

Course Title:

The Design Sprint: Modern Aging and the Future of Health in China

Prerequisites:

None.

Abstract:

This course investigates the wicked problem of Shanghai's aging population using the research sprint and design sprint methodology developed at Google Ventures. This course is done in partnership with AccessHealth and taps into leading university research and technologies from around the world. This highly focused initiative offers students the opportunity to have a global impact on aging populations. Simultaneously, immerse themselves in the history and culture of Shanghai and Mainland China. This course culminates in a presentation to a panel of experts who will award funding to those proposals they believe are most likely to succeed. Students of all disciplines and interests should take this course to learn to materialize equilibrium-shifting ideas better and faster.

Goals and Objectives:

Upon completion of this course, students will be able to:

1. **RESPOND TO REAL NEEDS:** Create businesses that address the needs of an aging population, their families, and society.
2. **BRING YOUR IDEAS TO LIFE:** Use your imagination and energy to bring inspired ideas to life with, expert guidance and peer support.
3. **MAKE A SOCIAL IMPACT:** Engage in an opportunity to make a social impact on a global scale and improve lives everywhere.

Overview of Contents

Week One: Modern Aging and the Future of Health in China

The week of courses will consist of interactive lectures and case studies to help students gain rapid expertise on the topics of modern aging and the future of health in China. Reading assignments will be relatively short in length but will be highly focused on the discussion topics during lectures. Small in-class and out of class assignments will be provided during each lecture to allow students opportunities to directly experience key issues discussed and prepare them for the sprints. Most assignments will take students out of the classroom, immersing them in the vibrant city and culture of Shanghai, China.

Week Two: The Research Sprint

The research sprint is a five-day process to help students gather and test data that will be used in the design sprint.

Class One: Create a set of questions and assumptions. These might include questions such as: What problems, needs, and motivations do people have? How do people evaluate and adopt products? Do people understand students value proposition? Which messages are most effective at explaining student's product? Can people figure out how to use student's product? Why do people stop using student's product? Why don't people adopt new features when students launch them?

Class Two: Learn how to do intentional and selective recruiting.

Class Three: Build a realistic prototype to test with users.

Class Four: Conduct five 1-on-1 interviews combining broad discovery questions with task-based evaluation of a prototype.

Class Five: Synthesize and summarize real-time of findings.

Week Three: The Design Sprint

The design sprint is a five-day process for answering critical business questions through design, prototyping, and testing ideas with customers. Developed at Google Ventures, it's a "greatest hits" of business strategy, innovation, behavior science, design thinking, and more—packaged into a battle-tested process that any team can use. Working together in a sprint, students will shortcut the endless-debate cycle and compress months of time into a single week. Instead of waiting to launch a minimal product to understand if an idea is any good, students will get clear data from a realistic prototype. The sprint gives students a superpower: Students can fast-forward into the future to see their finished product and customer reactions, before making any expensive commitments.

Class One: Map out the problem and pick an important place to focus.

Class Two: Sketch competing solutions on paper.

Class Three: Make difficult decisions and turn their ideas into a testable hypothesis.

Class Four: Hammer out a high-fidelity prototype.

Class Five: Test a prototype with real live humans.

Learning Activities

1. Interactive lectures
2. In-class, breakout discussions
3. Group projects
4. Online videos
5. Book, case, and article readings
6. Extensive field research (writing a case study, interviewing users, etc.)
7. Teaching
8. Developing a new product or service

Readings & Videos

Sprint: How to Solve Big Problems and Test New Ideas in Just Five Days by Jake Knapp (Simon and Schuster, 2016)

Selected cases, readings and videos from library.gv.com

Assessment

Preparation, Presence, Promptness, & Participation (30%)

Discussions depend upon the active, effective participation of the students. The student must get involved and take a great deal of—in fact, the primary—responsibility for his or her learning. It is necessary that each student be committed to the “4 Ps” of student involvement in case discussions:

1. *Preparation*. If the student does not read and analyze the case/readings, discussion will mean little.
2. *Presence*. If the student is not present, she or he cannot learn and, more important, cannot add her or his unique thoughts and insight to the group discussion.
3. *Promptness*. Students who enter the classroom late disrupt the discussion and deprecate the decorum of the process.
4. *Participation*. Each student’s learning is best facilitated by regular participation. More important, the student has the responsibility to share his or her understanding and judgment with the class to advance the group’s collective skills and knowledge.

The instructor will access the “4 Ps” based on the AAC&U Value Rubrics. Students may attend office hours each week to get feedback on their “4 Ps” performance.

Sprints (60%)

The sprints are an opportunity for students to apply the course objectives. Students will be graded on how well they identified opportunities, challenged assumptions, leveraged the limited resources they had and general level of creativity.

Reflection Paper (10%)

Students will write a brief—approximately 400 words—reflection after each week. These reflections will be turned in, graded, and returned to the student with feedback from the instructor. The grades will be combined to make up this percentage of the grade.

To learn more for how each of the grading component will be assessed, please see the AAC&U Value Rubrics (<https://www.aacu.org/value-rubrics>).

Week One: Modern Aging and the Future of Health in China

The week of courses will consist of interactive lectures and case studies to help students gain rapid expertise on the topics of modern aging and the future of health in China. The first week will be composed of classroom sessions and site visits, supplemented with reading materials of case studies.

The classroom course will consist of three sessions. The first session will introduce into aging and healthcare in China: What does aging mean? What is the silver tsunami in China and Asia? Then we will bring the students to conduct site visit to understand “what does aging mean.” The second session will introduce elder care and healthcare system in China: what is the elder care and healthcare system in China? What are the challenges? The third session will introduce the innovation and business opportunities in China. We will also bring students to visit some innovative projects for the elderly in Shanghai to give them a better understanding. Please find the detailed arrangement in the table below.

Day One, Tuesday January 3. What does aging Mean? The silver tsunami in China and Asia.

Time	Content	Remarks
1:30 pm to 1:50 pm	Introduction about the course	Dr. Eliot Gattegno
1:50 pm to 2:20 pm	Self introduction and understanding about age	Each students
2:20 pm to 3pm	General Knowledge of China and Aging in China	Cathie Liu
3 pm to 3:10 pm	Break	
3:10 pm to 3:40 pm	General Knowledge of Aging (video): <i>Aging in the 21st Century Issues and Challenges</i>	Angelique Chan
3:40 pm to 4 pm	Breakout Session?? – Students talk about their understanding about aging after watching the video.	Each students

After-class reading materials:

Redefining Aging for the Twenty First Century, Interview with Ruth Finkelstein (access to full text [here](#))

Dr. Ruth Finkelstein, the associate director of the Columbia Aging Center, discusses the need for more options for retirement due to the increased longevity of the growing older population. She also addresses the need to reenvision aging and adult education.

Page 1 to 11, *Elder care in Hong Kong* (access to full text [here](#))

Background Elder Care Hong Kong

Video: *Aging in the 21st Century Issues and Challenges*.

Baidu Cloud Link: <https://pan.baidu.com/s/1eR772Ml>. Access code: jrp2

Day Two, Wednesday January 4. Experience Aging, Build Empathy

Time	Content	Remarks
1:30 pm to 2:30 pm	<i>Caring People with Dementia</i> (video)	by Dr. Philip Yap
2:30 pm to 4 pm	Site Visit: Grand Action Senior Life Experiencing Center Room E, 17 th floor, No. 18 Caoxi North Road, Xuhui District	100 RMB/person

Field Visit: Grand Action LOHAS Senior Life Experiencing Center

In the LOHAS Experiencing Center, experiencers could simulate elder people through wearing weighted clothes, macular glasses and bound belts on joint. With the reference to daily lives of elders, the experience space is divided to four scenes: 1) the life after 80 years old (experience the life when your five senses decline), 2) the alone afternoon time, 3) J.O.M.A.C dementia game (understand lives of patients with dementia from judgement, orientation, memory, abstract thought and calculation), 4) unexpected disaster (Unilateral Hemiplegia) .

After being humpbacked, costive and hard to feel, experiencers still need to try doing daily routines like wearing clothes, walking up and down stairs, eating by themselves, doing sewing. They have to not only overcome the physical problems, but also feel psychological troubles.

Video: *Caring People with Dementia*

Baidu Cloud Link: <https://pan.baidu.com/s/1gfl0XjH> access code: eabt

After class reading materials:

The AdvantAge Assessment: Using Data to Design Elder Friendly Initiatives, Interview with Mia Oberlink, Senior Research Associate, Center for Home Care Policy and Research (access to full text [here](#))

The AdvantAge Initiative survey is a tool for hearing the voices of older adults and understanding the level of age friendliness of an apartment complex, neighborhood, town, or county. The survey reveals areas that are working well in the community and those that need to be addressed to create a more age friendly environment. In this interview, Mia Oberlink discusses how the AdvantAge Initiative collects data directly from community residents. She describes how the data inform strategic planning that prioritizes the findings that need the most attention.

Aleris: Improving Dementia Care and Care of the Elderly, Interview with Linda Martinson, Manager, Odinslund Elder Care Home, Aleris (access to full text [here](#))

Aleris is a private health and social care company and one of the largest providers in Scandinavia. In this interview with Linda Martinson, manager of an Aleris elder care home in Stockholm, Sweden, she talks about quality registries, national guidelines, and the development of new and better methods in elder care. Ms. Martinson discusses how to treat patients suffering from dementia with respect and dignity.

Day Three: Thursday January 5. Healthcare and Elder Care System in China and Asia.

Time	Content	Remarks
1:30 pm to 2:30 pm	Healthcare and Elder Care system in China	by Dr. Chang Liu
2:30 pm to 2:40 pm	Break	
2:40 pm to 4 pm	Planning and Transforming for the Aging Population	by Dr. Chang Liu

After class reading materials:

Page 12 to Page 39 (the end), *Elder care in Hong Kong* (access to full text [here](#))

Three case study of elder care model in Hong Kong.

Case Study: The Most Fragile Elderly Project (access to full text [here](#))

To meet the social care and healthcare demands of the aging Swedish population, the Swedish government decided to identify the care needs of the most fragile elderly. This case study examines the Most Fragile Elderly Project and its results. The case study begins with an interview with Dr. Eva Nilsson Bågenholm, the national coordinator for elder care. The second part of the case study provides a background of the project. The third part includes a detailed breakdown of outcomes in five focus areas: preventive care, dementia care, end of life care, medications, and care coordination.

Day Four: Friday January 6. Innovation in Aging and Healthcare in China.

Time	Content	Remarks
1:30 pm to 2:30 pm	Promoting Innovation in Aging and Healthcare in China	by Dr. Chang Liu
2:30 pm to 4 pm	Site visit to Buurtzorg and Ai Zhaohu	TBD

After class reading materials:

Buurtzorg: A Neighborhood Model of Care (access to full text [here](#))

Buurtzorg Nederland is a not for profit homecare provider with a reputation for delivering high quality and affordable elder care services. Buurtzorg means “neighborhood care” in Dutch. Buurtzorg is centered on neighborhood resources, including family members and neighbors. This is a summary of an interview with Jos de Blok and the transcript of an interview with Gertje van Roessel. The interviews highlight the Buurtzorg philosophy and working methods in homecare management. Buurtzorg methods are being replicated worldwide.

Full Circle America Case Study: Aging in Place and Community (access to full text [here](#))

Full Circle America is a person centered home and community care program. Full Circle America links technology, people, and clinical processes in a holistic care setting across the care continuum. In this interview, Dr. Allan Teel describes his thirty years of experience enabling aging in place and community to his patients. Dr. Teel offers his insights into elder care and the Full Circle America care model. The Full Circle America model cuts costs of care and provides equity of access while improving health outcomes and quality of life for clients.

eHealth in Sweden: Interview with Patrik Sundström (access to full text [here](#))

The Swedish eHealth initiative is a part of a national digitization agenda, with the goal of Sweden becoming the most prominent digital user in the world. The aim of eHealth is to improve the health, participation, and independence of patients in Swedish society. In this interview with Patrik Sundström, the program manager for eHealth at the Swedish Association of Local Authorities and Regions, Mr. Sundström shares his thoughts on eHealth in Sweden.

WEEK TWO: Preparing for your Design Sprint!

Day One: Monday, January 9. Research, Quick and Dirty

Time	Content	Remarks
1:30 - 1:50 pm	Debrief on last weeks questions, go over reflection papers	
1:50 - 2:00 pm	The Big Question + John Maeda Quote	
2:00 – 2:10 pm	Where we are going: <i>Redesigning the Bagel</i>	https://www.ideo.com/blog/redesigning-the-bagel
2:10 – 2:15 pm	Break	
2:15 – 4:00 pm	The Research Sprint Essentials – Customer Testing: The Five-Act Interview; User Research Quick and Dirty with Google Ventures	http://www.gv.com/lib/user-research-quick-and-dirty

After class reading materials:

In *Sprint*: Introduction, Set the Stage, & Monday

Day Two: Tuesday, January 10. Prototyping, Quick and Dirty

Time	Content	Remarks
1:30 - 1:50 pm	Why Prototype?	
1:50 - 2:30 pm	The soft stuff: Explore and install Marrel, InVision, Keynote, Keynotopia	
2:30 – 2:40 pm	Break	
2:40 – 4:00	The <i>hard</i> stuff: Intro to 3D Printing, and other physical prototyping	

After class reading materials:

In *Sprint*: Tuesday

Day Three: Wednesday, January 11. Essential Skills for Innovation

Time	Content	Remarks
1:30 - 1:50 pm	Beginners Mind	
1:50 - 2:10 pm	Yes, and...	
2:10 - 2:30 pm	How Might We...	
2:30 - 2:50 pm	Lightning Demos	
2:50 - 3:00 pm	Break	
3:00 - 3:20 pm	Sticky Decision	
3:20 - 3:40 pm	The 4-step Sketch	
3:40 - 4:00 pm	Note-and-votes	
4:00 - 4:20 pm	Make a Storyboard	

After class reading materials:

In *Sprint*: Wednesday

Day Four: Thursday, January 12. Field Trip + Check-in

Time	Content	Remarks
10:30 - 12:30 pm	Field Trip to International Medical Center – Jinqiao; interview staff	(Transportation Provided)
2:00 - 4:00 pm	Office Hours	Room 900

After class reading materials:

In *Sprint*: Thursday

Day Five: Friday, January 13. Mini Sprint: How to name a company in 8 Hours

Time	Content	Remarks
Morning (10am – 1pm)	Brand exercises: What, how why; 20-year roadmap; Audience ranking; Values; Brand opposites; Competitive landscape	
Early Afternoon (2pm – 4pm)	Themes, names	
Late Afternoon (4pm – 5:30pm)	Weighted voting	

After class reading materials:

In *Sprint*: Friday, Liftoff, Checklists, FAQ's

Project 1: Validated Product Design

This project will help you design a product people will love. By the end of this project, you will be able to summarize your product idea, build out wireframes or prototypes, articulate what you learned from user testing, and highlight metrics that will be important to measure for your product.

For this project your submission should include the following five parts:

1. Product Idea Summary (max 100 words)
2. Design Sprint Deliverables (e.g., wireframes, mockups, or low-fidelity prototypes of your product idea)
3. Design Brief
4. Feedback from User Testing (summary, max 250 words)
5. Three Metrics to Measure (summary, max 250 words)

Please submit all these as a single PDF document.

Project 2: Monetization Plan

This project will help you figure out how your product will make money! With this project, you'll identify how your product will generate revenue (your monetization strategy) and dig into the details of implementing that strategy and your rationale for choosing it.

The project that you submit will include four items:

1. Monetization Summary: Overview of the problem you're solving, your solution, and the monetization strategy you've chosen for that solution. (max 250 words)
2. Monetization Details: Go deep on your chosen monetization strategy and rationale.
3. KPIs: What you plan to measure, your rationale for those metrics, and your definition of success for those metrics.
4. Plan B: What you'll do if your first monetization strategy doesn't succeed. The portfolio will be submitted as a PDF document.

Project 3: Interactive Prototype

With this project, you'll go through the iterative prototyping process -- starting with a low fidelity prototype and using feedback to build a medium fidelity prototype. By the end, you'll have an amazing prototype to share and a really insightful list of talking points for potential investors about the feedback from your UX research experiments.

This project will push your product design, UX and UI forward and get you great user feedback. You'll incorporate any design considerations from your monetization plan, and you'll get higher fidelity prototypes to share with users or investors. With this project, you'll go through the iterative prototyping process -- starting with a low fidelity prototype and using feedback to build a medium fidelity prototype. By the end, you'll have an amazing prototype to share and a really insightful list of talking points for potential investors about the feedback from your UX research experiments.

For this project you will go through the following steps in order:

1. Decide on and describe a problem (this can be re-purposed from Project 1)
2. Build a low-fidelity prototype
3. Conduct UX research with the low-fidelity prototype
4. Use the feedback from that research to make a medium fidelity prototype

5. Conduct UX research with the medium-fidelity prototype 6. Make a list of talking points about the process and positive feedback from the research

Project 4: Marketing & Distribution Plan

With this project, you're going to come up with a plan to acquire users and grow! By the time you're done, you will have a robust marketing plan, which will also give you a lot of material for your final capstone project. Your slide deck for this project will include a description of your value to your customers, how you stack up against competitors, who your target audience is, and how you plan to get distribution.

Project 5: Your Story

You often only get one chance to tell someone (an investor, an accelerator, or a customer) about your business. This project will help you do that in a powerful, succinct way. This is the polished culmination of everything you've done and learned during the course. You'll use this story to pitch your company to potential investors, incubators or accelerators, friends and family, and even new customers.

There are two key deliverables for this Capstone Project:

1. Your Story (Pitch Deck, Investor Page, Video, etc.)
2. Supporting documentation for Your Story (e.g. research, user feedback, market analysis, etc.)