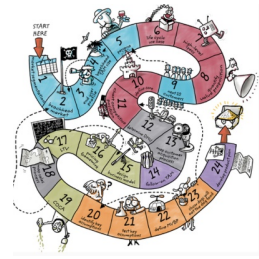




MASSACHUSETTS INSTITUTE OF TECHNOLOGY  
**15.390/15.3901 NEW ENTERPRISES**  
Spring 2023  
**COURSE SYLLABUS**



## CLASS TIMES AND LOCATIONS

15.390/15.3901 A, Monday & Wednesday, 2:30PM - 4:00PM, 32-155

15.390 B, Monday & Wednesday, 4:00PM - 5:30PM, E62-233

Recitation 15.3901 Select Fridays (See dates in syllabus), 1-2pm, E40-160 Trust Center

*Note: 15.3901 is for undergraduates only and the number all undergraduates should sign up with. It is the same course with extra sessions and graded on a different curve.*

## OVERVIEW

15.390/15.3901 is a hands-on, project-based introduction to Innovation-Driven Entrepreneurship. Throughout the term, you will work with a team to build a plan for a new enterprise using a proven framework, the Disciplined Entrepreneurship process, to accomplish this. The course also covers additional topics to make it more comprehensive than simply covering the product aspect of starting a new venture. It is designed as an intensive introductory course for general entrepreneurship. It will prepare you very well for more advanced courses.

This course is specifically built for the student who wants to understand firsthand the process of launching a new venture. While this obviously fits the “ready to go” entrepreneur who is looking to launch a startup, it is also relevant for other student profiles. It is appropriate for the student who wants to join a high growth company in the future, the “joiner”. It is also valuable for those students who are simply curious to learn about the field and gauge whether they are interested—although, it should be noted that there is a lot of work involved in this course. The course is also valuable for students interested in launching new ventures within existing organizations (e.g., corporations, government, non-profits, academic institutions), or people who want to be entrepreneurial ecosystem builders (e.g., what we call “entrepreneurship amplifiers”). In all these cases, this course will give you a solid fundamental understanding of what it takes to launch a new venture and a common language to use in entrepreneurial endeavors in the future.

Our primary goal is not to have you launch a new venture, but rather to learn the process. A good analogy is that we are focused first and foremost on teaching you “how to fish” rather than focused on “catching a fish”.

That being said, this is a hands-on course that teaches a rigorous framework and provides a valuable experience to students so that they, upon completion, can be more successful in starting a new venture. Our success has been evidenced by the hundreds of successful entrepreneurs this class has produced, who have gone on to form dozens of companies including A123 Systems, HubSpot, LARK Technologies, Whoop and the majority of the \$100K winners over the past two decades including Occular last year. Just in the past few years, the following new ventures have come out of this course: WellNested,

Lightmatter, Ubiquitous Energy, Klarity, Podometrics, TVison Insights, Spoiler Alert, Airworks, Corridor, TireTutor, Precavida, Cheeky Fishing, Humon, EcoVent, and PillPack.

### **NOTE REGARDING INTELLECTUAL PROPERTY RIGHTS**

Work done in the class is purely for academic purposes and there is no explicit or implicit agreement that teams that are formed in the class are obligated in any way to share their intellectual property or equity in a new venture that comes out of the class. All marketing and business analysis that is produced is considered public domain unless explicitly specified and agreed to by the instructors. We are an educational institution and not an economic development agency or an investment accelerator. Any technical intellectual property brought to the course should be protected before it is brought to this course and that is handled differently than the knowledge gained in the business planning process.

### **OFFICE HOURS**

There are no official office hours for this course. Students can request 1-on-1 meetings with the TAs or instructors, at any time, after checking availability.

### **SPECIAL SESSION FOR UNDERGRADUATES**

Undergraduates will be invited for special sessions. These are intended to serve as opportunities for undergraduates to receive additional mentoring, coaching and exposure to entrepreneurship, as well as interact with fellow undergraduate founders.

### **INSTRUCTORS**

#### **Bill Aulet**

Professor of the Practice, MIT Sloan School of Management  
Managing Director of the Martin Trust Center for MIT Entrepreneurship  
MIT Office: E40-160  
Tel: (617) 253-2473  
Email: [aulet@mit.edu](mailto:aulet@mit.edu)  
Assistant is Alicia Carelli at [carelli@mit.edu](mailto:carelli@mit.edu)

#### **Paul Cheek**

Senior Lecturer, MIT Sloan School of Management  
Executive Director, Martin Trust Center for MIT Entrepreneurship  
MIT Office: E40-160  
Email: [pcheek@mit.edu](mailto:pcheek@mit.edu)  
Office Hours: Please email Alicia Carelli: [carelli@mit.edu](mailto:carelli@mit.edu)

#### **Jacquelyn Pless**

Fred Kayne (1960) Career Development Assistant Professor of Entrepreneurship  
Assistant Professor, Technological Innovation, Entrepreneurship, and Strategic Management  
MIT Office: E62-479  
Email: [jpless@mit.edu](mailto:jpless@mit.edu)

#### **Macauley Kenney**

Lecturer, MIT Sloan School of Management  
Entrepreneur in Residence, Martin Trust Center for MIT Entrepreneurship

MIT Office: E40-160  
Email: macauley@mit.edu

## TEACHING ASSISTANTS

TA mailing list	15390.tas@mit.edu
Dragana Marinkovic	dmarinko@mit.edu
Clyde-Blaise Niba	cniba@mit.edu
Madeleine Cooney	mcooney@mit.edu
Michael Nieset	mnieset@mit.edu

## CLASS RESOURCES

**Course Website: Please see Canvas**

### Digital Worksheets:

<https://drive.google.com/drive/folders/1Kb1VWJFjxU56PW1m5kHIOplApsF3NB19?usp=sharing>

### Additional Advisory Resources Available

Please refer to Canvas to find additional materials for each class. These include slides, electronic worksheets, financial models or calculators, videos and more.

We also strongly encourage you to take advantage of the Entrepreneurs In Residence (EIR) program available through the Trust Center for MIT Entrepreneurship. For more information and to schedule a time with an EIR, go to <http://orbit.mit.edu>.

In addition, additional material is available at [www.d-eship.com](http://www.d-eship.com) that will complement the course content but this is not required.

## REQUIRED MATERIALS

### Disciplined Entrepreneurship: 24 Steps to a Successful Startup (Wiley)

Bill Aulet, ISBN: 978-1-118-69228-8

The lectures will cover material rapidly. *We expect students to complete reading Disciplined Entrepreneurship: 24 Steps to a Successful Startup (referred to as DE), by the fourth week of class to maintain this pace.*

### Disciplined Entrepreneurship: Workbook (Wiley)

Bill Aulet, ISBN: 978-1-119-36579-2

This companion book will allow you to understand more deeply how to apply the concepts and the chapters on each step and should be reviewed before the class in which they are covered. The book can also be a valuable reference as you are working to complete each step.

## SUGGESTED READINGS

If the students are interested in additional readings, please see the instructors and they will provide additional readings but they are not required.

## GRADING

15% individual participation and attendance

20% individual deliverables, quizzes, and peer reviews

25% team deliverables (based on slides prepared for each of 24 steps of DE)

10% in-class presentations (includes “board meetings”)

30% final deliverables and final peer reviews

### Individual participation and attendance\*

- Be on time to every class and adhere to Sloan Values
- Attendance will be taken at the beginning of class
- Display a namecard in front of you or Name with more info on Zoom
- Once you have a team, sit together in the same places throughout the semester
- Come prepared to class: do the readings and be ready to discuss how your team has dealt with the steps in question
- Contribute (there may be cold-calling) – just showing up is not enough; emails within 24 hours are acceptable too
- We follow Sloan policies on absences; more than two unexcused absences will reduce your final grade by a letter grade – that being said, this year in a pandemic, if you need to miss, all sessions will be recorded

### Individual Deliverables and Peer Review

Students are to submit the following deliverables:

- **Initial survey:** See assignment posted on Canvas for more information.
- **Reflection Paper(s):** As assigned.
- **Intro video:** See assignment posted on Canvas for more information.
- **Idea journal:** Keep a running journal of ideas that you might consider using for your business idea. See assignment posted on Canvas for more information. (This may or may not be part of the grade.)
- **Individual PMR report:** This assignment is designed to encourage entrepreneurs to gain a firm understanding of the future users of their products/services. In the write-up each student should discuss how primary market research was conducted, the insights gained, and how the project will be adjusted accordingly.
- **“Take an entrepreneur to dinner:”** Each undergraduate student should set up an in-person or online appointment with an entrepreneur and write a report on the insights from his/her experience. Please take into account that entrepreneurs have busy schedules, so you should book your appointment well in advance of the assignment **due date**. No late exceptions will be granted to accommodate scheduling issues, please plan accordingly. This is only relevant to undergraduates
- **Quizzes:** There will occasionally be quizzes on the material that will be individually taken to ensure understanding and reinforce the material.

Additionally, individual deliverables will include peer evaluations. These will be graded both on each student's ability to provide constructive feedback to team members, as well as the evaluation received by peers. If your teammates make it clear that you did not actively contribute to the team, *this will reduce your final grade by up to a letter grade.*

### **In-class presentations and Team Deliverables**

Much of the learning in New Enterprises comes from the shared experience of all groups. All teams must regularly prepare mini slide decks, according to the rubrics posted on Canvas (see Syllabus calendar of classes). **These decks are to be uploaded through Canvas by 11:59 PM** on the day of the class its due. The decks will be graded (v-, v, v+) and in-class feedback will be provided. Further qualitative feedback may be provided via office hours.

In addition to mini slide decks for each class session, each team will submit several consolidated assignments (see Syllabus calendar of classes) during the semester. These deliverables function as a chance to update earlier steps based on feedback, preparation for the final presentation/deliverable, and as opportunities to obtain feedback from peers and/or guest speakers. The assignments include: pitch decks that consolidate the main phases of DE's 24 steps and a financial analysis, including spreadsheet and explanatory slides.

Each component of the consolidated assignments will be graded (v-, v, v+). Qualitative feedback will be provided by a panel of experienced entrepreneurs (i.e. delta v alums, EIRs, previous 15.390 participants) in "board meetings" on days when or just after consolidated decks are due. These "board meeting" clusters will be assigned after teams are formed.

In many classes, individuals will present their team's work to other students. You must be prepared and be an active and constructive participant. Individuals and Teams will also be evaluated on their feedback to other teams as well. We suggest you provide this in an email and copy the TAs on it. Frequency and quality matter.

**Teams should incorporate feedback into their final pitch deck, which will be prepared in two versions. One version will be designed as a presentation for potential investors, while the other will cover all of DE's steps.** Specific rubrics for each deliverable are provided on Canvas.

We recognize that the pace and rhythm can vary for each team and the varying time needs across different steps. Thus, teams shall be allowed one "wildcard" for a deadline extension during the semester, i.e., one opportunity to extend one mini-deck deadline by a class. For example, if a mini slide deck deliverable was due 9 AM Tuesday, the team may extend to submit by 9 AM on the following Thursday. Teams must notify TA's sufficiently ahead of the deadline if they intend to use their 'wildcard' extension. (*Please note: "wildcard" extension option does not apply to consolidated decks.*)

### **Additional Mentorship**

**TA's/ Professors:** If your team requires feedback outside of these assignments from the TA's/Professors you may schedule time during office hours.

**EIRs:** Teams may email the entrepreneurs in residence at the Martin Trust Center ([eir@mit.edu](mailto:eir@mit.edu)) for additional advice and support

**Optional Pitch Videos:** teams will be given the option for each consolidated deck deadline (3 or 4 total) to submit a **max 5 min.** pitch video to be distributed to the Professional Advisor Network of experience advisors (industry experts, EIRs, etc.) for feedback.

**CALENDAR OF CLASSES OVERVIEW**

- Deliverables are **due 11:59 PM** the day in which assignments are listed (*Please note: subject to change*). Quizzes are due at *noon* the day on which they are listed.
- See Canvas for additional information on each specific deliverable.
- Completed deliverables should be posted online to Canvas under the relevant assignment. Do not submit hard copies to TA's.

**DRAFT SCHEDULE AND SUBJECT TO CHANGE – CONSULT CANVAS FOR MOST UP TO DATE VERSION**

Class	Day	Date	Topic	Preparation	Homework - Deliverable
1	Monday (M)	2/6/23	<u>Class Intro &amp; Logistics, DE Overview</u>	None	None
2	Wednesday (W)	2/8/23	<u>Pitch2Match &amp; Team Building ⇒ Kick Off Hack Challenge</u>	1. DE book, Intro & Step 0 (p. 1-21) 2. View classmates videos & forum on ideas	1. 60 sec video 2. Idea Journal (at least 20) 3. Enter idea(s) to pitch on Canvas
3	Monday (M)	2/13	<u>Market Segmentation &amp; Selecting BHM (Steps 1-2)</u>	1. Read DE & DE Workbook, Steps 1-2 2. Most Overrated Thing <a href="#">article</a>	Milestone #1 Form Completed
4	Wednesday	2/15	<u>Present Results of Hack + High Performance Teams</u>	Research problem and build a prototype/wireframes for your solution with your team.	Build a prototype/wireframes for your solution with the team!
5	Tuesday	2/21	<u>How To Do PMR</u>	1. Read DE Workbook PMR Guide (p. 23-38) 2. PMR Tips from DE blog <a href="#">here</a>	1. List of all markets brainstormed 2. Matrix of top 6-8 market segments to do PMR in 3. Sign 15.390 Commitment Agreement 4. Quiz: PMR
6	Wednesday	2/22	<u>PMR Field Day</u>	1. Conduct PMR interviews 2. Refine PMR script 3. Document a list of targets. Your list of	1. First draft of PMR worksheets 2. PMR pledge

				PMR targets should be >30 if B2C, or >10 if B2B	
7	Monday	2/27	<u>End User Profile, TAM, Persona (Steps 3-5)</u>	Read DE Steps 3-5	<p>1. Market Segmentation Slides, step 1 filled in now</p> <p>2. Individual PMR reflection report</p> <p>3. Team assignment: 1st PMR summary What did you do? What were the learnings? What key insights did you gain?</p> <p>4. Quiz: Steps 3-5</p>
8	Wednesday (M)	3/1	<u>Full Lifecycle Use Case, High-Level Product Spec, Quantify the Value Proposition (Steps 6-8)</u>	Read DE Steps 6-8	<p>1. Slides for Steps 3-5: End user profile, TAM, Persona, and of BHM slides</p> <p>2. Quiz: Steps 6-8</p>
9	Monday	3/6	<u>Identify Your Next 10 Customers (Step 9) &amp; Define Your Core, Competitive Positioning (Steps 10-11)</u>	Read DE Steps 9-11	<p>1. Slides for Steps 6-8: Full cycle use case, High-level product specifications and Quantified Value Proposition slides</p> <p>2. Quiz: Steps 9-11</p>
10	Wednesday	3/8	<u>PMR Field Day #2</u>	Read “Market Testing Tactics” PDF	None
11	M	3/13	<u>Tactics for Validating Persona, HLPS, and Value Proposition</u>	Read Market Testing Tactics	Slides on Steps 9-11
12	W	3/15	<u>Interim Mock Board Meetings (Steps 1-11)</u>	<p>Prepare first Consolidated Slide Deck for Steps 1-11</p> <p>Identify key areas to review at Mock Board Meeting</p>	Revised Consolidated Slide Deck for Steps 1-11
	M	3/20	<u>No Class – SIP Week</u>		



	W	3/22	<u>No Class – SIP Week</u>		
	M	3/27	<u>No Class – Spring Break</u>		
	W	3/29	<u>No Class – Spring Break</u>		
13	M	4/3	<u>DMU &amp; DMP (Steps 12-13) including Windows of Opportunity &amp; Triggers</u>	Read DE Steps 12-13	Quiz: Steps 12-13
14	W	4/5	<u>Is Your BHM Sharp Enough? Follow on Markets (Step 14)</u>	Read DE Step 14	Quiz: Steps 13-14
15	M	4/10	<u>Business Model, Pricing &amp; LTV (Steps 15-17)</u>	Read DE Step 15-17	1. Slides for Steps 12-14 2. Quiz: Steps 15-17
16	W	4/12	<u>COCA and Adjustments – (Steps 18-19)</u>	Read DE Steps 18-19	1. Slides for Steps 15-17 2. Quiz: Steps 18-19
	M	4/17	<u>No Class – Presidents’ Day</u>		
17	W	4/19	<u>Overall Financials</u>	1. Review MIT Bootcamp worksheets from Canvas 2. Review Charlie Tillett spreadsheet	Slides for Steps 18-19
18	M	4/24	<u>Identify and Test Key Assumptions (Steps 20-21)</u>	Read DE and DE Workbook Steps 20-21	1. Overall Financial Plan 2. Quiz: Steps 20-21
19	W	4/26	<u>Define MVBP and Metrics of Success (Steps 22-24)</u>	Read DE and DE Workbook Steps 22-24	Quiz: Steps 22-24

20	M	5/1	<u>Mock Board Meetings (Steps 1-24 plus using DE Canvas)</u>	Prepare consolidated deck and be ready for Mock Board Meeting	Revised Consolidated Deck Steps 1-24
21	W	5/3	<u>Peer to Peer Mock Board Meetings and HR Plan Discussion, Pulling It All Together &amp; Presenting Your Plan</u>	Review Charlie Tillet Model Input for Personnel – Reflect Whether You Want to Refine It Try to develop a short story board – narrative arc about how to tell your story	None
22	M	5/8	<u>Final presentations</u>	If you are assigned to present on this date, be ready to present. In any case, be ready to listen to other presentations and learn.	Summary presentation deck for 5 min presentation - Focus on narrative, clear flow
23	W	5/10	<u>Final presentations</u>	If you are assigned to present on this date, be ready to present  In any case, be ready to listen to other presentations and learn	1. Final full revised consolidated deck is due by noon on Wednesday 5/15 including HR Plan (as described in class)  2. Final Team-Peer Reviews due (TAs will send out link)
24	M	5/15	<u>Next Steps After New Enterprises</u>	None	1. Final full revised consolidated deck is due by noon on Wednesday 5/15 including HR Plan (as described in class)

**Recitation Sections (Required, Open to Undergraduates Only):**

Instructor: Macauley Kenney

Email: Macauley Kenney [macauley@mit.edu](mailto:macauley@mit.edu)

Office Hours: Please email to request an appointment

Dates: 7x Fridays

Location: E40-160 Martin Trust Center

Time: 1-2pm ET

<u>#</u>	<u>Date</u>	<u>Location</u>	<u>Topic</u>
1	F 2/10	E40-160 MTC	Introduction to Entrepreneurship and 15.390
2	F 2/17	E40-160 MTC	The Importance of Team & Working With People Not Like Yourself <i>Attendance not counted due to student holiday.</i>
3	F 3/3	E40-160 MTC	Talking to Customers – How to Do It
4	F 3/17	E40-160 MTC	The Thrill, Alchemy & Mystery of Creating Value for Customers
5	F 4/7	E40-160 MTC	Startup Boards & Mock Board Meeting Check-In
6	F 4/21	E40-160 MTC	Financial Literacy for Undergrads
7	F 5/12	E40-160 MTC	Home Stretch – Stories of Going to Market & Then Figuring It Out + Next Steps

## Frequent Q&A's

### 1) How to register for 15.390 class and get access to class materials on the Canvas site?

#### For MIT Students, please follow these steps:

- a. **Register online or download a registration form.** Form needs to be signed by Bill Aulet or Paul Cheek (TA's cannot sign). Once the TA's let you know that you can join the course, please submit an [add form](#) and email Paul Cheek ([pcheek@mit.edu](mailto:pcheek@mit.edu)) to ask him to approve. For additional information, please referenced attached PDF:



Add Drop Student  
Guide.pdf

- b. **Canvas Access-** Please email the TA's ([15390.tas@mit.edu](mailto:15390.tas@mit.edu)) with your @mit.edu email address and we will add you. Please give up to 24-48 hours for access to Canvas once your TA has added you to the class.

#### For NON-MIT Students, please follow these steps:

- a) To officially register for this class, ALL students must download, fill, sign (by Paul or Bill) and submit the add/drop form. See above step A under MIT student instructions for additional information.
- b) All students must get an @mit.edu email address, which means you need to register for a Kerberos password. Additional instructions: <http://ist.mit.edu/start/kerberos#identity>. If you have any issues, you can contact the MIT IS&T Help Desk, information below:

##### [IS&T Help Desk](#)

[E17-110](#), 40 Ames Street

Walk-ins: 9AM-5PM, M-F

Email: [helpdesk@mit.edu](mailto:helpdesk@mit.edu)

Phone: 617-253-1101 (3-1101)

Telephone/Online: 8AM-6PM, M-F

- c) **Canvas Access-** Please email you section TA's with your @mit.edu email address and we will add you. Please give up to 24-48 hours for access to Canvas once your TA has added you to class.

PLEASE NOTE: For non-MIT students, all course syllabus, assignments, announcements are always posted on Canvas. If you do not have a Kerberos and @mit.edu email address, you will NOT have access to Canvas.

### 2) What should you do if you registered late for 15.390? Please make sure you're fully registered for the class and to Canvas. Please read all class announcements and complete all homework and class assignments as soon as possible. We understand students will be adding the course for the first 1-2 weeks of class and TA's will note when you have joined the class.

### 3) Team Logistics and Registering for Section A or B? During idea and team formation, you are allowed to reach out to students in both sections to form your teams. HOWEVER, once we've

finalized your team, all members must be in the same section, **no exceptions**. We ask that teams register for the same class because you will be completing presentations by section and all members must be registered together.

#### 4) Team Presentation Guidelines & Expectations?

- 1) We will take your team's compliance of presentation guidelines and expectations listed below into account as part of the slide format grade.
- 2) Please save presentation files as a PowerPoint doc and named: Team Name\_Assignment X\_SectionX
  - a. Please look at the schedule overview below for which assignments correspond with which number under the "Deliverables" column.
  - b. Please note whether you are in Section A or Section B.
  - c. Please designate one team member to handle uploads on a regular basis
- 3) Team overview: Always include an introduction slide including:
  - a. Team Name (please finalize your team name and keep it consistent)
  - b. Team Members
  - c. Program Name for each Team member
  - d. 2-3 sentence overview about your project
- 4) Audience: The slides you are preparing weekly for class assignments will eventually build into a final pitch deck. You should present your information in a clear, concise, and professional manner that fits the level of expectations that VCs/investors would look for in a pitch deck.
- 5) Content: Please look at the grading rubrics for guidance on content to include. **A good presentation is the one that meets its goals and each slide is self-explanatory and connected to the story you are telling through the whole deck. If you think that there is information that should be shared but not included in your slides, please, use the notes to include further details. If you include notes, please make sure to print them. Otherwise we will not read them.**
- 6) Participation grade: Your presentation will be included as part of your participation grade for the class. All team members are highly encouraged to present.
- 7) Presentation Time Requirements: Please adhere to the time requirements as posted by TA/Professors.