

DS 341: Design Thinking for Transformation

Credits: 3

Class meeting times: T and TH: 3:30 – 5:20

Locations: Room 3190 SoHE

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COURSE CONTENT AND OBJECTIVES:

Design thinking is an iterative problem solving process that employs design based techniques to gain insight for producing innovative solutions. It can be applied to virtually any type of organizational or challenge.

Through projects, lectures, readings, videos, and discussions, students will learn design thinking techniques to enhance creative analysis and problem solving. In interdisciplinary teams, students will directly apply what they have learned to a variety of human centered design challenges. Students will innovate, prototype, and test designs that address real-word problems with real-world constraints. Projects range from ways to encourage healthy eating to buying local to improving sales for farmers. Students will give presentations and receive feedback to sharpen their communication and storytelling skills as well as produce a product, service or process.

COURSE GOALS:

- Explain the methods and processes of design thinking
- Investigate problems, develop research methods, and synthesize results to form solutions
- Develop a deeper understanding of the users and their interaction with the designed environment
- Understand that in addition to the creation for innovative objects and places, design can be applied to the development of new processes, services, interactions, and collaboration in a variety of fields.
- Recognize that design requires an interdisciplinary approach and the value of design thinking as a means for innovative problem solving across disciplines.
- Apply methods for creating physical prototypes with high-tech tools such as 3D printers, laser cutters, mills and lathes.
- Investigate basic analytical tools used by engineers to design products.

LEARNING OUTCOMES:

- 1. Students will be able to **empathize with a broad group of stakeholders** to understand their needs through the ethnographic method.
- 2. Students will be able to **define and re-define innovation challenges** by asking the right questions, and not necessarily focusing on the right answers.

- 3. Students will be able to **develop creative ideas** through structured brainstorming sessions. Students will be able to **gain the competence to approach many different problems** and challenges with an open, creative, empathetic, and prototype-driven mindset.
- 4. Students will develop confidence in creative problem-solving.
- 5. Students will be able to **develop and fabricate rapid prototypes** using a wide range of techniques to bring their ideas into reality as quickly as possible, and obtain feedback.
- 6. Students will be able to use basic analytical engineering tools to reduce risk.

CLASS POLICIES, AND PROCEDURES:

- 1. **Presentations, Readings, and Videos** are sequenced to prepare students for the design thinking process.
- 2. **The Design challenges** require a demonstration of the ability to apply course concepts and information.
- 3. **Progress** from one class to the next <u>is expected and requires significant and regular time</u> investment outside of class.
- 4. A positive attitude is essential to the learning activities.
- 5. Attendance is required; come prepared with all necessary tools and materials.
- 6. **Discussion/Journal entries are required** and designed to stimulate creative thinking, incorporate feedback and new ideas.
- 7. **Team dynamic** is essential for a successful outcome
- 8. Field Trips are required

TEAMS:

The class will be broken up into interdisciplinary teams of 4-5 students. Teams will be composed during our first day of class. **As a team, you will also be required to teach your own design thinking experience. Dates TBD**

WHAT WENT WELL?

At the end of each day groups will be required to informally present the positive aspect of their progress and findings to the class. This is an opportunity to get feedback on the progress, test prototypes, offer new perspectives, and gain new insights.

PROGRESS ASSIGNMENTS AND EVALUATIONS

For each phase of the project, students will be required to provide a peer evaluation, team feedback, and a short reflection paper on what was learned from the experience and how to move forward.

- 1. **Peer Evaluation:** This is an opportunity to help us understand how your team is working together and how we can help you move forward.
- 2. **Team Feedback:** This is an opportunity to provide other teams with valuable information regarding their progress and steps moving forward.
- 3. **Reflection Paper:** This is your opportunity to let us know what you think! We are interested in learning about what you learned from each stage of the process and what you plan to do next.

PRESENTATIONS

At each phase of the process your team will be required to provide a progress presentation as a way to get feedback, new insights, and direction. This presentation will help teams move forward as well as ensure that they are on track.

A final presentation that will be the key deliverable for the course. It can be presented in any visual format (powerpoint, display...) that best conveys the solution. However, there must be a refined prototype and it must be tested with the key audience.

Key Deliverables:

- Articulation of the design challenge
- Actionable insights based on the design research conducted
- Key themes and opportunity areas identified from the insights
- Visualized concepts that address the opportunity areas refined prototype (s)
- A compelling, human-centered narrative that ties all the points above together

GRADING:

Introduction to Design Thinking Project		25
Presentation one: Discover		75
Presentation two: Define		75
Presentation three: Develop		125
Presentation four: Deliver (final presentation)		50
Discussion Entries (based on readings and videos):		100
Peer Evaluations		140 (35 each)
Team Feedback		120 (30 each)
Short Reflection Papers:		100 (25 each)
Teach your own Design Thinking Experience!		25 `
Attendance:		135 (5 per day)
Attitude, Participation, and Honor the Gathering		20
	Total	1000 points

USEFUL REFERENCES:

- Design Thinking –<u>Bootcamp Bootleg</u> d.school Free down load
- IDEO Human-Centered Design Toolkit http://www.ideo.com/work/human-centered-design-toolkit/ Free Download
- Erwin, Kim Communicating THE NEW Methods to Shape and Accelerate Innovation, Wiley, 2014
- Kelley, David and Tom: <u>Creative Confidence: Unleashing the Creative Potential Within Us All</u>, Crown Publishing, 2013. Available in audio or paper back from Amazon.com
- Berger, Warren <u>CAD Monkeys</u>, <u>Dinosaur Babies</u>, <u>and T-Shaped People</u>: <u>Inside the World of</u>
 <u>Design Thinking and How It Can Spark Creativity and Innovation</u> Available in audio or paper back from Amazon.com
- Tim Brown: Change by Design: How Design Thinking Transforms Organizations and Inspires Innovation. Harper Collins Books, 2009 Available in audio or paper back from Amazon.com

A SAMPLE OF THE WEBSITES, COMPANIES AND PEOPLE TO FOLLOW:

- Stanford d.school http://dschool.stanford.edu/use-our-methods/
- Cooper Hewitt http://www.designother90.org/solutions/?exhibition=12
- IDEO <u>www.ideo.com</u> (follow Tim Brown's Blog)
- Makershed http://www.makershed.com/?qclid=CKm26fD7jcACFQUFaQodqnsAGA
- Instructables <u>www.instructables.com</u>

INTERESTING LINKS TO VIDEOS AND READINGS

- Ernesto Sirolli TED talks Want to help someone? Shut up and listen http://video.ted.com/talk/podcast/2012X/None/ErnestoSirolli 2012X-480p.mp4
- How to Build Your Creative Confidence
 http://www.ted.com/talks/david_kelley_how_to_build_your_creative_confidence
- "Informing Our Intuition" Jane Fulton Suri http://www.ideo.com/images/uploads/news/pdfs/Informing Our Intuition.pdf
- "Design Thinking" Tim Brown http://www.ted.com/talks/tim brown urges designers to think big
- "Ira Glass on Storytelling" Ira Glass

- http://www.youtube.com/watch?v=loxJ3FtCJJA
- Design Thinking Training Yourself to Be More Creative http://www.youtube.com/watch?v=34EuT2KH2Lw
- Design Thinking -- Maximizing Your Students' Creative Talent: Co Barry at TEDxDenverTeachers http://www.youtube.com/watch?v=nyt4YvXRRGA
- Schools Kill Creativity
 http://www.ted.com/talks/ken robinson says schools kill creativity
- Human Centered Design David Kelley http://www.ted.com/talks/david kelley on human centered design

Special Needs? We wish to fully include persons with special needs in this course. Please let me know if you require any special accommodations in the curriculum, instruction or assessments of this course to enable you to fully participate. Confidentiality of any information shared with me will be respected.

The University of Wisconsin-Madison supports the right of all enrolled students to a full and equal educational opportunity. The Americans with Disabilities Act (ADA), Wisconsin State Statute (36.12), and UW-Madison policy (Faculty Document 1071) require that students with disabilities be reasonably accommodated in instruction and campus life. Reasonable accommodations for students with disabilities is a shared faculty and student responsibility. Students are expected to inform faculty [me] of their need for instructional accommodations by the end of the third week of the semester, or as soon as possible after a disability has been incurred or recognized. Faculty [I], will work either directly with the student [you] or in coordination with the McBurney Center to identify and provide reasonable instructional accommodations. Disability information, including instructional accommodations as part of a student's educational record, is confidential and protected under FERPA.

GENERAL OPERATION PROCEDURES:

- A. Academic honesty and high standards are expected of all students
- B. Projects must meet specified format requirements (i.e. size/binding, labeling, etc.) or may be returned for modifications prior to grading
- C. Students are responsible for obtaining information or announcements missed due to late arrival or absence.
- D. It is not appropriate to schedule work or other appointments during class time
- E. Make-up exams and grades of incomplete are given subject to UW policies and procedures, including informing instructor of need in advance.

There are many services on campus that can help students that are having difficulty. Here are a few helpful links to useful resources:

- A. Master list of student services available at: www.wisc.edu/studentlife/studnetservices.php
- B. University Health Service: www.wisc.edu/homejsp?catid=36
- C. GUTS (Greater University Tutoring Service) www.guts.studentorg.wisc.edu/indexaxp
- D. Tutoring help and other assistance in SOHE classes through SOHE Student Affairs Office, 262-2608

Syllabus (some activities are subject to change)

1	Discovery: Lo	ok at the world in a fresh way, notice new things, and gather insights
TH 9/06	3:30 - 4:00 4:00 - 4:30 4:30 - 5:00 5:00 - 5:15	Introduction to the course Introduction to Design Thinking Form teams and team activities Introduction to Design Thinking Challenge
	5:15 – 5:20	What Went Well (WWW) and discuss homework and plans for Tuesday
	Read: Watch: Do:	An Introduction to the Human-Centered Process and Design Thinking Methods Design and Thinking Movie Post comments on readings and movie by 11:59 pm 9/9
T. 9/11	3:30 – 3:45	Honor the Gathering
	3:45 – 4:15 4:15 – 4:45	Empathy Research Define
	4:45 – 5:15	Ideate and Develop How Might We statement
	5:15 – 5:20	What Went Well (WWW) and discuss plans for Thursday
TH 9/13	3:30 – 3:45	Honor the Gathering
	3:45 – 4:45	Prototype
	4:45 – 5:15 5:15 – 5:20	Test (presentations) What Went Well (WWW) and discuss plans for Tuesday
	5.15 – 5.20	what went well (www) and discuss plans for Tuesday
	Read:	Field Guide to Human Centered Design Pages 9 – 74 (Review Methods)
	Watch: Do:	TED Talk: How to Build Your Creative Confidence by David Kelly Post comments on reading and TED Talk by 11:59 pm 9/16 AND write a brief
	D0.	reflection on your first design thinking experience by 11:59 pm 9/16 Sunday
T. 9/18	3:30 - 3:40	Honor the Gathering
	3:40 – 4:00	Discussion/in class activity
	4:00 – 5:10 5:10 – 5:20	Group work What Went Well (WWW) and discuss plans for Thursday
	0.10 0.20	What Well (WWW) and discuss plans for marsday
TH 9/20	3:30 - 3:40	Honor the Gathering
	3:40 – 4:00	Discussion/in class activity
	4:00 – 5:10 5:10 – 5:20	Group work What Went Well (WWW) and discuss plans for Tuesday
	3.10 - 3.20	What Well (WWW) and discuss plans for ruesday
	Read:	How to Frame your Challenge
	Watch:	TED Talk: Tim Brown Urges Designers to Think Big.
T. 9/25	3:30 – 3:40	Post discussion comments on reading and TED Talk by 11:59 pm 9/23 Honor the Gathering
	3:40 – 4:00	Discussion/in class activity
	4:00 – 5:10	Group work
	5:10 – 5:20	What Went Well (WWW) and discuss plans for Thursday
TH 9/27	3:30 – 3:40	Honor the Gathering
	3:40 – 4:00	Discussion/in class activity
	4:00 – 5:10	Team Presentations on findings (divide into two groups)
	5:10 – 5:20	What Went Well (WWW) and discuss homework and plans for Tuesday
	Do:	Submit presentation, team feedback, and peer evaluation by 11:59 pm 9/30

2	Define: make sense of the findings, identify opportunities and begin idea generation. Determine what matters and is feasible	
T. 10/02	3:30 - 3:40 3:40 - 4:00 4:00 - 5:10 5:10 - 5:20	Honor the Gathering Discussion/in class activity Group work What Went Well (WWW) and discuss plans for Thursday
TH 10/04	3:30 - 3:40 3:40 - 4:00 4:00 - 5:10 5:10 - 5:20	Honor the Gathering Discussion/in class activity Group work What Went Well (WWW) and discuss plans for Thursday
	Read: Watch: Do:	Field Guide to Human Centered Design Pages 75 – 131 (Review Methods) TED Talk: How to Find a Wonderful Idea OK Go Write reflection paper and submit on line by 10/07 Post comments on reading and TED Talk by 11:59 pm 10/07
T. 10/09	3:30 - 3:40 3:40 - 4:00 4:00 - 5:10 5:10 - 5:20	Honor the Gathering Discussion/in class activity Group work What Went Well (WWW) and discuss plans for Thursday
TH 10/10	3:30 - 3:40 3:40 - 4:00 4:00 - 5:10 5:10 - 5:20	Honor the Gathering Discussion/in class activity Team Design Thinking Challenge What Went Well (WWW) and discuss plans for Thursday
	Read: Watch: Do:	Ideation Phase - Synthesis AND Ideation Phase - Prototype <u>Tony Fadell</u> – the first secret of design is noticing Post comments on reading and TED Talk by 11:59 pm 10/14
T. 10/16	3:30 - 3:40 3:40 - 4:00 4:00 - 5:10 5:10 - 5:20	Honor the Gathering Discussion/in class activity Group work What Went Well (WWW) and discuss plans for Thursday
TH 10/18	3:30 - 3:40 3:40 - 4:00 4:00 - 5:10 5:10 - 5:20	Honor the Gathering Discussion/in class activity Team Progress Presentations (divide into two groups) What Went Well (WWW) and discuss homework and plans for Tuesday
	Do:	Submit presentation, team feedback, and peer evaluation by 11:59 pm 10/21
3	Develop: soluti	ons or concepts are created, prototyped, tested, and iterated.
T. 10/23	3:30 - 3:40 3:40 - 4:00 4:00 - 5:10 5:10 - 5:20	Honor the Gathering Discussion/in class activity Group work What Went Well (WWW) and discuss plans for Thursday
TH 10/25	3:30 - 3:40 3:40 - 4:00 4:00 - 5:10 5:10 - 5:20	Honor the Gathering Discussion/in class activity Team Design Thinking Challenge What Went Well (WWW) and discuss plans for Tuesday

	Read:	Field Guide to Human Centered Design Pages 132 – 157 (Review Methods)	
	Watch:	TED Talk <u>Janine Benyus</u> – Biomimicry in Action	
	Do:	Write reflection paper and submit on line by 10/28	
		Post discussion comments on reading and TED Talk by 11:59 pm 10/28	
T. 10/30	3:30 - 3:40	Honor the Gathering	
	3:40 - 4:00	Discussion/in class activity	
	4:00 - 5:10	Group work	
	5:10 - 5:20	What Went Well (WWW) and discuss plans for Thursday	
	3:30 – 3:40	Honor the Gathering	
TH 11/01	3:40 – 4:00	Discussion/in class activity	
	4:00 – 5:10	Team Design Thinking Challenge	
	5:10 – 5:20	What Went Well (WWW) and discuss plans for Tuesday	
	Boods	Implementation Phase	
	Read: Do:	Implementation Phase Post discussion comments on reading by 11:59 pm 11/04	
T. 11/06	3:30 – 3:40	Honor the Gathering	
1. 11/00	3:40 – 4:00	Discussion/in class activity	
	4:00 – 5:10	Group work	
	5:10 – 5:20	What Went Well (WWW) and discuss plans for Thursday	
	0.10 0.20	Trial trail (Tritt) and disease plane for maleday	
TH 11/08	3:30 - 3:40	Honor the Gathering	
	3:40 - 4:00	Discussion/in class activity	
	4:00 - 5:10	Team Design Thinking Challenge	
	5:10 – 5:20	What Went Well (WWW) and discuss plans for Tuesday	
	Doods	Design Beesensh for Bediest Innervation	
	Read: Do:	Design Research for Radical Innovation	
T. 11/13	3:30 – 3:40	Post discussion comments on reading by 11:59 pm 11/11 Honor the Gathering	
1. 11/13	3:40 – 4:00	Discussion/in class activity	
	4:00 – 5:10	Group work	
	5:10 – 5:20	What Went Well (WWW) and discuss plans for Thursday	
TH 11/15	3:30 – 3:40	Honor the Gathering	
111/13	3:40 – 4:00	Discussion/in class activity	
	4:00 – 5:10	Team Design Thinking Challenge	
	5:10 – 5:20	What Went Well (WWW) and discuss plans for Tuesday	
	0.10 0.20	Trial trail (trivit) and disease plane for russday	
	Watch:	Simon Sinek: How Great Leaders Inspire Action	
	Do:	Post discussion comments on TED talk by 11:59 pm 11/18	
T. 11/20	3:30 – 3:40	Honor the Gathering	
	3:40 – 4:00	Discussion/in class activity	
	4:00 – 5:10	Group work	
	5:10 – 5:20	What Went Well (WWW) and discuss plans for Tuesday	
	Read:	TBD	
	Watch:		
	Do:		
T. 11/27	3:30 – 3:40	Honor the Gathering	
	3:40 - 4:00	Discussion/in class activity	
	4:00 - 5:10	Group work	
	5:10 – 5:20	What Went Well (WWW) and discuss plans for Thursday	
	0.00 0.40		
TII 44/00	3:30 – 3:40	Honor the Gathering	
TH 11/29	3:40 – 4:00	Discussion/in class activity	

	4:00 – 5:10	Team Presentations (divide into two groups)
	5:10 – 5:20	What Went Well (WWW) and discuss homework and plans for Tuesday
	Do:	Submit presentation, team feedback, and peer evaluation by 11:59 pm 12/02
4	Deliver: the product, service, process or environment is finalized, produced, and launched	
T. 12/04	3:30 – 3:40	Honor the Gathering
	3:40 – 4:00	Discussion/in class activity
	4:00 – 5:10	Team Design Thinking Challenge or group work
	5:10 – 5:20	What Went Well (WWW) and discuss plans for Thursday
	3:30 – 3:40	Honor the Gathering
TH 12/06	3:40 - 4:00	Discussion/in class activity
	4:00 - 5:10	Group work
	5:10 – 5:20	What Went Well (WWW) and discuss plans for Tuesday
	Do:	Write reflection paper and submit on line by 12/09
T. 12/11	3:30 - 3:40	Honor the Gathering
	3:40 - 4:00	Work on final project
	4:00 – 5:20	Final Presentations
	Do:	Submit presentation, team feedback, and peer evaluation, and reflection paper by 11:59 pm 12/15

FARM-to-TABLE

PROJECT:

This project reinforces the modes of design thinking with an emphasis on a local real world practical application. Through a human centered lens, students will follow the methods of empathize, define, ideate, prototype, and test, as a way to seek design solutions for **the Farm to Table challenge**. Upon completion of the project, students will be experts the main concepts of design thinking and learn to use them as an approach to problem solving for a variety of issues.

LEARNING OUTCOMES and PROJECT GOALS:

- → To be able to apply the methods and processes of design thinking.
- → To be able to investigate problems and synthesize results to form viable solutions.
- → To develop a deeper understanding of the issues.
- → To understand the specific factors that affect how the spaces are used and design feasible, desirable, and viable solutions.
- → To develop an innovative design solution that brings something new to the users.
- → To understand that design is an iterative process.
- → To learn the value of rapid prototyping and testing for a successful design solution. purposes of conceptualizing, developing, and communicating ideas.

DOCUMENTATION

It is highly recommended that each team develop an on-line and/or written method (<u>journal</u>) for documenting their process and progress. This method will be the central communication vehicle for the teams and will help keep the project on track. It is also a great way to post new ideas, insights, and observations for your team to see. Each week, teams are expected to write about their design challenge in a reflection paper, based on where they are in the design process as well as evaluate their team and do peer reviews.

DISCOVER

WEEK ONE June 18-24

Your team will be required to decide on a problem to solve. Then observe and document the activities that center around your design problem. You will also develop interview questions, interview individuals, groups, and experts. Using what you learned from the empathy stage and your research, define your design challenge. At the end of the week, you will be expected to present on your findings and your direction moving forward.

Use the provided worksheets:

- Frame the Challenge
- Create insight statements
- How might we statement (HMW)

Synthesize information to come up with a How might we statement

METHODS: individual interviews, group interviews, expert interviews, analogous inspiration, and peer to peer, download your learnings, bundle ideas, create a concept, and how might we?

DEFINE:

WEEK THREE June 25 - July 1

Using what you learned from the discover state begin to develop ideas.

Be sure to refer back to the worksheets.

Points are based on your ability to come up with multiple ideas, both in writing and drawn, while deferring judgement and put all of the ideas on paper no matter how "crazy" they may sound. Some of the best ideas stem from the crazy ones.

METHODS: design principles, brainstorm rules, gut check, and determine what to prototype

DEVELOP:

WEEK THREE July 2 - 8

Using what you learned so far develop prototypes of your ideas. These can come in the form of storyboards, built models of the space, furniture....

Be sure to refer back to the worksheets and to use the storyboard to help guide you.

Points are based on your ability to come up with multiple prototypes. These are to be in the form of drawings, 3-D models, furniture, and equipment prototypes (4-6 or more)

METHODS: rapid prototyping, and storyboard

DELIVER:

WEEK FOUR July 9 - 15

Teams present their design concepts to the class

Points are based on:

- Quality of visual presentation (presentation board and prototypes)
- Your verbal presentation and ability to clearly express your concepts
- Ability to present a clear direction and story
- Ability to present all aspects of the design concept viability, feasibility, desirability
- Ability to present a design concept with a clear direction for future implementation

METHODS: create a pitch

Living the Good Life

PROJECT:

This project reinforces the modes of design thinking with an emphasis on a local real world practical application. Through a human centered lens, students will follow the methods of empathy, define, ideate, prototype, and test, as a way to seek design solutions for the design challenge.

Imagine how ET must have felt when he landed on earth. He certainly wasn't living the good life. He was (1) off the grid, (2) in the face of disaster, (3) dealing with food insecurity, and (4) starting over. His issues are also real world issues that people face every day. Your challenge is to take on one of these design problems and come up with a desirable, feasible, and viable solution while addressing the social, cultural and physical aspects of the problem.

LEARNING OUTCOMES and PROJECT GOALS:

- → To be able to apply the methods and processes of design thinking.
- → To be able to investigate problems and synthesize results to form viable solutions.
- → To develop a deeper understanding of the issues.
- → To understand the specific factors that affect how the spaces are used and design feasible, desirable, and viable solutions.
- → To develop an innovative design solution that brings something new to the users.
- → To understand that design is an iterative process.
- → To learn the value of rapid prototyping and testing for a successful design solution. purposes of conceptualizing, developing, and communicating ideas.

DOCUMENTATION

It is highly recommended that each team develop an on-line and/or written method (<u>journal</u>) for documenting their process and progress. This method will be the central communication vehicle for the teams and will help keep the project on track. It is also a great way to post new ideas, insights, and observations for your team to see. For each phase students are expected to write about their design challenge in a reflection paper, based on the information they received from the team feedback forms.

DISCOVER

Your team will be required to decide on a problem to solve. You will then interview individuals, groups, and experts, as well as, observe activities and do research centered around your design problem. At the end of this section, you will be expected to take a point of view, present on your findings and your plans for moving forward.

Use the provided worksheets:

- Interview Guide
- Create insight statements
- How might we statement (HMW)

Take a point of view

METHODS: individual interviews, group interviews, expert interviews, analogous inspiration, and peer to peer, download your learnings, bundle ideas

DEFINE:

Using what you learned from the discover stage, synthesize your findings, define your challenge, and begin to develop ideas.

Use the provided worksheets:

- Frame the Challenge
- Refer to Create insight statements
- How might we statement (HMW)

Points are based on your ability to come up with multiple ideas, both in writing and drawn, while deferring judgement and put all of the ideas on paper no matter how "crazy" they may sound. Some of the best ideas stem from the crazy ones.

DEVELOP:

Using what you learned so far, develop multiple rough prototypes of your ideas. These can come in the form of storyboards, built models of the space, furniture.... During this phase, you will also construct a working model as well as assess the feasibility of your solution.

Be sure to refer back to the worksheets and to use the storyboard to help guide you.

Points are based on your ability to come up with multiple prototypes (4 or more) as well as a refined prototype. These are to be in the form of drawings, 3-D models, furniture, and equipment prototypes

DELIVER:

Teams present their design concepts to the class

Points are based on:

- Quality of visual presentation (presentation board and prototypes)
- Your verbal presentation and ability to clearly express your concepts
- Ability to present a clear direction and story
- Ability to present all aspects of the design concept viability, feasibility, desirability
- Ability to present a design concept with a clear direction for future implementation

METHODS: create a pitch

The Design Thinking Challenge

Rules to Design By:

- 1. Keep it visual.
- 2. Be original.
- 3. Make it conversational.
- 4. Keep it simple.
- 5. Make it quick.
- 6. Share your findings.

OBJECTIVE:

As a team, create a hands-on design thinking, experience that takes no more than 50 minutes to implement. Test the experience on your classmates, gather feedback, revise the experience and write a brief paper on what worked and what you would do differently the next time. Your experience must involve physical or drawn prototypes and tackle a real-world problem. The problem can be as simple as something like the gift giving experience or as complicated as, how might we get people involved in our project? You can use this experience as a way to help tackle part of your group's project or take on something completely new.

DELIVERABLES:

- 1. The experience
- 2. Images of the students doing the experience
- 3. Images of the prototypes
- 4. Feedback from classmates
- 5. A brief description of the results after the team has debriefed.
- 6. Experience revisions if needed
- 7. Hand in project in a bound packet

This project is worth 25 points.