.)

Class Time: Tuesday 5:00 pm – 7:30 pm. (Typically, class will be divided into two sessions separated by a 15-20 minute break.)

Faculty: **Alan MacCormack**, Morgan Hall 443 (amaccormack@hbs.edu)

Faculty Assistant: Ethi Al-Mahdi (617-384-7295)

Office Hours: by appointment (contact Faculty Assistant)

Program Manager: **Susanna Lynch**, (617-496-8747; email = elab@hbs.edu)

Questions about course logistics and host firms/projects.

Websites: External: www.hbs.edu/mba/academic-experience/elab/

Course website: canvas.hbs.edu (available Dec 17th 2016).

Enrollment: Non-HBS graduate students are encouraged to take the course; diversity contributes to project success. We hope that each team can include at least one non-HBS graduate student, especially from STEM areas. Cross-registrants should submit an application by Jan 15th 2016 via the external website noted above.

Attendance: We only meet for a small number of sessions, so it is important that you attend every class. Attendance will be taken. Reasons for absence should be provided in advance via the registrar (HBS students) or by email to the program manager (cross-registrants).

Materials: A packet of materials is available from MBA course distribution. Supplemental materials will be made available online.

Role of the E-Lab Program Manager

The E-Lab program manager is the main resource for communicating with host firms. They can provide help if your team needs assistance contacting/working with the host.

If you wish to have conference calls with your host, you should use the Spangler project rooms. If you require other resources (e.g., space or technology) for interacting with host firms, contact the E-lab program manager. Note we expect teams to spend a substantial amount of time meeting with and working with their host **on-site**.

The faculty will lead all class sessions, hold periodic mentoring meetings with teams, and assess all student grades. Additional resources for coaching teams are available to teams through the HBS Entrepreneurs in Residence program.

COURSE DETAILS

Before the First Class

The faculty has carefully selected the set of host firms and projects for this course. The industries represented are chosen to mirror student interests. Host firms are screened to ensure that i) they are "real" opportunities (i.e., they have technology and funding); ii) they are small in size (hence an E-Lab team can have significant impact); and iii) they have a local presence (so the team can work with employees face-to-face). We recruit more host firms than student teams, to provide a choice of projects.

You must review all E-Lab project proposals before the first class. The final portfolio of projects will be made available on the Canvas website on January 19th. **After reading the proposals, please indicate your top three project preferences by January 24th.** This information is not binding, but will be used to facilitate team formation in class.

All students must also send a 1-page resume to the program manager by January 15th. These will be made available to other students via the Canvas website on January 19th.

We encourage you to use the course website before the first class, to identify projects that match your interests as well as students you want to work with. Informal virtual networking, with host firms and with other students is encouraged. However, you may not formally commit to working with a specific firm or team prior to the first class.

First Class: Team Formation Process and Host Firm Projects

In the first class, we will introduce the course, begin the team formation process, and hear host firms describe their projects. Potential teams, team members, and representatives from host firms will then have an opportunity to network thereafter. Students are encouraged to bring laptops to the first class for further online research.

Teams should consist of 4 members. Teams of 3 or 5 will be accepted only if this is the best way to meet student preferences. When forming a team, consider first whether you share the same passions in terms of target industries and projects. Then consider whether you have complementary skills and backgrounds. Historically, more diverse teams have performed better in E-Lab, and students in them report learning more.

Team formation is inherently a messy process. While we kick off this process in class, using information about your preferences and experiences, the onus is on you to network with other students and to find those with complementary skills and interests. Given more time, we might devote more classes to get to know each other before forming teams. But this would significantly reduce the amount of time for the project. In contrast, the focus in E-Lab is to maximize the time spent working with host firms. (You will still learn a lot from getting to know and working with your teammates).

After the First Class: Forming Teams and Ranking Projects

We expect students to form teams <u>before</u> the second class. Prior to the second class, we will ask each team to identify its members, and rank its top 3-5 project choices. We will allocate teams to host firms based upon these preferences. While we attempt to give each team its top project choice, sometimes this proves impossible. Hence your team should consider multiple projects, and be open and flexible.   In the second class, we will devote time to launching your team and planning the project.

Working with Your Host Company

Once you learn your host firm, you should call/email them to arrange your first meeting. The first task in working with your host is to agree details about the project objectives, scope, outputs, tasks, interim milestones and working arrangements. All E-Lab projects are screened in terms of objectives and scope, but startups move quickly and priorities shift. Hence it is important you revisit these topics. We will ask you to submit a written and signed "project agreement" prior to the third class.

A critical topic for the first meeting with your host is access, both to senior managers, and to customers and prospects. Frequent high-level contact is a key element of successful E-Lab projects. Access to prospective or actual customers is also essential. You should address this issue up-front with your host, and agree expectations for how much access you will have. You should also ask them whom to approach if expectations are not being met, and you need help resolving the issue.

It is important to front-load your project. The semester goes by quickly and involves a lot of work. Furthermore, you will face challenging logistical issues associated with gaining access to managers, customers, prospects and experts. Not

everyone you want to talk to will be willing to meet, nor available in your timeframe (especially in B2B projects). Your team's ability to ramp-up and "get out the building" quickly will be key.

At the end of term, you will present the results of your project first to faculty, and then to your host firm. In the faculty presentation, you will receive feedback on how to improve your presentation to increase the impact of your work. Your project grade will depend only on the faculty evaluation, and not on the views of your host firm.   However, you should ask for feedback from your host firm throughout the term.

Professionalism and Ethics

During your project, you are a representative of HBS. Your behavior will affect people's opinions of you and of HBS. Please take care to behave in a way that supports and strengthens the HBS brand. Be competent, ethical, professional, and polite.

Ethics require special attention in start-ups and technology companies. First of all, 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.

You are asked to maintain the confidentiality of host firm information on the Canvas website. Host firms may also ask you to sign a non-disclosure agreement (NDA). This is normal, and we have developed a standard NDA for you to use. In most cases, firms have agreed to use this NDA. If they ask you to sign a different NDA, contact the E-Lab program manager, and provide them with a copy of the agreement for approval.

Whether or not you sign an NDA, ask your host firm to be explicit about the information you can share. 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. But recognize that firms must weigh transparency against protecting proprietary information.

You may face ethical issues when you interview customers, competitors and others during your field research. Say that you are an HBS student working on a project with a startup. If an interview subject asks which firm, tell them. If they ask for more details, do not share confidential information. If the subject refuses, or requests inappropriate information in return for cooperation, politely decline. You'll find most people are happy to help if you are open with them, and make it clear why you value their opinions.

Course Grading

Your grade will depend on both team and individual performance, as follows.

60%   Project Performance
- Adding significant value through rigorous and insightful analyses
- Periodic deliverables which highlight your analyses and findings
- Presentations in class and to the faculty at the end of term

20%   Peer Contribution to the Project
- Evaluation of each team members contribution by other members
- Faculty observations of team meetings, exercises and presentations

20%   Class Participation and Attendance
- Participation in class discussions, lectures and exercises
- Online discussions and personal reflections about your project

Grading follows the required curve for HBS classes. Approximately the top 20% of students will receive a category 1. The lower 10% of students will receive a category 3 (a low pass). All other students will receive a category 2.

E-Lab Course Overview 2015

Week	Date	Topic
0	January 15	Deadline for cross-registrants to apply for E-Lab
	January 19	E-Lab project portfolio available on course website
		Students submit resumes; available on course website
		Students rank project choices; available on course website
		Students may network with host firms and other students
1	January 26	**First Class. Attendance Mandatory.**
		Faculty: Course Objectives and Pedagogy
		Host Firms: Pitch E-Lab Projects in Class
		Students: Networking and Team Formation
	(February 1)	Deadline for team formation and project matching
2	February 2	**Topic: Market Selection; Team Launch**
		Case: Space Data Corporation
		Reading: Disciplined Entrepreneurship, Chapters 1-5
		Exercise: Project Launch and Team Planning
3	February 9	**Topic: Accessing and Interviewing Customers**
		Guests: Jeff Hoffman, Sales and Marketing Training, "How to get customers to talk to you".

		Bill Aulet, Director, MIT Entrepreneurship Center, "Customer value proposition design".
	Reading:	Disciplined Entrepreneurship, Chapters 6-8

4	February 16	**NO CLASS: TEAMS WORK ON PROJECTS**

5	February 23	**Topic:**	**Customer Discovery Feedback**
		Guest:	Ron Biederman, CEO, Hourly Nerd
		Reading:	Value Proposition Design, Ch 1.1
		Exercise:	Evaluate your Outreach Funnel

6	March 1	**Topic:**	**Customer Discovery in Big Bang Ventures**
		Case:	The Rise and Fall of Iridium
		Note:	*Half Class: We meet for only 90 minutes.*
		Note:	*Deadline for first team meeting with faculty*

7	March 8	Topic:	**Present your Customer Value Proposition**
		Exercise:	Each team will Present its Work to Date

8	March 15	**NO CLASS: SPRING BREAK**

9	March 22	**Topic:**	**Channel Pricing and Channel Strategy**
		Guest:	Jim Dougherty, CEO, Madaket Health
		Case:	Makadet Health

10	March 29	**Topic:**	**Buying Process/Competitive Analysis**
		Guest:	Jim Matheson, CEO, Oasys Water
		Exercise:	Teams share analyses and give/get feedback

11	April 5	**NO CLASS: TEAMS WORK ON PROJECTS**

		Note:	*Deadline for second team meeting with faculty*
12	April 12	**Topic:**	**Evaluating your Business Model**
		Guest:	Brian Halligan, CEO Hubspot
		Case:	Red Hat and the Linux Revolution
13	April 19	**NO CLASS:**	**TEAMS WORK ON PROJECTS**
14	April 26	**Topic:**	**Team Elevator Pitch Presentations**
		Exercise:	Each team will pitch its conclusions, then host a poster/whiteboard session
	April 25 onwards		Final Presentation to Faculty (out of class: via sign up)
	April 25 onwards		Final Presentation to Host Firms (times vary by host)