



PREPARING INNOVATIVE LEADERS FOR GLOBAL IMPACT

Graduate School of Management
Department of Marketing
University of California - Davis

New Product Development

Summer Quarter 2023

MGB 241 001 Summer Q 2023 (CRN: 80639)

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Office Hours: Please arrange a meeting via email and give some advance notice.

Do you aspire to launch your own startup?

Do you want to learn how to launch it successfully?

If yes, this is YOUR course!

Student Evaluations from	2013 SAC	2014 BAY	2015 SAC	2016 SAC
Instructor Rating:	4.8 (16 students)	4.3 (31)	4.5 (22)	4.5 (20)
Course Rating:	4.4 (16 students)	4.3 (31)	4.5 (22)	4.7 (20)

Course Description

Each year, in the US, approximately 30,000 new consumer products (i.e. CPG products) are launched. About 95% of them are failures (see Carmen Nobel (2011), *Clayton Christensen's Milkshake Marketing*). For other product categories the failure rate ranges from 40%-60%. Why is this so? Even though firms have a long history of bringing new products to the market, why do a majority of them fail?

As evident from this fact, bringing a new product to market is fraught with uncertainty, and the odds are stacked against you (quite heavily!). While no course can ensure success for every new product introduction you might make, this course will help you think of ways to reduce the possibility of failure – i.e., we will study the challenges of bringing new products to market, and discuss avenues to possibly overcome them. The topics discussed are relevant whether you work for a startup or Fortune 500 firm or whether your firm focuses on the B2B or B2C space.

The course focuses on state-of-the-art frameworks, concepts and tools that have been recently validated by innovative companies. We will structure our learning around the following basic steps of the innovation process:

- Opportunity Identification
- Idea Generation
- Product Design
- Concept Testing
- Launch Strategies

You are introduced to and apply the following state of the art frameworks used by the most renowned and successful startups:

- Customer Development Process (CDP)
- Business Model Canvas (BMC) & Value Proposition Design (VPD)
- Design Thinking
- Rapid Prototyping and Agile Lean Development

As part of this course you will also learn to deal with multiple entities that speak 'different languages,' helping you develop the ability to communicate ideas to the different constituencies involved in product development.

Course Objectives

The course focuses on the NPD steps of:

- Opportunity Identification
- Idea Generation
- Product Design
- Concept Testing
- Launch Strategies

To learn and to subsequently apply the acquired knowledge the course is structured into the following layers:



This ensures that you take away as much as you possibly can: A NPD project to pitch to Your company or Your own start-up if you decide to do so.

Any team can continue to pursue the idea by registering for the BIG BANG competition (<http://gsm.ucdavis.edu/big-bang-business-competition>).

Class Format and Administration

Classes are organized in the following way:

1. In-class lectures
2. In-class discussions
3. In-class exercises
4. Group case analysis, group case presentations, group project work, and discussions

Classes consist of lectures, exercises, discussions, case and group project work. Lectures provide the concepts and tools. In-class discussions are based on the assigned reading material, lectures, and case work. The cases will furnish real-world examples of how concepts and tools are applied in practice. Additional information will be given in the first class (**do not miss it**).

Class Rules

Notice of the Academic Code of Conduct

There are several individual level assignments in this course. You are expected to complete the assignments on your own, without help from your peers – i.e., you are not permitted to work with others on any aspect of the individually graded coursework. In case you have questions regarding the material or assignments, I'm available either in my office, by phone or email and will be happy to answer your questions.

Please read <http://sja.ucdavis.edu/files/cac.pdf> for details.

Use of Electronics in Class

You are allowed to use your laptop/tablet in class – however this use is conditional. You cannot use your laptops for any other activity other than those pertaining to the class. Hence, surfing, emailing, chatting, facebook visits and other related activities are not allowed. If such activity is observed in class, then laptop privileges will be revoked – for the entire class. Smartphone/phone use is not allowed in class – you are welcome to step out of class, with my permission, if you need to answer a call.

Prerequisites

- Marketing Management (MGT/P/B 204)

I will assume that you have some prior knowledge of pricing and market research techniques – but it is also my pleasure to guide you towards introductory references and answer your questions if you would like some help.

Course Requirements and Grading

The course requirements and their contribution to the overall **letter** grade are as follows:

<u>Your Individual Performance:</u>	<u>60%</u>
1. Individual Class Participation	25%
2. Individual Essay (1 article from the list)	20%
3. Peer Group Evaluation for Cases & Project	15%
<u>Your Group Performance:</u>	<u>40%</u>
4. Group Case Presentations (4 cases)	15%
5. Group Project (1 report, 4 presentations)	25%

Your Individual Performance (60%)

1. Class Participation (25%)

Meaningful class interactions add a great deal to the learning experience. Hence, I consider class participation to be an important component of your education in this course. A lot of your learning about ideation and the creativity process will come from intensive class discussions – so, I expect that you have read all the articles assigned to each class prior to the class and come prepared to discuss your insights about and analysis of the articles. Additionally, feel free to go above and beyond just the class readings – bring articles that caught your attention, any prior experience you might have had with new product development also into the conversation. Conversations that enrich the class discussion are encouraged; at the same time I will discourage conversations that might veer the class off-track. Simply speaking in class without adding constructively to the class discussion will not merit any points. Finally, while I encourage you to voluntarily participate in the class discussion, also expect to be cold called from time to time.

Please miss no more than 1 class or your grade will be B+ or lower.

2. Individual Essays (20%)

Each student is expected to write an essay on **one (1) reading** for a respective grade. Any student can pick any **article** from the list provided below. Essays should be in the form of an executive summary (see outline on Canvas). The Essay should highlight the interesting points of the article and must contain **personal original insight based upon your analysis** of the article, applying the chosen article insights to your own business idea and deriving **actionable recommendations** for your team. This original insight may be supported by including attachments that highlight your analyses. This can form the appendix of the paper.

The Essay should be double-spaced; Times Roman size 12 fonts; and the Essay should not exceed three (3) pages (not including appendices).

Please structure your Essay as follows:

1. Introduction (1 para, 1/3 page max)
2. Summary of key take-aways from reading (bullet points, max 2/3 page)
3. Original comments & insights that relate to your employer / NPD project (≈2p)
4. Summary (1 para, 1/3p)

You will be provided with an outline (word doc) and I explain in class what the expectations are.

Essay is due by:

Essay: Aug 18, 2023, 11pm (max. 3 pages)

List of Articles for Essays:

- | | |
|--|----------------|
| 1. Why Most Product Launches Fail (Schneider & Hall 2011) | F1104A-PDF-ENG |
| 2. Turn Customer Input into Innovation (Ulwick 2002) | R0201H-PDF-ENG |
| 3. The Customer Centered Innovation Map
(Bettencourt & Ulwick 2008) | R0805H-PDF-ENG |
| 4. Customer Discovery and Validation for Entrepreneurs
(Cespedes, Eisenmann & Blank 2012) | 812097-PDF-ENG |
| 5. Design Thinking. (Brown 2008) | R0806E-PDF-ENG |

3. Peer Group Evaluation on Case and Project (15%)

The four (4) cases and the group project are teamwork. Part of the overall individual grade for each student depends on an anonymous rating by his group peers at the end of class.

Your Group Performance (40%)**4. Group Case Presentations (15%)**

As the course aims to enable participants to analyze realistic scenarios and subsequently devise and implement appropriate solutions, team case work is key. Team memberships will be assigned in the first class and hold for the entire course. Grading will be based on the analytics as well as the suggested solution, their presentation, and the team's contribution to class discussion.

Depending on the final size of the class, each group presentation will be limited to leave sufficient time for in-class discussion. All presentations (6-10 PPT slides) are due by email at the following times:

Case 1: TruEarth	Aug 18, 2023 11pm
Case 2: Kookaburra	Aug 25, 2023 11pm
Case 3: Hasbro	Sep 1, 2023 11pm
Case 4: Metabical	Sep 8, 2023 11pm

5. Group Project (25%)

The project for this course will be to design a **NEW PRODUCT OR SERVICE** for a company of your choice or **START YOUR OWN FIRM**. It will be graded based on how well it incorporates the aspects that have been covered in the course. The readings from the course will also prove useful in formulating your ideas and concepts on the topic you intend to study.

Every student generates 2-3 initial ideas. You can use observational techniques or come up with challenges you think should have better solutions. You should describe your idea on a single slide addressing:

- What is the problem you are addressing?
- Why is it relevant, i.e., why and how much do you think people would be willing to pay for a solution?
- What could be first starting point of how to design a solution?

As a group, you discuss all the ideas: one presents, others try to challenge and improve it. Your group chooses the Top 3 ideas. These are the base for meeting other teams to get similar feedback, but now across groups. Then your team chooses the Top 1 idea to pursue.

Subsequently, your team will apply all concepts learned in class to fail your team idea. If it survives, you take the next step. If you need to kill it, you take your 2nd best idea.

In detail, we plan the following in-class schedule for your group project:

Class 1+2:

We will kick start your NPD project in class 1. I will introduce all teams to the group project and may present results from previous projects as an inspiration.

Every student will bring 2-3 initial ideas to the classroom. Please use the template from Canvas to structure your ideas before class. Each idea should be described along 3 criteria:

- Which problem is the solution addressing?
- How could it potentially be solved?
- Value: What would people pay for it?

In total, you may have 1-3 slides per idea. The shorter the better. All your ideas need to be on Canvas by

Aug 12, 2023, 11pm.

After putting the teams together in class 1, we will have a first in-class round of feedback within your teams on all your ideas to facilitate constructive feedback. In class, you integrate the feedback and – as a team – choose the top 2-3 ideas from all ideas presented in your group.

Then, your set of 2-3 ideas will be challenged across teams. For this session, each team prepares an initial outline of around 2-3 slides for each of the 3 selected ideas.

After the feedback sessions – which may continue during the week – you choose your final group project idea that your team is going to evaluate.

Class 3+4:

An **intermediate presentation 1** is scheduled. Your intermediate presentation 1 of around 4-8 slides is due on Canvas by

Aug 19, 2023, 5pm.

Class 5+6:

An **intermediate presentation 2** for feedback is scheduled.

The intermediate presentation 2 of around 9-15 slides is due on Canvas by

Aug 26, 2023, 11pm.

You are prototyping your solution in a design exercise in class.

Aug 27, 2023.

Class 7+8:

An **intermediate presentation 3** for feedback is scheduled. Focus is your associated **business model** for your group project.

The intermediate presentation 3 of around 4-5 business case slides is due on Canvas by:

Sep 2, 2023, 5pm.

Class 9+10:

Final group project report is due and is presented. It is limited to a maximum of twenty (20) slides plus notes below the slides within PPT (not including attachments and appendices).

ALL submissions (powerpoint presentation) are due by (no exceptions):

Sep 9, 2023, 5pm.

You may send a final version of your report until **Sep 14, 2023, 11pm.**

Required Course Material

Required Books

Steve Blank and Bob Dorf	The Startup Owner's Manual, 1 st edition, 2020, ISBN-13 : 978-1119690689
Alexander Osterwalder & Yves Pigneur	Business Model Generation, 1 st edition, 2010, ISBN-13 : 978-0470876411
Alexander Osterwalder et al.	Value Proposition Design, 2014 ISBN 978-1-118-96805-5

'New Product Development' TextPak

which consists of articles used in the lectures.

Linked items are available online or through the UC Davis library. If noted, some links will need to be accessed from on campus or by using the [library VPN](#). Some items will need to be searched for directly. The link will take you to main the HBR page of the library. Click on “Search within this publication” and then search for “AN [Insert number]” in the second field.

1. [Why Most Product Launches Fail](#) [VPN]
(Schneider & Hall 2011) F1104A-PDF-ENG
2. [Turn Customer Input into Innovation](#) [VPN, search for AN 5848093]
(Ulwick 2002) R0201H-PDF-ENG
3. [The Customer Centered Innovation Map](#) [VPN]
(Bettencourt & Ulwick 2008) R0805H-PDF-ENG
4. [Blue Ocean Strategy](#) [VPN, search for AN 14599913]
(Kim & Mauborgne 2004) R0410D-PDF-ENG
5. Customer Discovery and Validation for Entrepreneurs [HBS coursepack]
(Cespedes, Eisenmann & Blank 2012) 812097-PDF-ENG
6. [Direct Observation: Some Practical Advice](#)
(Patnaik & Becker 1999, A Jump White Paper).
7. [Bootcamp Bootleg](#)
8. [Design Thinking](#). [VPN, search for AN 32108052]
(Brown 2008) R0806E-PDF-ENG
9. Design Thinking and Innovation at Apple. [HBS coursepack]
(Thomke & Feinberg 2012) 609066-PDF-ENG
10. A Practical Guide to Conjoint Analysis (Wilcox 2003) [HBS coursepack]
UV0406-PDF-ENG

Cases:

11. TruEarth Healthy Foods: Market Research for New a Product [HBS coursepack]
Introduction (Kasturi Rangan & Yong 2009) 4065-PDF-ENG
12. TruEarth Healthy Foods – Student Spread Sheet [HBS coursepack]
4067-XLS-ENG
13. Kookaburra Cricket Bats: Dealing with Cannibalization [HBS coursepack]
(Hennessy 2012) KEL684-PDF-ENG
14. Kookaburra Cricket Bats – Student Spreadsheet [HBS coursepack]
KEL687-XLS-ENG

15. Hasbro Games – POX (A) & (B) [**HBS coursepack**]
(Godes & Ofek 2004, 2005) 505046-PDF-ENG and 505047-PDF-ENG
16. Metabical: Pricing, Packaging and Demand Forecasting for a New Weight-Loss Drug [**HBS coursepack**]
(Quelch & Beckham 2010) 4240-PDF-ENG

Additional Readings (also part of your Textpak):

17. [Decisions 2.0: The Power of Collective Intelligence](#) [VPN]
(Bonabeau 2009) SMR302-PDF-ENG
18. OpenIDEO [**HBS coursepack**]
(Lakhani, Fayard, Levina & Pokrywa 2012) 612066-PDF-ENG
19. [Innovation's Holy Grail](#) [VPN]
(Prahalad & Mashelkar 2010) R1007N-PDF-ENG
20. [The New Corporate Garage](#) [VPN]
(Anthony 2012) R1209B-PDF-ENG
21. A Framework for Scaling Local Innovations [**HBS coursepack**]
(Soman, Kumar, Metcalfe & Wong 2012) ROT180-PDF-ENG

Course Schedule

Date	Topic
Introduction to the “Customer-Centric Innovation Process”	
Class 1+2	
Sun Aug 13 9.30a- 4.30p BR-1503	<p><u>Lecture:</u></p> <ul style="list-style-type: none"> • Class Logistics & Your Expectations • Product vs. Customer Development Model & Business Model Canvas (I) • Customer Discovery & Ideation – Customer Centered Innovation Map <p><u>Individual Assignments - Introduction:</u></p> <ul style="list-style-type: none"> • Introduction to the Individual Assignment <p>Essay: Aug 18, 2023, 11pm (max. 3 pages)</p> <p><u>Case Assignments - Introduction:</u></p> <ul style="list-style-type: none"> • Case TruEarth Team Solution Presentations: Aug 18, 2023, 11pm (6-10 slides) • Case Kookaburra Team Solution Presentations: Aug 25, 2023, 11pm (6-10 slides) <p><u>Group Project (1):</u></p> <ul style="list-style-type: none"> • Introduction to the Group Project • Assignment of Groups • Kickoff – first in-class Team Session – Get feedback from your group: 3 Initial Ideas: Aug 12, 2023, 11pm (2-3 slides per idea) • Choose your top 3 Team ideas based on feedback • Internal Group Feedback Session on all ideas; Select your Top 3 Ideas • Mutual Group Feedback Session on Your 3 Ideas • Choose Your Best Idea based on Feedback in Group Discussion <p><u>Readings:</u></p> <ol style="list-style-type: none"> 1. Why most products fail (Schneider & Hall 2011) 2. Book: The Startup Owner’s Manual 3. Turn Customer Input into Innovation (Ulwick 2002) 4. The Customer Centered Innovation Map (Bettencourt & Ulwick 2008) 5. Blue Ocean Strategy (Kim & Mauborgne 2004) 6. Design Thinking. (Brown 2008) 7. Design Thinking and Innovation at Apple. (Thomke & Feinberg 2012) <p><i>Supplemental Reading</i> Customer Discovery and Validation for Entrepreneurs (Cespedes, Eisenmann & Blank 2012)</p> <p><i>Supplemental Reading for GP1:</i></p> <ol style="list-style-type: none"> a. Direct Observation: Some Practical Advice (Patnaik & Becker 1999, A Jump White Paper, http://bit.ly/dsCuq9). b. Bootcamp Bootleg (http://stanford.io/ipaPIa)

Date	Topic
Value Proposition, Design Thinking	
Class 3+4	
Sun Aug 20 9.30a- 4.30p BR-1503	<p><u>Individual Assignment - Essay:</u> Essay due: Aug 18, 2023, 11pm (max. 3 pages)</p> <p><u>Case Assignments:</u> 1. Hasbro Games – POX (A) & (B) Team Solution Presentations: Sep 1, 2023, 11pm (6-10 slides) 2. Metabical Team Solution Presentations: Sep 8, 2023, 11pm (6-10 slides)</p> <p><u>Lecture:</u> <ul style="list-style-type: none"> Design Thinking Value Proposition & Value Map </p> <p><u>Case Presentations & Discussion:</u> <ul style="list-style-type: none"> Case TruEarth Team Solution Presentations: Aug 18, 2023, 11pm (6-10 slides) </p> <p><u>Group Project (2):</u> <ul style="list-style-type: none"> Present Your Group Project Work to Instructor Intermediate Presentation 1: Aug 19, 2023, 5pm (4-8 slides) </p> <p>Readings 1. TruEarth Healthy Foods: Market Research for New a Product Introduction (Kasturi Rangan & Yong 2009)</p>

Date	Topic
Group Project: Intermediate Presentations & Prototyping	
Class 5+6 Sun Aug 27 9.30-12.30n BR-1503	<p><u>Lecture:</u></p> <ul style="list-style-type: none"> • Concept Testing & Nielsen Bases • Prospect Theory <p><u>Case Presentations & Discussion:</u></p> <ul style="list-style-type: none"> • Case Kookaburra <p>Team Solution Presentations: Aug 25, 2023, 11pm (6-10 slides)</p> <p><u>Group Project (3):</u></p> <ul style="list-style-type: none"> • Present Your Group Project Work in class to all: <p>Intermediate Presentation 2: Aug 26, 2023, 5pm (9-15 slides)</p> <p><u>Rapid Prototyping Exercise (Group Project):</u></p> <ul style="list-style-type: none"> • In-class Exercise on Prototyping (approx. 100 minutes) • Based on your Intermediate 4-8 page report plus Instructor Feedback <p><u>Readings:</u></p> <ol style="list-style-type: none"> 1. Kookaburra Cricket Bats: Dealing with Cannibalization (Hennessy 2012)

Date	Topic
Group Project (4): Business Models	
Class 7+8 Sun Sep 3 9.30a-4.30p BR-1503	<p><u>Case Presentations & Discussion:</u></p> <ul style="list-style-type: none"> Hasbro Games – POX (A) & (B) <p>Team Solution Presentations: Sep 1, 2023, 11pm (6-10 slides)</p> <p><u>Group Project (4):</u></p> <ul style="list-style-type: none"> Present Your Group Project Work (Focus Business Model) <p>Business Model Presentation: Sep 2, 2023, 5pm (4-5 slides)</p> <p><u>Readings:</u></p> <ol style="list-style-type: none"> Hasbro Games – POX (A) & (B) (Godes & Ofek 2004, 2005)

Date	Topic
Case Presentations & Group Project (5b)	
Class 9+10 Sun Sep 10 9.30a-4.30p BR-1503	<p><u>Case Presentations & Discussion:</u></p> <ul style="list-style-type: none"> • Metabical <p>Team Solution Presentations: Sep 8, 2023, 11pm (6-10 slides)</p> <p><u>Group Project (5):</u></p> <ul style="list-style-type: none"> • Present Your Final Group Project Work <p>Final Presentation: Sep 9, 2023, 5pm (max. 20 slides)</p> <p>Group Project - Final Report due Sep 14, 2023, 11pm (Max. 20 slides plus notes)</p> <p>Class Wrap-up</p> <p>Evaluation</p> <p><u>Readings:</u></p> <ol style="list-style-type: none"> 2. Metabical: Pricing, Packaging and Demand Forecasting for a New Weight-Loss Drug (Quelch & Beckham 2010)

Statement on Accommodation

UC Davis is committed to educational equity in the academic setting, and in serving a diverse student body. All students who are interested in learning about how disabilities are accommodated can visit the [Student Disability Center](#) (SDC). If you are a student who requires academic accommodations, please contact the SDC directly at sdcs@ucdavis.edu or 530-752-3184. If you receive an SDC Letter of Accommodation, submit it to your instructor for each course as soon as possible, at least within the first two weeks of a course.

Rights and Responsibilities

All participants in the course, instructor and students, are expected to follow the UC Davis [Principles of Community](#), which includes affirmation of the right of [freedom of expression](#), and rejection of discrimination. The right to express points-of-view without fear of retaliation or censorship is a cornerstone of academic freedom. A diversity of opinions with respectful disagreement and informed debate enriches learning. However, in this course, any expression or disagreement should adhere to the obligations we have toward each other to build and maintain a climate of mutual respect and caring.

You are expected to take UC Davis's [Code of Academic Conduct](#) as seriously as we do. You were given this code of conduct with explicit explanations of violations (e.g., plagiarism, cheating, unauthorized collaboration, etc.) and your responsibilities in regard to them during orientation, and you signed a statement affirming that you understand it. Academic conduct violations will not be tolerated, and your instructor will not hesitate to turn violators over to Student Judicial Affairs. If you are uncertain about what constitutes an academic conduct violation, please refer to the code linked above, contact your instructor, or refer to the [Office of Student Judicial Affairs](#).

All material in the course that is not otherwise subject to copyright is the copyright of the course instructor and should be considered the instructor's intellectual property.

Safety and Emergency Preparedness

UC Davis has many resources to help in case of emergency or crisis. While reviewing campus [Emergency Information](#), you may want to register for UC Davis Warn Me and Aggie Alert, which will give you timely information and instructions about emergencies and situations on campus that affect your safety. If there is an emergency in the classroom or in non-Davis locations, follow the instructions of your instructor.

Student Wellness

You deserve respect, and are encouraged to [practice self-care](#) so that you can remain focused and engaged; that might mean getting a drink of water, leaving to use the restroom, taking a moment to stretch, or doing something else you need to do to take care of yourself. Please be respectful of others by minimizing distractions when practicing self-care – especially in lab, field or studio settings where safety is imperative.

College life can be overwhelming at times but know that you are not alone if you're feeling stressed. For many of us, systems of oppression such as racism, sexism, heterosexism or cissexism may cause additional stress. Please remember to practice self-care and reach out for support if and when you need it.

You can visit [Virtual UC Davis](#) to find resources related to health and well-being, academics, basic needs (food and housing) and more.

Disclaimer

Of course, any unexpected events might require elements of this syllabus to change. Your instructor will keep you informed of any changes.