University of Maryland April 2021 I-Corps Cohort Course Syllabus

Course Requirements

• At least one member of each team attends all Class Sessions, and the required Office Hours
• Time Commitment: 2-3 hours of course work and, approximately 10 hours/week outside of class, primarily for customer discovery, for the main two weeks April 16th-April 30th
• Ability to actively participate in a Virtual meeting (Zoom), and ability to access Canvas Learning Management System (directions below) for all other Class resources

*Anyone with questions about the course should contact the UMD I-Corps Program Manager at dsteele1@umd.edu or the teaching team at i-corps@umd.edu*

Faculty

<table>
<thead>
<tr>
<th>Instructors</th>
<th>Dan Kunitz, Edmund Pendleton, Dean Chang, Quanita Bost</th>
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</thead>
<tbody>
<tr>
<td>Mentors</td>
<td>Piotr Kulczakowicz, Alex Wang, Vivek Kalihari, Jay Smith, Mark Wozniak, Moe Abutaleb, Cedric Nwafor, David Powell, Christina De Mur, Alla McCoy</td>
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<tr>
<td>Program Managers</td>
<td>David Steele, Bijan Dabell</td>
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Course Dates

| Class 0: Pre-class Intro Webinar | • Friday, April 9th, 12pm-1pm  
|                                | • Zoom (link will be provided prior to class) |
| Class 1: Opening Workshop      | • Friday, April 16th, 8:30am-12:30pm  
|                                | • Zoom (link will be provided prior to class) |
| Office Hours with Instructors  | • Week of April 19th  
| (Required)                     | • (1 on 1 with Instructors scheduled for 30 min, sign-up instructions will be distributed prior to class) |
| Class 2: Midpoint             | • Friday, April 23rd, 8:30am-12:30pm  
| | • Zoom (link will be provided prior to class) |
| Office hours with Mentors     | • Week of April, 26th |
| (Optional)                    | |

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## I-Corps Short Course Technology Requirements

**Zoom:** Throughout the course we will be using Zoom for our Class sessions. We may be using some Zoom features to help facilitate cohort interactions. These are all fairly easy to use and will potentially include Whiteboards, Polling, Breakout Rooms, and Renaming yourself. If you are not familiar with these features please review these resources in advance:

- Whiteboards: [https://support.zoom.us/hc/en-us/articles/115005706806](https://support.zoom.us/hc/en-us/articles/115005706806)
- Polling: [https://support.zoom.us/hc/en-us/articles/213756303-Polling-for-meetings](https://support.zoom.us/hc/en-us/articles/213756303-Polling-for-meetings)
- Breakout Rooms: [https://support.zoom.us/hc/en-us/articles/115005769646-Participating-in-breakout-rooms](https://support.zoom.us/hc/en-us/articles/115005769646-Participating-in-breakout-rooms)
- Renaming + Other Controls (Click on your browser/computer type) [https://support.zoom.us/hc/en-us/articles/200941109-Attendee-controls-in-a-meeting](https://support.zoom.us/hc/en-us/articles/200941109-Attendee-controls-in-a-meeting)

**Security:** *Please do not share the links for our meetings beyond your teammates that are participating in our I-Corps program. If you wish to include an additional observers or participants in our meetings, ask our Teaching team first. The links for the meeting will include an automatic password embedded in the link. When joining a meeting, you will be placed in a waiting room first, please wait for the Host to let you in. Once you have joined please rename yourself to be (Team #, “-”, First Name)

**Canvas-ELMS:** Canvas is Learning Management software offered by UMD. All course resources will be housed in Canvas and you will need to sign up for Canvas in order to have access to all of the course content. The course Schedule, Assignments, and In-Class materials will all be shared within Canvas-ELMS. Please see below on how to Enroll in the I-Corps course via Open Learning:

### How to Enroll in an Open Learning Non-Credit Course

For UMD Participants

I. Go to the course page: [Introduction to I-Corps at UMD](https://openlearn.umd.edu)
II. **Click the blue "Enroll" button and then follow the instructions below:**

For Non-UMD Participants

III. **Non-UMD Participants** must first create an associate account and be signed in before you are able to enroll:

1. Follow the link on the enrollment page, or here: [Create an Associate Account](https://openlearn.umd.edu/associate-account)
2. Complete the Associate Account Registration information, then click the "Submit" button.

3. On the next page, you will confirm your login ID. Change the Drop-down to "Yes" and then click "Accept."
   a. After you click "Accept," you will receive an email stating that you have created an Associate Account:

4. Click the link in the email to activate your account and to create a password

5. Create a password* according to the Password Requirements listed on the right side of the page, then click Update Password.

6. Log into elms.umd.edu using your new credentials and accept the terms of use to complete account creation.

   *NOTE: Passwords are valid for up to 180 days. Account holders will be notified via email to reset and update their password in order to prevent deletion of the account. A password reset generates a link emailed to the account that remains valid for 10 minutes. Accounts with expired passwords or with no activity after creation will be deleted and removed from the system after 180 days.

IV. Return to the Introduction to I-Corps at UMD and again click the blue "Enroll" button:

7. On the following page, click "Sign in Here." Login using your email and the password you created for the associate account.

8. Click the blue "Enroll" button.

YOU ARE NOW ENROLLED IN THE COURSE! You will receive an e-mail confirmation of your enrollment. To access your course in ELMS, click on the link in the email. If you are new to navigating the ELMS course space? For a helpful introduction, check out the Orientation to ELMS for Students.

Google Drive: Google drive links and documents will be embedded into Canvas. We will be using Google Drive to utilize shared worksheets and will include Google Slides, Docs, and Sheets.

Google Table: Google Table is a demo product offered by Google and allows you to take a traditional spreadsheet and automate/curate it to connect more deeply with Customer Discovery Data. Any team interested in utilizing Google table can view this instructions document

I-Corps Course Description
Customer Discovery is an iterative process of physically (and now virtually) getting out of the building to interview potential customers and stakeholders to understand their problems and pain points in the market and in society. These interviews, or experiments, lead to real-world learnings and insights that validate or invalidate key components of the business model, often leading to pivots.
This course provides teams with real-world, hands-on learning experience with customer discovery and successfully transferring knowledge into products and processes that benefit society. Teams will spend time talking to and learning from customers, partners and competitors, and learning how to deal with the chaos and uncertainty of commercializing innovations and creating ventures.

Teams will be spending a significant amount of time “outside the building” talking to customers and testing their hypotheses. Class time will be spent on the teams’ key learnings from talking to customers, not what they already knew coming into the course. Teams are expected to conduct a total of 20 interviews by the end of the course.

At the opening session we will explain how to conduct the interviews and more about the expectations. **We suggest teams set up potential customer discovery interviews as soon as possible, but, do NOT conduct interviews prior to the course opening. Teams should be researching leads and scheduling appointments, but those interviews will all happen AFTER the opening session.**

**I-Corps Course Culture**

The instructors have limited time and they push, challenge, and question teams in the hope that they will quickly learn. Instructors are direct, open, and tough – just like the real world. They hope that teams can recognize that their comments aren’t personal, but part of the process. Instructors also expect the teams to question them, challenge their point of view if they disagree, and engage in a real dialog with the teaching team. This approach may seem harsh or abrupt, but it is all part of our wanting the teams to learn to challenge themselves quickly and objectively, and to appreciate that as entrepreneurs, they need to learn and evolve faster than ever imagined possible.

**Free Non-Credit Course**

Non-credit courses and Continuing Education Units (CEUs) do not post to the University of Maryland transcript and do not count towards a student’s academic record. Neither a grade nor credit is earned. Students do not receive a University ID card and will not be granted access to University facilities such as recreation, transportation, and campus events. Non-credit students may access UMD Libraries as Visitors; see [https://www.lib.umd.edu/about/visitors](https://www.lib.umd.edu/about/visitors).

**Program Schedule (Check Canvas and Emails for additional details):**

**Pre-Class Assignment**

As discussed above, the opening sessions will explain how to conduct the at least 20 interviews that constitute the majority of the work done in this class. Teams should set up potential customer discovery interviews as soon as possible, but, do NOT conduct interviews prior to the course opening. Brainstorm and research who you think your most promising potential
customers are, and the key stakeholders in your customer ecosystem. **Schedule appointments to meet them during the weeks of April 19 and April 26.**

**Pre-Class 0: Course Preparation**

*Date:* Upon receipt of syllabus  
*Location:* Virtual, self-paced

<table>
<thead>
<tr>
<th>Detailed Schedule</th>
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<tbody>
<tr>
<td>Begin compiling a list of potential customers to interview once the course begins</td>
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**Recorded Lectures (Videos 1-4):**
- Watch Introduction to I-Corps
- Watch Customers
- Watch Business Models
- Watch Interview Prep

**Class 0: Webinar**

*Date:* Friday, April 9th, 12:00pm-1:00pm  
*Location:* Online via Zoom (An invite will be sent to your inbox)

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<tr>
<td>Instructor Introductions</td>
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<tr>
<td>Intro to Customer Discovery</td>
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<tr>
<td>Mock Cold Call &amp; Cold Email</td>
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<tr>
<td>Discussion of Assignments and Expectations</td>
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<tr>
<td>Q&amp;A</td>
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**Pre-Class 1**

*Date:* Week of Monday, April 12th- before Class 1  
*Location:* Virtual, self-paced

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<tr>
<td>Recorded Lecture (Videos 5):</td>
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<tr>
<td>- Watch Customer Discovery</td>
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</table>
Continue compiling a list of potential customers to interview once the course begins and start scheduling interviews following Class 1

Class 1: Course Opening Workshop
Date: Friday, April 16th, 8:30am-12:30pm
Location: Zoom (An invite will be sent to your inbox)

Detailed Schedule

Attendance
Team Introductions
Discussion of business models, customers, & jobs
Interview Prep
  ● Turning hypotheses into interview questions
Interview exercise
Discussion of Customer Discovery best practices
Ecosystem Role Play Exercise
Review of assignments and expectations
  ● Sign up for 1 on 1 Instructor Office hours, coordinate interview observation
Open Q&A

Office Hours (REQUIRED) - Teams
Date: Between Friday, April 16th and Thursday, April 22nd
Location: Virtual (Zoom) or conference call. Instructions for sign up will be sent via email.

Pre-Class 2
Date: Between Friday, April 16th and Thursday, April 22nd
Location: Virtual, self-paced
Conduct Interviews! Record them on Shared Interview Tracking sheet

Compile your Mid-point Presentations (See Details below)

Class 2: Midpoint

Date: Friday, April 23rd, 8:30am-12:30pm
Location: Zoom (An invite will be sent to your inbox)

Detailed Schedule

Team Presentations (in Zoom Breakout rooms)
12-15-minute team presentations using the designated team slides in the Shared Class Google Slides

Value Proposition Discussion and Exercise

Hypothesis Development Discussion and Exercise

Customer Discovery Example Video (AGED)

Discussion of Final Assignments and Q&A

Office Hours (OPTIONAL) - Teams

Date: Between Friday, April 23rd and Thursday, April 29th
Location: Virtual (Zoom) or conference call
Instructions for sign-up will be sent via email

Pre- Class 3

Date: Between Friday, April 23rd - before Class 3
Location: Virtual, self-paced

Detailed Schedule

Continue Customer Discovery Interviews

Prepare for Final Presentation (Update your Team Slides)
Class 3: Lessons Learned & What’s Next

Date: Friday, April 30th (8:30am-12:30pm)
Location: Virtual, instructions for presentation sign-up will be sent via email

Detailed Schedule

<table>
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<th>Team Presentations (in Zoom Breakout rooms)</th>
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<td>12-15-minute team presentations using the designated team slides in the Shared Class Google Slides</td>
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<th>Next Steps Discussion</th>
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<tbody>
<tr>
<td>• National I-Corps, SBIR, Other Programs and Resources</td>
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<tr>
<td>• Rest of Business Model Canvas discussion</td>
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</table>

Teaching Team

Instructors

Dan Kunitz
UMD Venture Strategy and Development Director
DC I-Corps Node Executive Director
NSF I-Corps Instructor
dkunitz@umd.edu

Dan Kunitz is a media and technology executive and entrepreneur who has been involved in the creation and management of several successful web and media start-ups. He recently joined the University of Maryland as the Director of Venture Strategy and Development at the Maryland Technology Enterprise Institute, and as Executive Director of the DC I-Corps Node. Dan is also an angel investor and a NextGen Venture Partner.

Before joining UMD in 2019, Dan was Director of I-Corps programs at The George Washington University. He also served as Chairman of the Washington DC Economic Partnership's AccelerateDC program, and as a Senior Advisor at Venture Well to NSF’s National Innovation Network. Dan is a nationally-certified instructor in NSF’s I-Corps Teams program. He has championed, instructed, and/or managed many international I-Corps and lean startup initiatives in developed and developing countries all around the world.
Prior to joining the DC I-Corps team at GW, Dan was an entrepreneur, founder, and executive for several startups in the web, new media, and education sectors. As Co-Founder and COO of Irides, LLC, a Virginia-based managed services provider, Dan oversaw all aspects of the company’s strategy and operations, and negotiated six acquisitions. Dan was on the founding team of Politico, a Virginia-based new media venture covering politics, Capitol Hill, and lobbying. As Associate Publisher and Managing Editor of politico.com, Dan was responsible for all aspects of the online strategy, built and managed a team of developers, designers, and content producers, and negotiated numerous strategic partnerships. Politico grew to over 100 employees and had 5 million monthly unique visitors in its first year. Dan was involved in two other new media start-ups in the Washington region: Local Point TV, an innovative short-form entertainment-based digital spectrum sub-channel, and NewsIT, a mobile platform for crowd-sourced news. Dan’s career also includes two education ventures. At MBA Center, Dan directed all aspects of the company’s communication, marketing, media, and editorial activities for Europe’s largest test prep provider with 12 locations throughout Europe, North Africa, and the Middle East. Dan subsequently co-founded Professional Prime, a strategic advisory and consulting company headquartered in Paris and London, with offices throughout Europe and education clients worldwide.

Dan has a BA from Wesleyan University, and an MBA in International Business from Ecole des Ponts.

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**Edmund Pendleton**  
Director, DC I-Corps Program  
NSF I-Corps Instructor  
[edmund@umd.edu](mailto:edmund@umd.edu)

Entrepreneur, angel investor, and mentor for technology start-up companies. Founded or co-founded several businesses, primarily in high-tech markets, with successful exits. Currently active in several Washington, DC area angel investment and entrepreneurial groups.

Primary business experience and interests include technology innovation, product development and management, sales and marketing, and entrepreneurship. Also, extensive experience in technology consulting, manufacturing, architecture / engineering / construction – and conducting real-world due diligence of technology start-up companies.

Acting as an advisor to several area tech start-ups, and an active volunteer for Arlington, VA youth sports and public schools.

- Founding member of FounderCorps  
- Member of Capital Area Network - Angel Investors
• Guest lecturer at several local universities
• Mentor at The Founder Institute
• Coach/Mentor, Kauffman Foundation FastTrac program
• George Mason University Venture Mentor
• Chairman, Health & Physical Education Sub-Committee, Arlington Public Schools
• Inventor – multiple patents and trademarks

Dean Chang
Associate Vice President, Innovation and Entrepreneurship, University of Maryland
NSF I-Corps Instructor
deanc@umd.edu

Dean’s passion is helping students and professionals cultivate the innovator and entrepreneurial mindset inside of them through design thinking, lean startup, and team-based experiential learning. He is UMD’s founding Associate VP for the Academy for Innovation & Entrepreneurship, reporting to the President and Provost and tasked with engaging every student in all 12 colleges in innovation. Dean is the lead PI and an instructor in the NSF I-Corps Mid-Atlantic Node program and leads workshops for students, faculty and administrators, as well as professionals from non-profits and government agencies like NASA and HHS.

Prior to UMD, Dean was CTO and VP of Immersion Corporation, a venture-backed, Stanford spinout he helped transform into a publicly traded (NASDAQ: IMMR), world-leading licensor of haptics technology embedded in over a billion devices from companies like Apple, BMW, Microsoft, Samsung, and Electronic Arts.

Dean is also a seasoned RV camper, having taken 5 RV camping trips in three different countries. When not in the Academy for Innovation’s brightly colored offices and classroom, Dean can often be found playing pickup ultimate frisbee on campus on Fridays at lunchtime. Dean holds over 40 patents, a B.S. from MIT, a Ph.D. from Stanford, and an MBA from Wharton.
Quanita Bost is a Department of Defense (DoD) Technology Transfer and IT Program Manager with 20 years' experience licensing government technologies for commercialization and building partnerships with industry and academia. In 2017, Quanita, along with her colleagues introduced the I-Corps processes and Lean Start-Up methodology to their DoD agency to encourage innovation and the spirit of "intranueurpreship" among employees. She coaches employees on how to use the I-Corps processes to develop and align ideas with customer needs, validate hypotheses and assumptions critical for success within the DOD ecosystem, and effectively communicate the value of their project to obtain funding for prototyping and project execution.

Prior to becoming a DOD employee, Quanita worked in industry for ten years performing business development, technology transfer, IP management, project management, and network engineering functions. She also served in the United States Army for ten years as an electronic maintenance and network engineer. She holds a Master of Science in Information Management Systems from University of Maryland, University College.

Staff

David Steele
Program Manager, UMD I-Corps
dsteele1@umd.edu

David has been serving as the Program Manager for UMD I-Corps since February 2020. He has worked for multiple start-ups and has some experience as a restaurant consultant.

He created his own major at the University of Maryland in Innovation & Entrepreneurship and graduated with a Bachelor’s of Science in April 2018. Directly following school, he interned for two DC Startups, one in the food incubator space, and the other in software application design. Previously, he served as a Teaching Assistant for BMGT461- Entrepreneurship, in the UMD Smith School, advising student entrepreneurs on how to utilize the BMC (Business Model Canvas) and grow their start-ups.
While on campus he was a member of the Hinman CEOs Living Learning program which teaches technology entrepreneurship to a select group of students. He participated in the Innovo Scholars program, through which he consulted with two UMD professors on how to improve the educational impact of BMGT495-Management, a required Smith Business school course. His recommendations developed through the program were later implemented into the course. He also is a food tour guide in Georgetown, DC and has written numerous articles on how to get the most financially out of credit cards.

**Bijan DaBell**
Coordinator to the University of Maryland's Chief Innovation Officer Program Manager
bdabell@umd.edu

In his role Coordinator to Julie Lenzer, Bijan supports UMD’s innovation, entrepreneurship, and technology commercialization enterprise. Bijan also assists the Mixed/Augmented/Virtual Reality Innovation Center (MAVRIC), the Maryland Small Business Development Center (SBDC) and the TechPort incubator in St. Mary’s County, MD. Since 2018, Bijan has led the planning and implementation of the university’s annual premiere celebration of innovation on campus, Innovate Maryland. He received his B.A. degree in History from University of California, Los Angeles and an M.A. in Social Sciences from the University of Chicago.

**Additional Resources**

This short introductory class does not require any reading, but teams will benefit from reading these additional resources.


2) These short videos from Steve Blank provide helpful tips and examples for preparing for your customer interviews:
   - Pre-Planning Pt. 1 (4:55)
   - Interviews Pt. 1 (5:40)
   - Interviews Pt. 2 (3:49)
   - Asking the Right Question (2:37)
   - Assuming you know what the customer wants (1:56)
   - Understanding the Problem (the right way) (3:22)
   - Customers Lie (2:37)
   - The Distracted Customer (3:12)
   - Engaging the Customer (3:37)
● Customer Empathy (2:25)
● The User, the Buyer & the Saboteur (2:17)
● Death by Demo 1 (2:18)
● Death by Demo 2 (1:45)

3) For a more detailed explanation of Customer Development and the Lean Startup, here are some short videos of Steve Blank from the Kauffman Founders School.
   ● https://www.entrepreneurship.org/video/customer-development-data
   ● https://www.entrepreneurship.org/video/minimum-viable-product

4) Textbooks

Value Proposition Design
Alexander Osterwalder, Yves Pigneur, Greg Pernarda & Alan Smith
   ● A free download of the first chapter of the book is available at:
     https://strategyzer.com/value-proposition-design?_ga=1.152090042.2059273423.1389715841

Talking to Humans
Giff Constable
   ● A free download of the book is available at
     http://www.talkingtohumans.com/

Business Model Generation – pages 14-51
Alexander Osterwalder & Yves Pigneur

The Startup Owner’s Manual – pages 195-199
Steve Blank & Bob Dorf

12 Tips for Early Customer Development Interviews
Giff Constable
   ● A free download is available at:
     http://giffconstable.com/2010/07/12-tips-for-early-customer-development-interviews

5) Register for the free Udacity online course “How to Build a Startup” at (https://www.udacity.com/course/ep175) and watch the following lectures:
   ● Lesson 1: What we Now Know
• Lesson 1.5A: Business Models
• Lesson 1.5B: Customer Development
• Lesson 2: Value Proposition
• Lesson 3: Customer Segments