INNOVATION & ENTREPRENEURSHIP -- Designing the Future

"The way to get good ideas is to get lots of ideas and throw the bad ones away." — Linus Pauling

"Innovation is the specific instrument of entrepreneurship. The act that endows resources with a new capacity to create wealth." — Peter F. Drucker

"Capital isn't so important in business. Experience isn't so important. You can get both these things. What is important is ideas. If you have ideas, you have the main asset you need, and there isn't any limit to what you can do with your business and your life." — Harvey Firestone

"Design thinking can lead to hundreds of ideas and, ultimately, real-world solutions that create better outcomes for organizations and the people they serve." Tim Brown & Jocelyn Wyatt

PEDAGOGICAL GOALS:
This project deals with the challenge of bringing to market elegant and efficient solutions to solve complex problems with a human-centered approach. This challenge is fundamental in innovation, and is relevant whether you work for a startup or a large company, whether you sell products or services, and whether your consumers are individual consumers, companies, or institutions.

This project extends beyond the discovery of new solution, but through this project you will also develop a plan for a new venture. This project gives students the hands-on experience in discovering innovative solutions and developing them into new business opportunities. Through this project you will:

- Develop methods of observational research & synthesizing data to gain unique insights
- Develop the skills to identify and then screen opportunities
- Collaborate with a team of people with diverse thoughts and skills
- Build skills in selecting an appropriate market and identifying stakeholders
- Build skills in developing a cohesive, well constructed, plan

PROCESS:
There will be two lectures to cover the skills and process established in this project. The first lecture on November 8th will cover innovation and the innovation process, the second lecture on November 19th will cover skills to develop a cohesive business plan.

This project will be conducted as a group project. The first step of this project is to form a team. The recommended sized is 2-5-person teams. Each team should jointly decide on a project focused on the development of a new product, product system, process or service. Please take the time to put together a team that will work together well in terms of schedules, work places, and different skills. As a team, you will identify an innovation opportunity, gather observational data, brainstorm ideas and translate the identified needs into a product/service concept. As a team you will then define the target market, stakeholders, value network, and revenue model to develop your concept into a business plan.

Choosing a project focus is an important second step of this project. Once you have developed a team, the team must identify a project focus that all team members have a high interest in. The project focus is up to the team to decide but it must meet the following two rules:

- A topic area that the team can physically experience
- A topic that encompasses a large global or national issue

It is extremely important to meet the first rule as the project will begin with a field activity. The field activity allows the team to gather observational research. If the team cannot experience the activity they will not be able to obtain sufficient research to inform ideas. The team should choose a large global or national issue that can be dissected to a smaller project which the team can experience first-hand. Some examples of topic areas include:

- Public Transportation Issues - Marta
- Health & US Obesity - Eating Healthy on College Campuses
- Eco Transportation Options - Bike Riding as a form of Transportation in Atlanta
Once you have selected a team and a topic area. The team will take the following steps:

1. **Field Activity – Observational Research**
   Your team will plan a field activity to experience the topic area. During this activity you will observe the surroundings and capture notes. Refer to the field guide for additional resources. "Directly witnessing and experiencing aspects of behavior in the real world is a proven way of inspiring and informing [new] ideas. The insights that emerge from careful observation of people's behavior . . . uncover all kinds of opportunities that were not previously evident.“ Jane Fulton Suri, notes in her book *Thoughtless Acts*. In this stage, the team should make sure that they look widely at the information, facts, feelings, social dynamics, customer use patterns etc. this research should inform your work going forward.

2. **Additional Research**
   Your team will be conducting additional research throughout the project to gather data about the industry, consumers, existing businesses, precedent solutions, etc.

3. **Synthesize Research - Clarify the Problems(s)**
   The team will have to work together to gather all the research findings. As a team you will need to synthesize the research to gather unique insights and further define your understandings around the problem. The team should attempt to clarify the problem and see the problems in the way of goal achievement from as many perspectives as possible. Additionally, the team needs to gain an understanding of the stakeholders, pain points, and unmet needs. The team will define design criteria and objectives.

4. **Ideation**
   As a team and individually you will use drawings or study models to generate potential concepts for innovative product/process/service ideas. The more ideas the better.

5. **Idea Selection**
   As a team you will define objectives and criteria for selection. You will use these criteria to sift through the many ideas the team has generated. The team will narrow the amount of ideas and will work to refine ideas, combine ideas, and expand on ideas. The team should plan on narrowing the set of ideas to a few key concepts.

6. **Refinement**
   The team will refine the final concepts to create a solution that satisfies all design criteria and objectives.

7. **Consumer Definition**
   Define the target market. A target market is a group of people that your group has identified as your consumers or clients. A target market is distinguished by socioeconomic, demographic, and/or interest characteristics, that make them the most likely consumers for your products or services.

8. **Stakeholder Identification & Needs Analysis**
   Define all stakeholders that will be affected by the innovation concept. Define the needs of the stakeholders.

9. **Define Ideal User Experience & Core Value Proposition**
Define the user’s experience with the new product/process/service. The core value proposition is a concise statement that summarizes why a consumer should buy the product or use the service your team has developed. This statement should convince a potential consumer that one particular product or service will add more value or better solve a problem than other similar offerings. The core value proposition is concise and appeals to the consumer’s strongest decision-making drivers.

10. Develop Value Network
A value network is a business’s set of linked, value-creating activities, ranging from securing basic raw materials and energy to the ultimate delivery of products and services.

11. Develop Roadmap
An important point to remember whether you’re planning a new business is that you must show that you have the potential for continued profitability through continuous innovation.

DELIVERABLES:
Here is an overview of the different steps and deliverables:

**Nov. 10th**  List of team members, project topic, and create your groups web page on lucky-cool
**Nov. 19th**  Marketing the $100 Laptop Reading (*Will be discussed in lecture on Friday*), Elevator Pitch
**Dec. 3rd**  Project presentation
**Dec. 6th**  Team Surveys

Please make sure to fully document the development process, including ideas which are not subsequently acted upon. Additionally please document and share the steps your group is taking in the process. While all parts of the project are equally important you final grade will be based on your teams abilities to use all the steps in the process to create a cohesive well structured final project presentation. The presentation will be a final poster presentation of 10 11x17s describing your innovation concept and business plan. There will be no verbal presentation.

LUCKY-COOL DELIVERABLES:
To share work and hand-in intermediate deliverables your team will be using luckycool. Each team will develop their own page on the luckycool site. The page should be used to hand-in the intermediate deliverables. Additionally, the page should be used to share and capture all processes and steps through the entirety of the project. This includes, pictures and notes gathered from field work, idea generation, concept refinement, group work, team discussions, mission statement, design and user experience criteria, etc. This site should be used for the team to communicate with one another and for teams to communicate with other teams and the entire class. This method will allow the class to create a virtual studio-like environment that allows for cross-filtering of ideas and learning.

PRESENTATION DELIVERABLES:
The presentation will include a poster presentation. Each group will have 10 11x17 sheets. The presentation should include the following:

1. **Title, Business Mission, Goals & Objectives – Clear & Concise**
A mission statement is a declaration of an organization’s business or "reason for being." A clear statement of a company’s mission is essential to effectively establishing objectives, formulating strategies, setting goals, devising policies, allocating resources, and motivating employees.
Questions you should consider:
○ Customers: Who are the present and future customers?
o Products or services--What are the major products or services?
o Markets--Where does the business compete?
o Technology--What is the basic technology?
o Philosophy--What are the basic beliefs, values, aspirations, and philosophical priorities of the business?
o Self-concepts--What are the business’ major strengths and competitive advantages

2. Consumer/Stakeholder Profiles
   Questions you should consider in describing your potential market are:
o Who are your prospective consumers?
o What characteristics make them similar? What makes them different?
o What are your customers’ needs?
o Who are your stakeholders?
o What are your stakeholders needs?
o How will you satisfy those needs?
o What is your projected market size or projected value for your product or service?
o Where are you going to sell/ provide your product? Where are your consumers? Stakeholders?

3. Competitive Analysis
   Questions you should consider:
o What other products or services are available that are similar to yours?
o What are their strengths? Weaknesses?
o What makes yours better? Different?

4. Innovation Offering & Core Value Proposition
   Questions you should consider:
o What are the features and benefits of your product/service? Features are the characteristics of a product or service that you have designed as part of the offering. The benefit is the result your customer enjoys.
o Unique Features: Explain your competitive advantage. What makes your product/service better, faster, more durable, etc.?
o What is the unique benefit that your solution provides?

5. Use Storyboards
   Questions you should consider:
o Where is the product/service used?
o How is it used?
o What are the steps in the process?
o What are the environmental characteristics?
o How does one operate the product?

6. User Experience Criteria
   "User experience" encompasses all aspects of the end-user's interaction with the business, its services, and its products.
   Questions you should consider:
o What is the goal or the reason a user will use this product/service?
o What is aim or desired result? something to be achieved? What are their motivations for performing the tasks?
o How does the user feel about using the product or service?
o What are the user’s perceptions of utility, ease of use, efficiency, ect...?
o What are the experiential, emotional, meaningful and valuable aspects of the users interaction with the product or service?

7. Value Network
Questions you should consider:
  o What are the steps or activities the product or services passes through when developed?
  o What is the value the product/service gains in each activity or step in the process?
  o Who provides the value in each step?

8. Revenue Model – How do you make money?
   Questions you should consider:
   o How will you sell your products or services?
   o Where can your consumers find them?
   o How does your company make money?

9. Roadmap
   Questions you should consider:
   o How will your company remain innovative?
   o How will the products/services continue to develop and provide more value to the consumer?

EVALUATION CRITERIA:
This project will be assessed based on content and presentation.
  ▪ Thorough investigation and identification of unmet needs
  ▪ Strategic development of design criteria, goals & objectives
  ▪ Strong idea generation to translate needs into innovative concepts
  ▪ Well-defined core value proposition
  ▪ Team collaboration and member contribution.
  ▪ Strategic market definition
  ▪ Well-defined operational and market strategy

REQUIRED READINGS:

Quelch, J. Knoop, C, “Marketing the $100 Laptop.” HBR case.

ShopWell, Ideo’s First Big Spinoff, Says Better Health Starts at the Supermarket

SUGGESTED READINGS:
Process of Innovation:
The Analysis-Synthesis Bridge Model. H Dubberly, S Evenson, R Robinson - INTERACTIONS-NEW YORK ..., 2008 - posterous.com HBR Design Thinking

Opportunities Identification:

Understanding customer needs:

Interpreting Observational Data:

Idea Generation:

Concept Testing:

Mission Statement:
A framework for developing an effective mission statement. By Cochran, Daniel S., David, Fred R., Gibson, C. Kendrick

Value Chain/Network:

Venture Creation: