

**DSGN 495-40 Intersect CPG: Transformative Product and Business Model Innovation
(Corporate Partner: Procter&Gamble Ventures)**

I. Course Information

Schedule:

Mondays 3-6pm: Class time where key content will be shared. Location: Ford Design Studio, Segal Design Institute
Wednesdays 3-6pm: Team working time (Instructors available in Segal Design Institute for team consultation)

Plus weekly call with P&G coach - 1 hour per week at mutually convenient time, outside of class time

Additional dates:

- In Home Visits Saturday 12th January
- Central Site Panelist visits may require some additional evening time to accommodate working panelists (February 4th and March 4th).

Professors:

Helen von den Steinen: Helen.vondensteinen@northwestern.edu

Craig Sampson: Craig.sampson@northwestern.edu

Instructors Assistants:

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Office Hours:

Wednesdays 3-6pm by appointment

II. Course Description

This experiential course lives at the intersection of transformative product innovation, design thinking, and business model innovation. The learning experience will be both rich and realistic!

Student teams will work under NDA on five real-world upstream product innovation projects sponsored by Procter & Gamble, experiencing and helping to advance the way in which big innovation works in highly scaled businesses like P&G. Teams will be formed across schools and majors. Each multi-disciplined student team will develop both the consumer and business value proposition of their project through real-world consumer research, hands-on exercises, prototyping, testing and weekly coaching by sponsor coaches on-site and via video conference.

Unique characteristics of this class include physical and virtual product prototyping, business model development, pitch development, and robust primary consumer research among the target audience for each project, applying a range of state of the art consumer research methods including ethnography and behavioral psychology. Physical & social sciences, engineering, business, communication, design plus both physical and digital prototyping skills and interests will all be highly valuable to the teams, and brought together in pursuit of a common innovation goal. Both creativity and rigor will be expected and developed in this course.

You will be in small multi-disciplinary teams of Kellogg, McCormick and Medill IMC students working under CDA on **5 real-world new business seed projects** sponsored by P&G Ventures. Each student will bring a different set of skills and experience to the project and the team. This is a studio course and so there will be minimal formal lectures, but maximum opportunity to learn via hands on experience.

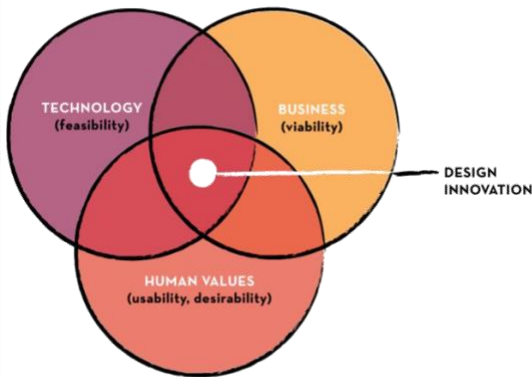
The work will be challenging, comprehensive and rewarding, building individual ability and team collaboration skills that will translate to the professional world. If you want to experience how big product and brand innovation works in the world of Consumer Packaged Goods (and, by analogy, to many other businesses), as well as learn powerful frameworks that guide innovation across the broadest range of business scales, then this is the course for you!

The course will meet twice a week. The second weekly session provides a reserved time during which team members from different schools can collaborate. *Additionally, we will be conducting in-home ethnographic research on Saturday January 12th, and all students are required to participate.*

During this Course you will learn about:

- Design thinking, including minimum viable prototypes
- Human centered design
- Lean innovation
- Behavioral science techniques
- Hypothesis driven testing with consumers (testing prototypes and pricing).
- Business model development
- Qualitative interviewing skills
- Prototyping
- Multidisciplinary team dynamics

Frameworks:

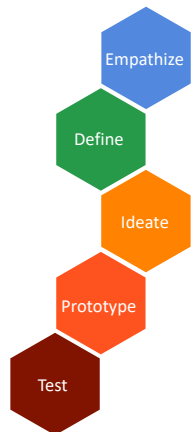


Big innovation comes to fruition when great creative *and* analytical work is done at the intersection of business, technology, and human values. Integrating effectively across these domains is not a matter of *managing*, rather of *collaborating* with the range of skillsets required. Each student team will have diverse membership from McCormick, Kellogg, and Medill to create the requisite mix of skills and points of view.

The Design Thinking framework helps guide how teams do great product and business model innovation. Central to this process is empathizing, i.e., experiencing the lives of the humans you are trying to serve with your product innovation. Here the student teams will do in-home ethnography, combined with central site and on-line

longitudinal consumer research to define the tensions and aspirations relevant to their project and to get consumer feedback on key elements of the product experience and business models.

Another key framework will be the concept of brand equity and equity stretch, i.e., with which brands do the product innovations best fit, and how these innovations potentially stretch and enhance the brand equity that currently exists.



Final Deliverables:

The final deliverables of each team will be presented to multifunctional teams from the sponsor at the end of the quarter, and are the key output of the class upon which the students are graded. These deliverables are quite robust, and will demand the best of each student individually and as team members as they apply their existing skills, critical thinking, and creativity combined with the principles learned and insight gained throughout the quarter.

- A) **A model of consumer behavior, tensions, touchpoints** and/or life stage segments that will find the product innovation/experience most appealing
- B) **Minimum Viable Prototypes** that deliver the intended experience with **supporting evidence** showing that the prototype experience **will be adopted**
- C) **Draft business models** outlining the consumer value proposition, the revenue model and paths to market.
- D) **A consumer pitch** that shows how to engage consumers in a way that drives desire and choice
- E) **A final Pitch to the project stakeholders** that covers the above and explains if/why further investment is warranted.
- F) **Thorough documentation of the project and deliverables** including executive summaries, interim and final presentations in written and video format, prototype design details, bill of materials and CAD, details of the supporting consumer research/feedback, and student portfolio materials that respect the Confidentiality Agreement terms.
- G) **Recommended next steps** for the corporate sponsor.

III. Communication

We will not be using Canvas. Sharepoint will be used for sharing information and for storing all documents related to the course.

Assignments will be communicated via email or in class and reviewed in class.

IV. Grading

Below are the graded components of the class and their relative weights:

Building the Foundation* (research, insights, need definition)	20%	Team
Class Participation	15%	Individual
Mid-term Presentation*	15%	Team
Final Presentation and Output*	50%	Team

* Individual grades will be adjusted as needed, based on team member feedback and the professors' judgment.

V. Expectations

- You will be working in diverse teams with different skills and working styles. We expect you to respect and leverage this diversity for the benefit of your team. We encourage you to have an upfront discussion about your differences.
- We encourage you to develop a team working contract outlining how you will work with one another. You do not need to share this with the instructors, but we are happy to provide help where needed.
- We expect you to be present in class (Friday mornings). In case of unavoidable absences, please communicate this in advance to the instructors and arrange with your team-mates to catch up on content shared.
- You will need to work together as a team outside of class times. We have set up Wednesdays to enable this, including a workspace and presence of instructors for help and discussion. If you will be absent for any portion of this time for any reason, you need to work a solution with your team. You should expect additional team working time (as a whole, or in sub-teams) each week.
- We expect you to document steps taken during your project in a way that can easily be accessed and understood at a later date. All documentation should be uploaded to your team's folder on Box.
- You will be required to sign a confidentiality agreement with Procter & Gamble, which will prohibit you from sharing details of your project outside the project team. This includes sharing specifics in your portfolio. We will provide help and guidelines as to how you can share the project in your portfolio to highlight the skills you learned without divulging confidential details. If you have any potential conflicts of interest (eg prior work or future planned employment at a competitor to P&G, family member working for a competitor), please discuss this with Helen von den Steinen prior to signing up for the course.

VI. Important reference books for the course

- ✓ The Field Guide to Human-centered Design; Ideo.org
- ✓ Business Model Generation; Osterwalder & Pigneur
- ✓ Ten Types of Innovation; Larry Keeley et al
- ✓ The Lean Start up; Eric Ries

VII. Syllabus

Wk	Date	Topics and activities	Assignment to be given (due by next class unless indicated)
-1	December	Pre-questionnaire to understand what skills and project interests. (Sign & return CDA)	

1	7 th January (M)	Introduction to Intersect CPG Signing of CDA and sharepoint access Team formation and contracts Overview of process Overview of projects Introduction to HCD Introduction to Business model canvas	Watch IHV videos prior to class on Wednesday and review materials posted on box.
	9 th January (W)	One hour briefing call with P&G Coach (3-4pm) Team working session: - Draft journey map - Identify questions to answer - Plan for IHVs (logistics) - Review discussion guide - Review details of consumers and homeworks - Practice interviewing/asking open questions	Set up weekly meeting time with P&G coach
	12 th January (S)	In Home Visits	
2	14 th January (M)	Analysis & synthesis of IHV learnings Discuss types of consumer observations (incl. defining tensions) Frameworks Consumer requirements 10 types of innovation	
	16 th January (W)	Team working session: Debrief and analyze in home visit learnings	Assignment to hand in: Journey map and tensions. Develop HMW statements around key tensions
3	21 st January (M)	NO CLASSES – MLK day	
	23 rd January (W)	Develop consumer value proposition hypothesis (use mad libs individually, then combine) Align on key HMW statements and problems you are going to solve.	Watch Simon Sinek TED talk ('why').
4	28 th January (M)	Prototyping, creating MVPs Testing prototypes Planning for CSV1 Guidelines for brainstorming	Draft first column of business model ('your offer')
	30 th January (W)	Team working session: brainstorming and prototyping Prep for CSV1	Prep for CSV1 (prototypes and testing plan)
5	4 th February (M)	CSV1: First panelist visit	Revise models and hypotheses.
	6 th February (W)	Team working session: debrief and analyse learnings from CSV1 Prepare for mid term presentation	Mid term presentation!
6	11 th February (M)	Mid term presentation	Mid term reflection due
	13 th February (W)	Team working session: Refine value proposition Align on next steps (including any pivots)	Pivot request to Helen by end of week!
7	18 th February (M)	Business model Canvas - Working session with Patrick Kraus - revenue model and bottom up pricing. - Estimating	Draft column two of business model ('making \$ on your offer'/Revenue model) Review with P&G coaches

	20 th February (W)	Review business model hypothesis and potential models Initial number crunching Define key questions to answer	
8	25 th February (M)	Testing pricing Preparing for CSV2 (logistics)	
	27 th February (W)	Working session: prep for CSV2 - Define business model questions to test. - Prepare stimuli for CSV2	
9	4 th March (M)	Second panelist visit (CSV2)	
	6 th March (W)	Team working session: debrief learnings; finalise business model and proposition	Finalise business model, including paths to market
10	11 th March (M)	Preparing for final presentations. Storytelling Consumer Pitch development	Final presentation Consumer pitch video or storyboard
	13 th March (W)	Develop and practice final presentations	
11	18 th March (M)	Final Presentations to P&G	Peer evaluation due 19 th March