**NEW PRODUCT DEVELOPMENT AND MANAGEMENT**

**MAR 6833**

**Module 2, Fall 2016**

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Office Hours: Tuesday & Thursday, 1:45pm—2:30pm, or by appointment

#### COURSE OBJECTIVES AND FORMAT

This course will provide students with a structured way of thinking about the new product development process from a marketing perspective. While there is no guaranteed formula for success, we will discuss and apply up-to-date tools and approaches for developing new products which should be relevant whether you work for a small startup or a large company and whether you sell products or services. The issues discussed in the course often require both qualitative and quantitative analyses (e.g., market research data analysis). Learning in this course will be achieved through a mix of lectures and in-class exercises and analyses of business case studies, as well as a hands-on product development project in which students will implement the tools discussed in this course and others.

#### COURSE MATERIALS

1. HBS Case and Readings: at Target Copy Center
2. All other required Readings: available on <https://ares.uflib.ufl.edu/ares/>
3. Lecture Notes: posted on course website after class

**CLASS CONDUCT**

* Students must actively participate in class discussions, whether as individuals, designated speakers, or members of project teams. Thus, timely preparation of readings, case analyses and other assignments is required. Come to all classes prepared, awake, and ready to add value.
* To facilitate active attention and participation, **all laptops will be closed and cellphones stowed during lectures and discussions.**
* Students’ nameplates must be displayed on the desktops.
* Attendance is crucial.  Lateness and absences will be duly noted and will negatively impact your grade. It is the student’s responsibility to notify me, in advance, of an excused absence and to provide documentation of an acceptable reason (see (<https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx>). Otherwise, the absence will be considered unexcused and the student’s participation grade will decrease. Excessive absences (more than one third of meetings) may result in a “fail”.
* Students who miss an assignment for an invalid reason will get a zero for the assignment.

**ASSIGNMENTS & STUDENT TASKS**

1. **Readings**

Students are expected to complete all assigned readings by the scheduled dates.

1. **Case Analysis and Discussion**

One case study will be discussed in class during the course. The title of the case and class session when it will be discussed are indicated in the schedule. Students are expected to read and analyze the assigned case carefully and be prepared to discuss them on the assigned date. To assist you in your preparation, “assignment questions” are provided. In your preparation of the case, you should confine yourselves to the information provided in the case, as well as the time frame of the case. It is not necessary, or even desirable, to consult outside sources such as the World Wide Web. All cases require that each student be thoroughly prepared in order to maximize learning and her/his contributions to class discussion. **Make sure to bring a hard copy of the case to class.**

1. **Individual Written Assignments**

Preceding seven of the discussions, you will submit via the course website on e-learning your reports pertaining to cases and other course assignments. **These assignments must be submitted before the corresponding class sessions.** Please note the due dates in the schedule. Print a copy of your report to refer to in the class discussion.

**Note that assignments marked as “individual” in the schedule are to be your independent work.** You should not discuss those assignments with other members of your team. Failure to submit any assignment by the due date and time will result in a grade of zero for that assignment. These assignments can be submitted days or even weeks in advance, so if you know you will be traveling or have limited access to the Internet, be sure to submit your assignment in advance.

1. **In-Class Team Assignment**

Several in-class team assignments occur during the course. These assignments ill be described in more detail during the class sessions in which they are embedded. To receive credit for team assignments you must be present in class and actively participating.

1. **New Product Development Project (to be submitted by teams)**

Students will work in teams to develop a new product concept in a familiar product category. Each team must focus on a different category. Categories must be submitted to the instructor for final approval. In the event that two or more teams submit the same category, categories will be assigned to teams on a first-come, first-serve basis. Category selection guidelines will be discussed in class.

The goal of the project is to emulate the product development process and provide various learning opportunities along the way. **The project requires all team members to engage in active field work, observation, user interviews, and multiple prototyping and testing iterations.** The project is comprised of three assignments:

* Opportunity identification report and presentation, in which teams will apply various design thinking and market research approaches discussed in class to individually and jointly identify unmet customer needs that represent viable new product opportunities. As will be explained in class, this assignment consists of an individual component and a team component.
* Concept testing plan, in which teams will (1) describe at least two new product concepts and (2) develop a plan for effectively testing them.
* Final report and presentation, in which teams will discuss the results of the tests conducted and provide their recommendations.

Examples of past submissions are posted on the course website. These examples should **not** be used as “templates” for your own reports, but rather are intended to convey the scope and depth of the analysis.

**All assignments must be submitted before the beginning of the corresponding class sessions.** Please note the due dates in the schedule.

1. **Summary Schedule of Assignment Due Dates**

|  |  |  |  |
| --- | --- | --- | --- |
| **Date** | **Assignment** | **Responsibility** | **Grade Points** |
| October 27 | Team Request Deadline | Team | Ungraded |
|  | Category Selection Report | Team | Ungraded |
| November 1 | Reflection Report | Individual  | 2 |
| November 10 | Opportunity Identification Report and Presentation | Individual Team  | 1510 |
| November 15 | Failure Résumé Assignment | Individual  | 5 |
| November 22 | Design Object Assignment | Individual  | 2 |
| November 29 | Testing Plan Assignment | Team  | 10 |
| December 1 | Clocky Case Report | Individual  | 6 |
| December 8 | Final Report and Presentation | Team  | 20 |
| December 13 | Final Exam (In Class) | Individual  | 10 |
|  |  | Subtotal: | 84 |
|  | Participation | Individual | 20 |
|  |  | **Grand Total:** | **100** |

|  |  |
| --- | --- |
| **If you earn at least:** | **You will get:** |
| 95 | A |
| 90 |  A- |
| 87 |  B+ |
| 83 | B |
| 80 |  B- |
| 77 |  C+ |
| 73 | C |
| 70 | C- |
| 65 | D+ |
| 55 |  D |

(Scores below 55 points will result in an F.)

Grades are translated into grade points by the University Registrar according to guidelines posted on <http://www.registrar.ufl.edu/catalog/policies/regulationgrades.html>.

This course follows general University policy regarding academic honesty and accommodations for students with disabilities. Students requesting classroom accommodation must first register with the Dean of Students Office.

Final Letter grades will be assigned as follows:

### Required Readings (available on <https://ares.uflib.ufl.edu/ares/>)

1. The Myth of Commoditization
2. Imitation is More Valuable than Innovation
3. Turn Customer Input Into Innovation
4. Learning from Extreme Consumers (in coursepack)
5. Spark Innovation Through Empathic Design
6. Blue Ocean Strategy
7. The Innovator’s DNA
8. Hypothesis-Driven Entrepreneurship: The Lean Startup (in coursepack)
9. Three Questions You Need to Ask About Your Brand
10. Eager Sellers and Stony Buyers
11. Crossing the Chasm (chapter 1)

#### COURSE SCHEDULE

**Tuesday, October 25**

Theme: Course Introduction

 Why Do New Products Fail?

Read: The Myth of Commoditization

 Imitation is More Valuable than Innovation

**­­­­­­­­­­­­­­­­­­­­­Thursday, October 27**

In-Class Activity: The Design Thinking Challenge

**Optional: Team Assignment** (submit via email to me **before class**)

Take some time to put together a team that will work well together in terms of schedules, workplaces, and different skills. Ideally, you will all share a passionate interest in a product or category.  Each team should include 4-5 members. The exact number will be determined in the first class, depending on class enrollment.

If I don’t hear from you **before** the beginning of class, I will randomly assign you to a team.

**Tuesday, November 1**

Theme: Understanding People’s Needs

Read: Turn Customer Input Into Innovation

 Learning from Extreme Consumers

 Spark Innovation Through Empathic Design

**#1 – Team Assignment Due: Category Selection Report**

(Due before class on course website)

 This is the first part of the group new product project. In this preliminary report you will merely identify the domain (i.e., product category, activity, user) in which your project will take place. Categories must be submitted to me for final approval, via this report. In the event that two or more teams submit the same product category, product categories will be assigned to teams on a first-come, first-serve basis. Be sure to satisfy yourselves that you can have access to enough information about the category and a large enough number of both average and extreme users.

**#2 – Individual Assignment Due: Reflection on Design Thinking Challenge**

(Due before class on course website. 300 word maximum)

 The goal of the Design Thinking Challenge (October 27) was to grow your capacity as an innovator. What did you learn? How did the process influence your outcome? More specifically:

* How did engaging and testing prototypes with a real person change the direction that your prototype took?
* What was it like showing unfinished work to another person?
* How did the pace (quick, iterative cycle) feel, relative to how you normally work?
* What would you do next if you had to do it again? Based on where you are with your partner and the product that you developed, would you go back and gain more empathy to your partner? Would you go back and redefine the problem statement? Would you ideate more solutions? Would you craft a new prototype?
* What is one thing that you want to adopt? If you could name one principle or one tool, what would you infuse into your work tomorrow?

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**Thursday, November 3**

Theme: Analyzing Markets and Products

Read: Blue Ocean Strategy

**­­­­­­­­­­­­­­­­­­­­­Tuesday, November 8**

Theme: Ideation

Read: The Innovator’s DNA

In-Class Activity: Brainstorming

**Thursday, November 10 + Tuesday, November 15**

Theme: Opportunity Identification (Report and Presentation Due)

**#1 – Individual Assignment Due: Preliminary Observation Report**

(Due before class on course website. Verbal portion must not exceed 2 pages. Print out all your data and interpretations and bring them to class to be used as a basis for discussion.)

 The purpose of this report is to examine and analyze your preliminary observations in the product domain your team has chosen for the project. This assignment is to be completed individually. However, you should share your report with your team *after it is graded*, as a starting point for your team assignment.

 Individually, find a venue for observation that will tell you something interesting about people’s needs when using products in your chosen category. Pick a place where you can see mainstream needs, extreme needs, cultural attitudes and/or analogous behavior. Use any of the inquiry and/or observation methods discussed in class and the readings, but make sure to use a combination of techniques beyond basic Q&A about product likes and dislikes. Try to uncover something truly surprising and interesting.

 **Recommended Structure:**

* Clearly describe the methods you used to discover unmet customer needs in the category (e.g, contextual interviews, observation, ethnographic research, surveys, online resources, experience mapping, etc). Describe exactly what you did, including sample sizes. For contextual observations and interviews, use at least 3 separate respondents from the relevant segment. For surveys, use at least 30.
* Make notes about whom you observed, where you observed them, and how people are using products and interacting in the situation.
* Make three **interpretations** of what you see and hear. What do people think, feel, and desire in connection with their interaction with the product? Don’t just stay at the observational level. Peel back the layers. Go deep. You may take photos or shoot some video to document what you have discovered, but make sure to include a thorough verbal description.
* Based on your observations and interpretations, describe **at least one novel unmet customer need** in that product category.
* A sample assignment is available in the “Files” section of the course website. The sample is not intended to be used as a template but rather to illustrate the expected depth and scope of this assignment.

**#2 – Team Assignment Due: Opportunity Identification Report**

(PowerPoint deck due October 10 before 10:00, on course website)

 The purpose of this report is to identify a viable opportunity for new product or service development in the product category you have chosen. The focus is on need-finding, not solution-finding: at this point, you are not expected to develop solutions but mainly identify a promising opportunity. **You need to identify at least two different (though possibly related) unmet customer needs that represent opportunities in the category.** To complete this assignment, you will need to collectively reflect on your individual observation reports (described above) and combine your insights into a unified proposal regarding unmet user needs.

 The report must be submitted in the form of a PowerPoint deck, with **a maximum of 15 slides**. Using slide “notes” added to the slides is helpful to overcome any limitations of the “bullet” format of PowerPoint, but please **be sure any notes fit on a printed page and are not smaller than 12-point font.**

**Recommended Structure:**

* Briefly describe the relevant market space, both graphically (e.g., perceptual map, strategy canvas) and verbally. What types of offerings does it include? Who are the main competitors? What are the key dimensions on which consumers currently make tradeoffs and choices? What are the current growth and innovation vs. commoditization dynamics?
* In presenting your results, be sure that it is clear which method led to which results. It should be easy for the reader to follow what you did and what you learned.
* Clearly describe three unmet customer needs you discovered.
* Based on your discoveries and analysis, assess the viability and desirability of these opportunities from the point of view of the customer.
* How exactly are these emerging opportunities innovative? Do they reside in an uncontested market space within the current market, or do they challenge market structure/dimensions? Are you going after a different segment?
* Opportunity selection and evaluation: which of the three (or more) opportunities you examined seems most attractive? Consider need strength, growth potential, competition, and feasibility. Also, address the following:
	+ Who is your target customer/user?
	+ What is the value proposition you offer to this customer?
	+ How are you going to reach them?
	+ How are you going to make money?
* Remember that the point of this assignment is to identify a promising opportunity – not to design a solution. The burden is on you to conduct an extensive search in order to verify that your selected opportunity has not been preempted by a competitor.
* Provide key evidence from the need-finding process. All sources used (e.g., articles, websites) must be cited properly.

**In-Class Activity: Opportunity Identification Presentations (by teams)**

 Teams (to be selected randomly at the beginning of class on November 10) will present a succinct 15-minute summary of their opportunity identification process, roughly corresponding to their submitted PowerPoint report. Your presentation should focus on the most important and captivating highlights and “a-ha moments” from your need-finding activities. Do not wear out your audience with dry details that are unessential for the discussion (I promise to carefully read your report after class).

 Due to time constraints, presentations will be strictly limited to 15 minutes, with a 5-minute period following for Q&A and discussion. Not all team members need to be involved in the presentation, but all must be present, at the front of the room, and prepared to discuss and answer questions. To receive full credit for the presentation, **all students must be present in class during both sessions** (i.e., November 10 & 15), even if their team is not presenting on a particular date.

**Tuesday, November 15**

In-Class Activity: Opportunity Identification Presentations (continued)

**Individual Assignment Due: Write a Failure Résumé**

 This is an individual assignment. Submit a **1-page/300-word** (max) report.

 Create an actual résumé that summarizes all your biggest mistakes — personal, professional, and academic. For each failure, you must describe *what you learned from that experience.* Start with the five biggest setbacks in your life and see what came out of them. It doesn’t matter how you write it, as long as you do it! We will discuss your Résumés on Thursday, November 17.

**Thursday, November 17**

Theme: Prototyping, Experimentation, and Concept Testing

Read: Eager Sellers and Stony Buyers

**Tuesday, November 22**

Theme: Product Design

**Individual Assignment Due: Design Object**

(Due before class on course website; 150-word maximum)

Individually, think about objects or products you own or use and find one – excluding electronics – that **you** think is a great design. Your choice can reflect how the product looks, feels (to you), operates, performs, how it moves you emotionally, or any other aspect of the product’s design that you find relevant. **Bring the object to class and be prepared to share your choice.**

**Thursday, November 24**

Thanksgiving break

**Tuesday, November 29**

Theme: Interpreting Concept-Test Data and Forecasting

**Team Assignment Due: Ideation Report and Testing Plan** (PPT deck due before class on course website)

 The purpose of this report is to identify new product solutions to the need(s) you identified in the previous phase, and describe your plan for testing your assumptions with real customers.

 If your definition or perception of the need or the market opportunity has shifted since completion of the previous team report, make sure to clearly state this and define the new opportunity/need you are pursuing.

 The report must be submitted in the form of a PowerPoint deck, with a **maximum of 12 slides.**  Using slide “notes” added to the slides is helpful to overcome any limitations of the “bullet” format of PowerPoint, but please **be sure any notes fit on a printed page and are not smaller than 12-point font**.

**Recommended Structure:**

1. Ideation report (suggested length: about 7 PPT slides)
* Create a concise problem statement that clearly defines the customer need you are trying to address and the market opportunity you have identified.
* Using multiple prototypes, sketches, storyboards, or any other means, create at least two different (realistic, prototypable) new product concepts that address the problem statement. These are tentative ideas, not necessarily finalized designs. In the spirit of design thinking, you should develop each of your two new product concepts using multiple prototypes, examining different executions and aspects of each idea.
* The report should include clear visual representations (e.g., photos, sketches) of your ideas. You may also use short and effective verbal descriptions as necessary.
* How is the new product positioned versus the competition in the category (use visual aids such as perceptual maps, strategy canvas, etc)?
1. Testing Plan (suggested length: about 5 PPT slides)
* Clearly identify the specific questions or assumptions you will test for each of the proposed concepts.
* Explain exactly how you your questions and assumptions might be tested with real customers (i.e., how the test will be set up, what you will show participants, what segments or demographics are most germane).

**Thursday, December 1**

Theme: Integrating the Marketing Plan

Analyze: Clocky: The Runaway Alarm Clock case

**Individual Assignment Due: *Clocky, The Runaway Alarm Clock* Case Analysis**

 This is an individual assignment. Submit a **1-page/500-word** (maximum) summary of your analysis, addressing each of the following questions:

1. What are the key marketing challenges facing Gauri Nanda? Which are most crucial to effectively bring her new product to market?
2. Nanda has several options for positioning Clocky. How would you segment the potential market for Clocky? Are there additional segments other than the “Need” and “Fun” target markets outlined in the case? On which target market segments should Nanda focus? Outline the value proposition appropriate for each target market segment.
3. Based on the case, how attractive is the alarm clock market?
4. Which of the positioning options are most feasible given the product development of Clocky to date and Nanda’s goals, resources and capabilities? Which is most valuable to Nanda?
5. **Bring to class a picture that represents your feelings toward your current alarm clock. This can be a photograph that you have taken or an image clipped from a magazine/website.**

**Tuesday, December 6**

Theme: Diffusion of Innovation

Read: Crossing the Chasm

**Thursday, December 8**

Theme: Conclusions and Recommendation

In-Class Activity: Final Project Presentations (by teams)

 Teams will present a succinct 6-minute (!) summary of their solution development and testing process, concluding with a go, no-go, or pivot recommendation. You may NOT use any textual PowerPoint slides. Instead, support your presentation with **physical prototypes** and **visual exhibits** (no more than 5 slides; no text). Tour presentation should focus on the most revealing and captivating highlights from the product’s testing stage. Focus on:

* What you learned about customers’ needs and the existence of opportunities in the category.
* What you learned about the viability of specific solutions (yours and possibly others).
* What you recommend going forward. Remember that a no-go or pivot recommendation is just as valid and legitimate as a go decision.

 Due to time constraints, presentations will be strictly limited to 6 minutes, with a 2-4 minute period following for Q&A and discussion. Therefore, you should rehearse your presentation.

 Not all team members need to be involved in the presentation, but all must be present, at the front of the room, and prepared to discuss and answer questions. To receive full credit for the presentation, **all students must be present**. Please come on time and stay for the duration.

**Team Assignment Due: Final Team Project Report** (PPT deck due on course website)

 The report must be submitted in the form of a PowerPoint deck, with a **maximum of 20 slides** (you may add any information not included in your class presentation). Using slide “notes” added to the slides is helpful to overcome any limitations of the “bullet” format of PowerPoint, but please be sure any **notes fit on a printed page and are not smaller than 12-point font.**

**Recommended Structure:**

# Test Results (15 PPT slides maximum)

Start with a clear visual and verbal depiction of your new product and its unique attributes, as it was presented to respondents. Make sure to include a clear positioning statement (i.e., what needs/goals the product is designed to achieve, for whom it is designed, and how it is different from the competition). What are the new product’s points of parity and points of difference compared with the competition?

What methods did you use to test the questions and assumptions? Describe the basics of what you did, including sample sizes (use at least 5 different 1-on-1 sessions for each concept/session). In presenting your results, be sure to explain which method led to which results. It should be easy for the reader to follow what you did and what you learned.

What were the key findings? How did respondents understand your design and how did they evaluate it? Use multiple measures as discussed in class and make sure to note both explicit (e.g., purchase intent, willingness to pay, uniqueness) and non-explicit (e.g., body language) responses.

How did the findings vary across respondents/segments? Did any interesting or surprising patterns emerge?

In conclusion, summarize users’ view of the product (by segment, if applicable).

# Final Recommendation (5 PPT slide maximum)

Drawing together the insights generated at different stages of the project, discuss and explain your recommendation moving forward. Would you continue with the same design? Would you pivot, based on new learning that occurred in the process? Would you abandon the opportunity? This is where the “rubber meets the road” for a new product development team!

What are your recommendations for the new product’s marketing plan?

* Product – What is the new product’s market offering? What should its key attributes be?
* Promotion – How should the new product communicate its value to the customer? How should it be packaged?
* Place – Where will consumers obtain the new product?
* Price – How does the product/service’s price compare with the competition?

What is the unique business model for the new product or service (if applicable)?

**Use visual exhibits whenever possible.**  The analysis should be integrative, pulling together everything you have learned about the new product opportunity, its strengths and weaknesses, its challenges and potential.

**Tuesday, December 13**

# **Final Exam! In-class, no materials, laptops, or cellphones allowed.**

The exam will cover all the assigned readings listed on page 4 of this syllabus.