# COURSE NUMBER AND COURSE NAME TERM AND YEAR, CREDITS ALLOCATED

#### **PROFESSOR NAME**

#### **COURSE/TEACHING ASSISTANTS**

Professor Office Location: 731 Kravis E-mail: cjl2241@columbia.edu Office Hours: Tuesday 11:00 to 1:00 Thursday 11:00 to 1:00

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Communications from professor and teaching assistants about the course will take place through Canvas. Students should make sure they regularly check for announcements and messaging notifications.

# TEACHING TEAM (INSTRUCTOR/S, CAs/TAs) HEADSHOTS HERE

## **COURSE DESCRIPTION**

The 'digitization' of business has radically transformed entire industries and created new ones, with speed, force, and in ways that could not be imagined two decades ago. Current foundational changes (web3, crypto/blockchain) are only accelerating the pace of change, putting even more pressure on firms to innovate quickly. The Product Manager has become the central player in leading technology firms to innovate and stay relevant, responsible for identifying, building and delivering products in hyper-fast development cycles.

As the "CEO of the Product" Product Managers must be proficient in a wide range of capabilities which have been introduced in the Introduction to Product Management and Product Management II classes. This class (the Lab) will provide students with the opportunity to put those best practices and frameworks into practice by applying them to real problems and opportunities offered up by member companies. Students will be assigned specific product challenges and be responsible for completing assignments (as noted below) across most stages of the product development cycle, from ideation through commercialization. Although projects will vary based on the needs of the partner company, example possible problem statements that are appropriate for this class might include:

- Develop a new solution for an unaddressed customer need
- Address a new market requirement or react to competitive threats to ensure maintenance of an ever evolving
  product market fit (e.g. address changes in user behavior, adhere to regulatory requirements) while maintaining
  business viability
- Explore new technological applications to an existing value proposition

The course culminates in a formal recommendation to company executives with the suggested MVP, commercialization thesis, and business rationale.

This course is geared toward students that aim to work at medium to large sized companies as a product manager or leader, where firms are expected to innovate and launch new products and features as a means of ensuring they retain market relevance or expand into new markets based on current capabilities. We will cover the product development cycle from ideation to commercialization in that context. This course is not geared toward start-ups or new ventures, even if some of the concepts are applicable.

# **PRE & COREQUISITE COURSES**

This course is offered to students who have completed Introduction to Product Management and Product Management II (previously known as "So, you want to be a PM?") or the new 3 credit Product Management class offered in the Fall 2022. The pace of the class will be swift, and we will refer to concepts learned in the earlier courses to complete the course work. Students who have not completed Intro to PM and PM II (for example have only completed Intro to PM or PM II) or students who have completed neither but have prior experience as a product manager (e.g. held a role as a product manager in a technology company or have founded a technology start-up) should fill out <u>this form</u> prior to July 18<sup>th</sup> to request approval before registering for the course.

Although not a requirement for registering for the Lab, students who have taken other electives that are relevant to building digital products will have the opportunity to put those frameworks into practice in this class as well. For example, students will have the opportunity to (not an exhaustive list):

- apply frameworks to drive ideation (as learned in Foundations of Innovation, Innovate Design Thinking)
- deploy qualitative and quantitative customer research techniques to get customer feedback (as learned in Strategic Customer Insights, Modern Econometrics for Business)
- Recommend commercial strategies that reflect the networked strategic frameworks (as learned in Technology Strategy, Growth Hacking)

# STUDENT LEARNING OUTCOMES

The discipline of Product Management is evolving, as evidenced by the plethora of blogs, articles, books and opinions from some of the most accomplished product managers and consultancies. The PM curriculum at CBS, including the Lab, curates, organizes, and delivers the latest thinking as a foundation for students who aim to pursue careers in Product Management at medium to larger sized established firms. The specific objectives of the Lab are to:

- Deploy product management frameworks, tools and best practices that were learned in the prerequisites, on a current problem or opportunity faced by a member company.
- Experience the pace and complexity of what it takes to be a product manager in a ecosystem that is rapidly evolving, covering most aspects of the product life cycle (evaluating market needs, ideating on new products that achieve market and company fit, building roadmaps, driving prioritization decisions, developing MVP prototypes, sourcing customer feedback and building commercialization plans and business models).
- Apply strategic thinking to product design that naturally leverages the use of data and technology to build a competitive advantage.
- Influence without authority and negotiate with stakeholders by working in a team setting where team members will play different roles and will be accountable to each other for quick progress and success.
- Communicate effectively via presentation to member company executives

# CLASSROOM NORMS AND EXPECTATIONS



# **Core Culture**

Students are expected to adhere to CBS Core Culture in this class by being Present, Prepared, Participating.

## Inclusion, Accommodation, and Support for Students

At Columbia Business School we believe diversity strengthens any community or business model and brings it greater success. The School is committed to providing all students with equal opportunity to thrive in the classroom by providing a learning, living, and working environment free from discrimination, harassment, and bias on the basis of gender, sexual orientation, race, ethnicity, socioeconomic status, or ability.

Students with documented disabilities may receive reasonable accommodations. Students are encouraged to contact the Columbia University's Office of Disability Services for <u>information about registration</u>.

Columbia Business School adheres to all community, state, and federal regulations as relate to Title IX and student safety. Read more about CBS' policies to support <u>Inclusion</u>, Accommodations and Support for Students here.

## Honor Code And Academic Integrity

The <u>Columbia Business School Honor Code</u> calls on all members of the School community to adhere to and uphold the notions of truth, integrity, and respect both during their time in school, and throughout their careers as productive, moral, and caring participants in their companies and communities around the world. All students are subject to the Honor Code for all of their academic work. Failure to comply with the Honor Code may result in <u>Dean's Discipline</u>. Here you can review <u>examples of Academic Misconduct</u> which may result in discipline.

### **Course Attendance Policies**

Students from all programs should review and be familiar with the <u>MBA Core attendance policy here</u>. Students are expected to be present in all class sessions, including the Lab Working sessions (typically the second meeting of the class in a given week). Failure to attend class will negatively impact participation grade.

# METHOD OF EVALUATION

Individual Participation	20%
Individual Case Write Ups	20%
Team Project	60%

Letter grades for the course will be assigned in accordance with Columbia Business School's recommended grade distribution for elective courses. There will be several "deliverables" to be turned in at various points in the course, but the class discussions and activities in the course and in discussion forums are very important aspects of the course and the learning experience. Thus, grades will be based both on assignments that are turned in and on your performance in the classroom and off-site discussions. I will try to get feedback to you regarding your write ups as quickly as possible, so it is important that these deliverables be submitted on time and late submissions will impact grades.

Your overall grade will depend on the mix of individual and team assignments according to the following percentages:

Individual Participation (20%)

- Individual Case Write Ups (20%)
  - o <u>Airbnb, Etsy, Uber: Acquiring the First Thousand Customers</u> (10%)
  - Facebook: Hard Questions (A) (10%)
- Team Project (60%)
  - Market Requirements Doc (12%)
  - Prototype Plan (12%)
  - PRD (12%)
  - Final Written Project Report or Presentation to Member Company (12%)
  - Individual Project Contribution (via peer evaluation) (12%)

#### **COURSE ROADMAP/SCHEDULE**

The class will be run via a mix of lecture, case discussion, guest speakers and hands on work. Throughout the course, students are expected to come to class prepared. This typically implies achieving a good understanding of the material covered in previous classes as well as of any assigned readings. Unlike other classes, teams will have the opportunity to make progress on their capstone projects during class, but the expectation is that there will be substantial work outside of class required to satisfactorily complete the member company project.

Session	Topic(s)	Required Pre-Readings	Assignments Due (Type)	
Week 1: Co	Week 1: Course Introduction & Course Project Assignments / Company Research			
1 10/21/2017 (W)	Session 1: Lecture/Discussion Overview of course objectives, assignments, and trajectory of the class. Refresher of the role of the product manager and product development lifecycle, that will be the basis for this practicum. Review member company "Problems to be Solved."	Good Product Manager/Bad Product Manager Getting Started with Outcomes The Benefits and Pitfalls of Outcomes over Outputs Product Opportunity Assessment	Assignment (Individual): Fill out member company preferences survey by end of Session 1 day.	
2 10/26/2017 (M)	Session 2: Lab Working Session Use time to begin research of the assigned member company. Begin drafting a Market Requirements Document (MRD).		Assignment (Team): Create outline of an 'agile' Market Requirements Doc (MRD) in a shared Google doc and assign owners to each section by the end of week. Share with prof and course assistant.	
Week 2: Product Market Fit & Developing Opportunity Thesis				
<b>3</b> 10/28/2017 (W)	Session 3: Lecture/Discussion Discussion on balancing market, team, and product efficacy.	Jobs to be done The Only Thing That Matters		

4

	Techniques for getting customer feedback.	Product/Market Fit: What it really means, How to Measure it, and Where to find it <u>Needfinding</u>	
		Hypothesis Driven Validation	
4	Session 4: Lab Working Session		
11/04/2017	Weekly Stand-Up (<10 mins)		
(W)	Define research methodology and required customer input. Make a plan for how you will get customer insights.		
Week 3: Bui	Iding Products that Scale		
<b>5</b> 11/09/2017 (M)	Session 5: Lecture Multi-sided platforms Network effects	Strategic Decisions for Multisided Platforms	
<b>6</b> 11/09/2017 (W)	Session 6: Lab Working Session Weekly Stand-Up (<10 mins) Review progress on customer feedback and create customer persona(s).		
Week 4: Identifying Solutions			
<b>7</b> 11/09/2017 (M)	Session 7: Case Discussion	Why Design Thinking Works Airbnb, Etsy, Uber: Acquiring the First Thousand Customers	Case Assignment (Individual): Read Airbnb, Etsy, Uber: Acquiring the First Thousand Customers case. Submit 1 page Google document (share with prof and course assistant) that answers case questions before the start of Session 7.
8	Session 8: Lab Working Session		
11/09/2017 (W)	Weekly Stand-Up (<10 mins) Brainstorm possible solutions. At this stage, team should have many viable ideas that will be the basis of the MVP.		
Week 5: Prioritization			
<b>9</b> 11/09/2017 (M)	Session 9: Lecture Frameworks for making prioritization decisions	Product Prioritization Frameworks	

10	Session 10: Lab Working Session		Assignment (Team): Make a
11/00/2017	Weekly Stand Lin (<10 mins)		final prioritization decision by
11/09/2017	Work with your tooms to a) nick a		the end of Week 5 (Friday
(vv)	prioritization decision making		midnight) and include the
	framework and h) start prioritizing		rationale in the MDD
			rationale in the MRD.
			Assignment (Team): Submit
			final Market Requirements Doc
			(MRD) by the end of Week 5
			(Friday midnight).
Week 6: Bui	ld a Prototype	I	I
11	Session 11: Lecture	Step-by-step Guide to Building	
11/09/2017	Building prototypes for testing without	MVPs	
(M)	building products		
(101)		Consider Wireframes, Mockups	
		<u>or Prototypes</u>	
		Additional resource: <u>18 best</u>	
		Prototyping tools	
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12	Session 12: Lab Working Session		Assignment (Team): Submit a
11/09/2017	Weekly Stand-Up (<10 mins)		one-page summary via a
(W)	Create a plan for building a prototype		Google Doc (share with prof
	and getting customer feedback over the		and course assistant) of your
	next week and half.		plan for developing a
			prototype and getting
			customer feedback by end of
			Week 6 (Friday midnight).
Week 7: Technology Requirements			
13	Session 13: Guest Speakers	Technical Fluency for a Product	
11/09/2017	Guest speaker debate on Crypto,	Management Role	
(M)	Decentralization, NFTs, Blockchain - Transformative or Hype?	Web computing primer	
		Different Types of Mobile App	
		Development	
		Cloud computing primer	
		AR/VR primer (TRD)	
		iviachine learning primer (TBD)	
		Blockchain primer (TBD)	

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14	Session 14: Lab Working Session		Assignment (Team): Create
11/09/2017	Weekly Stand-Up (<10 mins)		outline of an 'agile' Product
(W)	Work on technical requirements.		Requirements Doc (PRD) and
			assign owners to each section.
			Submit PRD outline via Google
			docs (share with prof and
			course assistant) by the end of
			Week 7 (Friday midnight).
			Document (in the PRD) the
			technology requirements to
			launch a functioning product or
			feature including at least,
			feature(s) description, user
			flows, system & environment
			requirements, constraints and
			dependencies.
Week 8: Prepare Launch Plan with a PRD (Product Requirements Doc)			
15	Session 15: Lecture / Guest Speaker	How to Launch (TBD)	
11/09/2017 (M)	How to write compelling PRDs and "agile" roadmaps	Writing "Lean" PRDs (TBD)	
	(Tentative) Panel discussion with eng + sales + legal on 'what do you want to see in a product plan?'	Roadmaps (TBD)	
16	Session 16: Lab Working Session		Assignment (Team): Submit
11/09/2017	Weekly Stand-Up (<10 mins)		final prototype by end of Week
(W)	Work with your teams to get more specific about your plan to build a PRD.		8 (Friday midnight).
Week 9: Commercialize (Go-To-Market Planning)			
17	Session 17: Lecture	Go-to-market strategy	
11/09/2017	Go-to-market strategy basics	Sotting goals and matrice (TDD)	
(M)	Business model considerations	Setting goals and metrics (TBD)	
	Defining success criteria and what makes for a good KPI	John Doerr interview on OKRs	
18	Session 18: Lab Working Session		Assignment (Team): To be
11/09/2017	Weekly Stand-Up (<10 mins)		included in the PRD, define the
(W)	Determine the product's		go-to-market strategy,
-	commercialization needs and what		messaging, and business plan
	cross-functional team engagement is		(no separate submission
	required. Agree on the Key Performance		required) by end of week
			(Friday midnight).
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Week 10: Et	inics, Privacy and Regulatory Conside	rations in Product Manageme	nt

<b>19</b> 11/09/2017 (M)	Session 19: Case Discussion	Ethical considerations when building digital products - 'should' vs 'could' (TBD) Role of Data and Privacy Implications (access, use, share) (TBD) Regulatory considerations (TBD) <u>Facebook: Hard Questions (A</u> )	<b>Case Assignment (Individual):</b> Read Facebook: Hard Questions (A). Submit 1 page Google document that answers case questions (shared with prof and course assistant) before the start of Session 19 class.
20	Session 20: Lab Working Session1		
11/09/2017 (W)	Begin to assemble the final presentation that will be presented to the member company decision committee.		
Week 11: Leadership: Communicating and Influencing without Authority			
21 11/09/2017 (M) 22 11/09/2017 (W)	Session 21 & 22: Lecture & Role Play The final week before your review with member companies. We will use both sessions to run 'mock decision making meetings'. Each team will run an abbreviated mock executive review meeting as preparation for the final executive review with member companies.	Leading without Authority (TBD) How to work with Engineers, UX, etc. (TBD)	Assignment (Team): Submit complete PRD by the beginning of Session 21. Assignment (Team): Have your final presentation to member companies >50% complete to review with your classmates during sessions 21 and 22.
Week 12: Final Review with Member Companies			
23 11/09/2017 (M) 24	No class scheduled. This week will be u	sed for final presentations to mem permit.	ber companies when schedules
11/09/2017 (W)	R	egroup and share learnings.	