# FOUNDATIONS OF DESIGN AND ENTREPRENEURSHIP I (BUSA 161/A) FDE I 2021

## Feb 10 to May 19, 2022

<b>Lecture Sessions:</b> 3 hours per week (Tues for virtual lecture and Thurs for live sessions)	Team: 8 Faculty, 4 Faculty Interns (FI), 1 Project Coordinator		
Lab & Tutorial sessions: 1 hour per week, 1hr with FI Coordinator: Ms. Jewel Thompson: jthompson@ashesi.edu.gh	Prerequisit Tel #: 055- RB110 By	te: None -956-0022; +1404-914-3971 (WhatsApp) Office: online appointment	
Instructor and Class Details		Faculty Intern and Discussion Details	1 of 18
Cohort <b>A</b> Class: Hybrid (Lec) Tues & Thurs 8:00-9:30AM <b>Cohort B</b> Class: Hybrid (Lec) Tues & Thurs 9:45- 11:15AM		Cohort A Discussion: Pending Friday 9:10 - 10:10 AM Cohort B Discussion: Pending Friday 8:00 - 9:00 AM	
Cohort A Faculty: Dr. William Murithi & Mr. David Hutchful Email: <u>wmurithi@ashesi.edu.gh</u> Email: <u>dhutchful@ashesi.edu.gh</u> Office: By online appointment Office hours: tentative (Dr. Murithi) Office: By online appointment Office hours: tentative (Mr. Hutchful)		<b>Cohort A Faculty Intern</b> : Albert Bensusan Email: <u>albert.bensusan@ashesi.edu.gh</u> Office: By online appointment Office Hours: Tentative	
<b>Cohort B Faculty:</b> Dr. Prince Aning and Mr. Philip Asare	( F	Cohort A Faculty Intern: Albert Bensusan	

Email: <u>theodore.asare@ashesi.edu.gh</u> Email: <u>paning@ashesi.edu.gh</u> Email: <u>albert.bensusan@ashesi.edu.gh</u> Office: By online appointment

Cohort C Class: Hybrid (Lec) Tues & Thurs 9:45 – 11:15 AM Cohort D Class: Hybrid (Lec) Tues & Thurs 11:30 AM – 1:00 PM	Cohort C Discussion: Pending (Disc.) Friday 9:10 -10:10 AM Cohort D Discussion: Pending (Disc.) Friday 12:10 - 13:10 PM
Cohort C Faculty: Mr. David Hutchful and Mr. Samuel Darko Email: <u>dhutchful@ashesi.edu.gh</u> Email: <u>sdarko@ashesi.edu.gh</u> Cohort D Faculty: Dr. Kwami Morris and Ms. Emelia Ainooson Email: <u>kjmorris@ashesi.edu.gh</u> Email: <u>eainooson@ashesi.edu.Gh</u>	Cohort C Faculty Intern: Jason Nkansah Email: jason.nkansah@ashesi.edu.gh Office: By online appointment Office Hours: Tentative Cohort D Faculty Intern: Afua Addo Email: <u>afua.addo@.ashesi.edu.gh</u> Office: By online appointment Office Hours: tentative
Cohort E Class: Hybrid (Lec) Tues & Thurs 11:30- 1:00 PM Cohort F Class: Hybrid (Lec) Tues & Thurs 3:00- 4:30 PM	Cohort E Discussion: pending (Disc) Friday 9:10 - 10:10 AM Cohort F Discussion: pending (Disc) Friday 12:10 - 13:10 PM
Cohort E Faculty: Mr. David Hutchful & Dr. Prince Aning Email: dhutchful@ashesi.edu.gh Email: dhutchful@ashesi.edu.gh Office Hours: Tentative Cohort F Faculty: Ms. Jewel Thompson and Ms. Emelia Ainooson	Cohort E Faculty Intern: Jason Nkansah Email: jason.nkansah@ashesi.edu.gh Office: By online appointment Office Hours: Tentative Cohort F Faculty Intern: Afua Addo Email: afua.addo@ ashesi.edu.gh
Email: <u>Jthompson@ashesi.edu.gh</u> Email: <u>eainooson@ashesi.edu.Gh</u>	Office: By online appointment Office Hours: tentative

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### **Course Description:**

This course is the first part of a yearlong course on design thinking and entrepreneurship. Due to the complexities and ambiguities in developing viable new idea solutions that will satisfy customers, there is an increasing need to explore nuanced innovation approaches such as Design Thinking at the front-end of the entrepreneurial process. This approach is relevant to all sectors of the economy; hence this course is mandatory for all freshmen.

For this semester the course is focused on generating new creative ideas that are well researched, analyzed and tested. Especially when tested with users, such ideas are believed to resonate better with the users because their perspectives and pain points are included in the research and analysis. Students are taken through a holistic approach that involves problem space mapping, problem reframing, ethnographic research, sensemaking & visualization, Point of View construction, ideation, prototyping and solution definition. Students will then develop and prototype their ideas and showcase them in an exhibition.

Due to being a hybrid course and given the current COVID-restrictions the projects will involve strong individual activities but within remote teams. Research will also use modified protocols that allow for individual students to conduct their own in-person, socially-distanced research, conduct some research remotely through phone interviews and conference apps such as Zoom and integrate their findings into the team effort. Solution concepts are encouraged to have a functional digital component. For instance, a girl empowerment group mentorship solution for the underprivileged will typically need in-person group meetings to implement. However, with COVID-restrictions, your team can achieve that group mosaic by stitching individual one-on-one digital interactions with the underprivileged girls whom you may not be able to easily invite on to a Zoom call to have a group mentorship session.

The exhibition at the end of the semester will rate the team design concepts according to the appropriateness of the concept for business simulation in the second semester. The design concepts that qualify for the second semester are seeded with small grants for the business simulation exercise.

## **Course Objectives**

By the end of the first semester, students should have:

- 1. A deep understanding and practice of the fundamentals of problem space mapping
- 2. Skills for conducting qualitative-based ethnographic research (now with COVID-restrictions) and analysis and the ability to deal with the underlying ambiguity inherent in the process
- 3. Skills for ideation and prototyping and solution definition
- 4. Skills to navigate teamwork for success
- 5. Insights into project management
- 6. Soft' skills for entrepreneurial leadership and ethical consideration

## Text

Adomdza G. K & McCarthy C. (2021) Design Thinking Project Guide. Manuscript. Ashesi University Other material posted on Canvas and via links shared in class.

 $Supplementary\ text\ and\ material\ http://www.rcsc.gov.bt/wp-content/uploads/2017/07/dt-guide-book-master-copy.pdf$ 

## **Learning Goals**

To assess the attainment of the course objectives, the following learning goals will be pursued:

- 1. From the design sprints, assignments and exercises, the students will appreciate the essence of creative problem solving using design thinking principles (and also learn about how to implement these strategies in COVID-restrictions).
- 2. Through teamwork and other interpersonal activities, the students acquire the soft skills essential for innovating businesses/organizations
- 3. Students will show evidence of understanding the wide applicability of the course content, hence the need for basic skill acquisition irrespective of majors.

\*Below we indicate how the course also fulfills the Ashesi learning goals,

## **Measuring of Learning Goals**

The learning goals will be measured using the following assessments:

	Assessment	Detailed	Total	Weight (%)
	7 1550 5511011	Scores	Score	(vergine (70)
Attendance &	Class attendance	10	55	10
Participation	Discussion attendance			
	Class participation	30		
	Online participation	5		
	Quizzes (5 quizzes out of a number of quizzes)	50	50	10

Individual Assignments	3 Individual Assignments	45	45	10
Team	Team Assignment: Problem Space Mapping Assignment	20	210	
Assignments	Research & Analysis Assignment	80		23
	Ideation and Prototype Assignment	80		
	Class Presentations	30		
	Mid Semester Exam	60	60	12
Final	Sit down Exam	100	190	35
Assessment	Idea Fair Report (Solution Concept)	60		
	Idea Fair Presentation	30		
Total			600	100

### **Details of Assignments**

Attendance & Participation: Attendance to class, to discussion sessions and all other sessions organized including virtual boot camps, workshops, business fairs, etc. will be recorded and will contribute to final grades. Students should however note that there is a difference between attendance and participation. Student participation in all these gatherings as well as participation in online and other chat platforms will also be evaluated and will contribute towards the final grades. Introverted students should make it a point to be heard and seen – this is key to their development!

Team Project Assignments (before and after the mid-semester break): These will include in-class exercises with instant evaluation and project assignments. The first will be aimed at capturing the journey through the Problem Festival, reporting on the approach and outcomes especially the contextualization of the problems in our environment. The second will help students evaluate their journey through the design thinking process to solve problems identified. Students will be expected to go through a rigorous ethnographic research process to define the problem clearly, analyze the research, present findings and get feedback during presentations. Students will be introduced to the idea of pivoting (learning and acting on feedback or new information) and they will be expected to show how new information is helping them pivot in ways that improve on their projects and assignments. Parts of the evaluations will be done on the spot in class. Team assignments will also be expected to be completed on shared cloud platforms like Google Docs or MS Word Online such that individual participation and performance can be tracked and evaluated. In addition, peer evaluation of individual performance will be conducted after each team assignment submission to ensure that all students understand the rewards and consequences of strong team participation and free riding respectively on individual grades.

**Individual Assignments**: These assignments will be about the concepts students work through and reflect on individually. For instance, the first assignment will help hone their skills in mapping problem spaces and developing a systems' understanding of the problem. It will also help them deal with the ambiguity that comes with taking on large problems and having the patience to painstakingly understand all the factors relevant to the problem. Once teams are formed, the individual assignments become reflection papers on the concepts, frameworks, teamwork, achievements, failures, lessons and so on – focusing on submitted team assignments.

**Quizzes**: There will be class quizzes in almost every class, some before, some during and some after class and spread across the 12 weeks within the semester. The best 5 quizzes will be chosen for the student. The aim of these quizzes will be to provide the instructor with feedback on how students are preparing for class, as well as how they are studying and understanding the concepts taught in class. The quizzes also provide information on what aspects of theories and concepts will need to be addressed during discussion sessions and which students need extra attention.

The **mid-semester examination** will be a typical examination but taken online, which will be aimed at testing the understanding of concepts studied in class, and how to apply them. It will be a set of mixed type questions to ensure an all-rounded assessment.

#### The Final End of Semester Assessments: The Final Deliverables and the Final Examination.

- A. The Final Deliverables: The Final Deliverables are in 3 sections:
- Final presentations: This is where the teams will present their idea concepts in an online idea fair for evaluation. The purpose of the evaluation is to determine which concepts across cohorts make it to the Spring semester;
- An Idea Fair Report: This report will highlight the solution idea, the customer persona and pain points, the prototype; and a lessons learnt reflection and a short plan for the second semester. Individual contribution to the assignments will be specifically evaluated
- **B.** Final Examination: The final examination is the second part of the final assessment and will be a sitdown examination with mixed-type questions and a case study to test student understanding of concepts, skills developed and an appreciation of problem solving using design thinking.

#### Additional Activities and Student Responsibilities

There will be 2 workshops with the first (Problem Festival) to set the tone for the course. The other workshop will be around ideation. The workshops help teams complete assignments outside of the classroom as well as foster a collaborative environment where different teams from different classes can learn about what is happening in other classes. There will be an **Idea fair** at the end of

the semester to showcase business concepts to the entire Ashesi community. The fair will also help evaluators select the business concepts that will go into business simulation in the next semester.

### **Ashesi Learning Goals**

#### **Ethics and Civic Engagement**

An Ashesi student is an ethical, responsible and engaged member of his/her community.

During the research phase and the business venture simulation phase, students will learn to do business with integrity. They will also be encouraged to make decisions that consider business practices that not only focus on profits but people as well as the planet. Assignments will also pose scenarios with ethical dilemmas and students will be guided on how to analyze them and make good decisions.

### **Critical thinking and Quantitative Reasoning**

An Ashesi student is able to apply critical thinking and quantitative reasoning to approach complex problems.

Students will be expected to make decisions and assumptions, as well as justify these decisions and assumptions. They will conduct customer research, analyze data and draw conclusions. These require the application of critical thinking and quantitative reasoning. This class thus gives them an excellent opportunity to sharpen this skill and develop new techniques for approaching complex problems as young entrepreneurs.

#### Communication

An Ashesi student is an excellent communicator in a variety of forms including online.

The class and discussion sessions will be filled with written and oral presentations, pitches and interactions to help students hone their communication skills. Students will learn to conduct these interactions entirely online and independently. Also, interactions with peers in their business teams and coaches will help enhance their skills in listening and giving and receiving feedback. Presenting their business ideas at the fairs will also develop skills in pitching ideas and business concepts to potential partners, investors, customers and other stakeholders.

### Leadership and Teamwork

An Ashesi student is adept at leading and functioning in teams.

The entire class is based on team activity and team effort. Instructors in this class pay attention to how team development occurs and coach students on how to work together focusing on what contribution each team member makes to it, and minimize the differences they have to help them succeed. There will also be a workshop on teamwork, building and collaboration to provide students with theories and concepts they can employ to enhance team outputs.

#### **Innovation and Action**

An Ashesi student takes intellectual risks and demonstrates an entrepreneurial spirit.

At the core of this course is entrepreneurship with design thinking in the front-end. Hence creative ideas are developed and continuously tested for innovation. The course starts from problem or customer need identification, through solution finding, pivoting, and preparation for the commercialization of solutions. Students will be expected to come up with creative concepts, intellectually justify their assumptions and decisions, and thereby develop the tenets of an entrepreneur.

#### **Curiosity and Skill**

An Ashesi student is inquisitive and confident, has a breadth of knowledge, and has attained a high level of mastery in his/her chosen field.

The structure of the class is such that, students will learn how to be intellectually curious through customer research and feedback. Students will also learn how to probe during team presentation of solutions to problems and business ideas. They will also be required to read materials about entrepreneurship, innovation and business from leading journals.

#### **Technological Competence**

An Ashesi student is an effective and flexible user of technology.

Students will be introduced to software applications such as Microsoft Excel and PowerPoint, which they require in developing presentations and analysis of data. They will also be exposed to online collaboration platforms like Zoom and Meet etc. They will also be exposed to the tools and frameworks in design thinking and problem analysis.

### Professionalism

An Ashesi Student should embody the competence, skill level and demeanor expected of a respectable professional.

The structure of the course is designed to enable students to practice networking etiquette and effective resource management through business project and interactions with working professionals and leaders in industry. From successive presentations and workshops, students would be able to develop fundamental business soft skills and communication capabilities, becoming effective communicators with an acute outlook towards work excellence and working relations. In a COVID-era, being professional requires finesse in online interactions.

## **Course Schedule**

1Introduction Intro to Desi Thinking, Te formation, problem spa mapping	<ul> <li>Icebreakers</li> <li>Go through the course outline</li> <li>Discuss what the students expect to gain from this class</li> <li>Discuss class rules</li> <li>Discuss the essence of the class to an Ashesi education</li> <li>Provide a road map for the Design Thinking (DT) process</li> <li>Start team formation</li> </ul>	<ul> <li>Start Team Formation</li> <li>Personal SWOT and Team SWOT</li> <li>Discuss potential problem spaces provided to the team and how teams want to explore it in anticipation of the Problem Festival) – problems in or outside of companies</li> <li>Techniques for visualizing problem spaces and for expressing findings (mind maps, 2x2 matrices, Venn diagrams, fishbone diagrams etc.)</li> <li>First attempt to finalize team formation</li> </ul>
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	Discussion Session	<ul> <li>Finalize Team Formation</li> <li>Initiate team preferred social media set-up</li> <li>Finalize problem spaces the team cares about, in preparation for the problem festival</li> <li>Fill personal and team SWOT</li> <li>NB: Teams can be entrepreneurial or intrapreneurial in focus</li> </ul>		-Team lists (collected by FIs) -Personal SWOT (collected by FIs) Secondary research output on topic chosen (seen in discussion session)
2 Feb 15/17	Problem Festival: Analysis and presentation of problem spaces	Faculty and guest speakers emphasize on Visualization tools and ensure that the students go with the tagline: "Problem Festival: Where Problems are analyzed, and solutions are penalized" NB: Advice students to wrap up with their work, including infographicor 3pagePPT presentation outputs on Wednesday	<ul> <li>Problem Festival</li> <li>Presentations: - Distribute guest judges across</li> <li>cohorts (other lecturers from other cohorts, (excluding FIs since they will be setting up for the class), Staff, people from outside Ashesi.</li> <li>Judges will be allocated to various teams across cohorts for evaluations.</li> </ul>	-Filled out team evaluations on Google Forms - Updated cloud storage folder

	Discussion Session	<ul> <li>Finalize team formation</li> <li>Finalize team preferred social media set-up</li> <li>Finalize team website set-up (free CMS such as Hubspot or WIX)</li> <li>Feedback on problem area (are they willing to keep it for the semester?)</li> </ul>		<ul> <li>Team social account</li> <li>Team CMS choice and mock website</li> <li>Updated cloud storage folder</li> </ul>
3 Feb 22/24	Problem Space Mapping & Team Development	<ul> <li>-Feedback from problem Festival</li> <li>-Contextualize the problems from the Problem Festival by considering the socio-economics, sectoral changes and their impact on the problem spaces</li> <li>-PEST analysis on problem spaces, employ Opportunities, Threats (OT) and COVID-impact, as well as Team SWOT analysis.</li> <li>FIs present a case study on PEST &amp; OT &amp; COVID-Impact</li> <li>FIs present an example of a Problem Tweet (this is an assignment for teams)</li> </ul>	<ul> <li>Problem Tweet Presentations / 1 minute per team</li> <li>Stages of Team Development - Forming, Storming, Norming and Performing, Adjourning</li> <li>Team organization: charter, leadership, membership etc. (intrapreneurial teams should note the cultural elements of the identified organization)</li> <li>Performance and attitude peer review</li> <li>Explore roles (POGIL)</li> </ul>	-Problem Tweet seen on team social media (graded) and team website -Updated cloud storage folder (graded)
	Discussion session	-Finalize team organization: charter,	leadership, membership etc.	Team charter collected in discussion session Individual Assignment 1 Reflection on Problem Space Mapping and Personal SWOT &

				personal assessment paragraph Due Feb 25 <sup>th</sup> 5:00 pm – on Canvas
4 Mar 1/3	Creativity and Innovation	<ul> <li>Approaches to problem solving and innovation (e.g. tech-push, demand pull, design driven).</li> <li>In search of the innovation approach for today's world- case for Design Thinking</li> <li>Beyond functionality: Jobs to be Done and generation of new meaning)</li> <li>Factors to consider today in thinking about an innovation approach for team problem</li> </ul>	<ul> <li>The role of creativity in design - The neuroscientific basis of creativity. How the brain works to enable and prevent creativity</li> <li>Mental categorization and the need to embrace ambiguity.</li> <li>Mental categorization review of Problem Festival boards</li> </ul>	
	Discussion Session	Exercise on mental categoriza 'what if' exercises	tions in their problem space and	Team Assignment 1: Problem Space, Team SWOT & COVID-Impact Team Assessment paragraph – Due Feb 28 <sup>th</sup> , 2022 at 5:00pm - due in the team cloud storage folder and summary on team mock website -Peer evaluation survey filled
5 Mar 7-11		Spring Break		

Design Thinking		
Research and		
Preparation	Design Thinking Research	

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6 Mar 15/17		<ul> <li>Primary research approach in design thinking</li> <li>Ethnographic research process and why</li> <li>Research under COVID restrictions</li> </ul>	<ul> <li>Logic: Abductive logic to support the research process</li> <li>Identification of research users and strategizing on who is reachable and potential proxy users to consider – for team problem</li> </ul>	<ul> <li>Ethnographic research methods appropriate for the team's problem space and why (seen in class)</li> <li>Research users and potential proxies for individual and remote research due</li> </ul>
				restrictions and
	Discussion Session	<ul> <li>Discussion session: Exercises or Abductive)</li> <li>Reflect and finalize on suitable of team problem</li> <li>Review team formation and POO</li> <li>Discuss readiness and plans for Discuss COVID-restrictions for implications</li> </ul>	h Logic (Deductive, Inductive & ethnographic research method for GIL roles remote and individual research - the team research area and its	
7 Mar 22/24	Design Thinking Research and Preparation	<ul> <li>Review the research methods and abductive logic and implications for the team project</li> <li>Introduce the development of the Problem Tweet into a Research Protocol</li> <li>Concepts</li> <li>(Re)framing problems</li> <li>User/stakeholder mapping</li> <li>Developing research questions</li> <li>Lean Approach Research</li> <li>Research Protocol Development</li> </ul>	Preparatory exercises for the team research - (Re)framing problems - User/stakeholder mapping - Developing research questions - Lean Approach Research - Research Protocol Development MID TERM EXAM	-Reframe map (seen in class) - due in the team cloud storage folder -Stakeholder map (seen in class) - due in the team cloud storage folder -Research Protocol

		- Sampling		
	Discussion sessions:	<ul> <li>Initiate field research</li> <li>Finalize Reframe map, Stakeholder map and Research Protocol</li> <li>Finalize Research Protocol Development for team problem</li> <li>LAR: Practice interviewing and other skills (consent, initial engagement with respondent)</li> <li>Rotate roles (POGIL)</li> </ul>		Review: Lean Approach Research homework- have them watch Lesson 6- analyzing and using interview data- 1.5 hr of work
8 Mar 29/31	While Field Research is ongoing Design Thinking Analysis/Sensema king	<ul> <li>Design Thinking Data Analysis</li> <li>Use the Lean Approach Research concept as the frame for recap field research</li> <li>Analysis of ethnographic research output</li> <li>Intro: Develop analysis frameworks to make sense of research output.</li> </ul>	Open Card Sorting/Affinity Mapping exercise in class to commence sensemaking process (beneficial to teams that have done some field research)	-Evidence of start of research (seen by FIs e.g. pictures and videos) - due in the team cloud storage folder -Choice of appropriate extra analysis frameworks aside required (seen in 1 <sup>st</sup> class) -Physical map of open card sorting/affinity mapping (seen in 2 <sup>nd</sup> class)
	Discussion session	Field Research (ONGOING) Open Card Sorting/Affinity Mapping process for those who have done rese	g exercise to continue sensemaking earch	-Digitized map from open card sorting/affinity mapping (sent to FIs) Individual Assignment 2 on Ethnographic Research Process – Due March 14 at 5:00pm <sup>th</sup>

9 Apr 5/7	<i>While</i> Field Research <i>is</i> <i>ongoing</i> (should end by this week) Sensemaking and Visualization	<ul> <li>Review/case study: Design Thinking Analysis</li> <li>Start developing required analysis frameworks to make sense of research output.</li> <li>Review/Case Study: Point-of-View development (presented by FIs)</li> </ul>	<ul> <li>Another round of Open Card Sorting/Affinity Mapping exercise to continue sensemaking process for those who have done field research</li> <li>Finish construction of analysis frameworks for presentation and team assignment submission</li> <li>POV construction</li> <li>Data visualization for sense making</li> <li>Presentation Advice</li> </ul>	-Digitized map from open card sorting/affinity mapping (sent to FIs) - due in the team cloud storage folder -Review of frameworks constructed so far (seen in 1 <sup>st</sup> and 2 <sup>nd</sup> class) -Review of POV (seen in 2 <sup>nd</sup> class)
	session	- Finalize analysis frameworks, POV and presentation slides		
10 Apr 12/14	Critique	- Presentations	- Presentations	<ul> <li>-Presentation Slides (sent to FIs) - due in the team cloud storage folder</li> <li>-Peer Evaluation form (collected by FIs) - due in the team cloud storage folder</li> <li>-Presentation Evaluation (collected by FIs) form filled</li> </ul>
	Discussion session	- Detailed presentation feedback sessions with the FIs		-Feedback notes by FIs shared with faculty

12 Apr 26/28	Prototyping and Field Testing (Desirability and Feasibility)	<ul> <li>Design Critique (basic)</li> <li>Developing low fidelity prototypes of solution (focus on persona and journey mapping of solution to test steps)</li> </ul>	<ul> <li>Prototyping products, services, processes</li> <li>Developing a testing protocol for prototype</li> <li>Dark Pattern Design</li> </ul>	filled -Prototype constructed and testing protocol developed
	Discussion	<ul> <li>Finalizing ideation and requirements definition</li> <li>Idea Critique</li> <li>Review team health</li> <li>Rotate roles (POGIL)</li> </ul>		-Idea dashboard and requirements (collected by FIs) - due in the team cloud storage folder Team Project Assignment 2: Research & Analysis Assignment – Due April 4 <sup>th</sup> - due at 5:00 pm in the team cloud storage folder and summary on team mock website -Peer evaluation survey
11 Apr 19/ 21	Ideation and requirements definition	<ul> <li>Ideation techniques like Disney's three rooms, Six Thinking hats, Six Value Medals, Worst Idea, CoRT, Analogies and others</li> </ul>	<ul><li>Ideation sessions</li><li>Requirements Definition</li></ul>	<ul> <li>-Choice of appropriate ideation methods (seen in 1<sup>st</sup> class)</li> <li>-Evidence of ideation (seen in 2<sup>nd</sup> class)</li> <li>-Requirements Definition Document (collected by FIs)</li> <li>- due in the team cloud storage folder</li> </ul>

	Discussion	<ul> <li>Finalize Prototype and testing plan</li> <li>Review team health</li> <li>Rotate roles (POGIL)</li> </ul>		Prototype testing protocol
13 May 3/5	Value Fulfilment Blueprint	<ul> <li>Value Fulfilment Blueprint (VFB)</li> </ul>	-Field Research Protocol to test prototypes and VFB and collect more validation feedback	-VFB Draft Prototype Research Protocol
		<ul> <li>Updating the Prototype Protocol to test parts of the VFB</li> <li>Finalize Prototype Testing Protocol update with VFB</li> </ul>		-Final VFB submission -Prototype Testing Protocol update with VFB
14 May 10/12	<i>While</i> Field Testing of prototypes and VFB <i>is ongoing</i> The Art of Presentation and Story Telling	Final In Class Presentations	Final In Class Presenations	Evidence of Prototyping development and/or testing (seen by FIs – e.g. pictures and videos) -Presentation narrative (seen in 1 <sup>st</sup> class) -Presentation style (seen in the 2 <sup>nd</sup> classes)
	Discussion	<ul> <li>Developing the final presentations (physical &amp; photographed and digital mock-ups)</li> </ul>		Individual Assignment 3 – on the Solution and Testing -Due April 25 <sup>th</sup> at 5:00pm ) - due on Canvas

				Team Assignment 3: Ideation and Prototype Assignment – Due May 9 <sup>th</sup> at 5:00 pm) - due in the team cloud storage folder and summary on team mock website
15	IDEA FAIR	<ul><li>In class Presentations</li><li>Design Critique (Review)</li></ul>	<ul><li>In class Presentations</li><li>Design Critique (Review)</li></ul>	-Presentation Slides - due in the team cloud storage folder
May 17/ 19	and Final Presentations	(Peer, instructor and visitor evaluations)	- (Peer, instructor and visitor evaluations)	website -Peer Evaluation form
	Last Discussion Session	Presentation Feedback		
16 May 19		Review class	- Review/Last Day of Classes	Idea Fair Report (Solution Concept and VFB) – Due May 13th - due in the team cloud storage folder and summary on team mock website
May 19 <sup>th</sup>		Last Day of Class		
May 24 – June 3		Exams		