



SOCL 350 | Design Thinking and Innovation (1.5 Units*)

SOCL 550 | Design Thinking and Innovation (1.0 Unit*)

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Time: TBD

Location: American University of Central Asia, Bishkek, Kyrgyzstan

Number of hours: 90 (6 academic hours per week, over the course of 15 weeks)

**One Bryn Mawr unit is equivalent to four undergraduate semester hours or five graduate semester hours.*

COURSE VALUES

This course is a core-requirement for all LAS students at the American University of Central Asia. Students from other departments are more than welcome to join our learning journey, as the diversity of the student body sparks creative idea-generation. The class highly values a student-driven inclusive learning environment. No one shall be judged or discriminated against their race, gender, ethnicity, cultural, and socio-economic backgrounds, as well as their remote or physical learning capability, amidst COVID-19. To ensure inclusiveness, there are also diverse ways of performing assessments to evaluate students' learning outcomes. The class welcomes critical thinking, and we encourage different ideas to be shared. The course also requires collaborative teamwork to generate collective intelligence and a collaborative mindset. In the first introductory session, students are expected to come up with the commonly agreed class values for the entire semester. Hence, it requires students' self-discipline and group collaboration to observe the shared values.

COURSE DESCRIPTION

This is an experiential, project-based course that requires proactive learning and collaborative teamwork in the field. *Learn by Doing Together!* The course is designed to power students' creativity to come up with innovative solutions to address "wicked problems" in this complex and unpredicted BANI world by understanding core systematic gaps and problems through empathy. Especially in the context of COVID-19, students are urged to discover the most emerging problems to re-define, re-design and co-create the new normal of societal life we are living through.

Design thinking is the process of immersing oneself in a problem space through empathy connected to personas, generating creative ideas, then iteratively prototyping and testing various solutions. **Design thinking** is a mindset to constantly observe changes with curiosity, explore opportunities around pain points, understand the real needs of the people you are designing for, and be open to different feedback and even failures. **Design thinking** is an action to make your hands "dirty" on the ground by rapidly transforming ideas into prototypes that test your hypotheses to address real-world business and societal problems. Solving problems with user/human-centered solutions is at the core of **Design thinking!**

Design thinking is not as simple as designing! Rather, it is a systemic approach to innovation. The skills and capacity students learn in the course can be applied in many different disciplines. This is the course for all professions.



LEARNING OUTCOMES

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

- **Human-Centered Innovation:** Demonstrate a solid understanding of human-centered innovation and design thinking, including the skills to empathize with user experiences, define complex problems, generate creative ideas, and effectively prototype and test solutions.
- **Innovative Mindset:** Cultivate an innovative mindset that prioritizes growth rather than fixed thinking, encouraging students to approach challenges with curiosity, creativity, and the determination to drive positive change, applying divergence and convergence thinking at the right phase.
- **Proficiency in Design Thinking Tools:** Develop a versatile skillset by mastering a range of design thinking tools and techniques through practical application in real-world challenges and case studies.
- **Real-World Problem Solving:** Apply the principles and iterative processes of design thinking to address complex societal, public, and business challenges, with a particular focus on addressing emergent issues in the context of the dynamic BANI world.
- **Effective Communication and Teamwork:** Enhance communication skills by actively listening, articulating ideas clearly, and mastering visual communication and storytelling techniques. Develop teamwork skills, including a collaborative mindset, conflict resolution abilities, and effective time management. Practice virtual and in-class collaboration and learn to foster inclusivity and diversity within teams. Recognizing and celebrating team successes will further promote cohesion and motivation.
- **Entrepreneurial Skills:** Prepare to actively engage in the world of innovation and entrepreneurship by enabling them to confidently pitch ideas, solutions, and even startup ventures to relevant stakeholders and audiences, positioning them as contributors to the innovation ecosystem.

ACADEMIC INTEGRITY

Students are expected to follow the AUCA Code of Student Conduct. All types of plagiarism are strictly prohibited. If a student fails to observe this requirement, the instructor may assign an “F” for the work or an “F” for the whole class, depending on the type of assignment and relevant circumstances. Students are expected to read and follow the section on the Student Academic Dishonesty of the AUCA Code of Student Rights, Responsibilities, and Conduct. As defined, academic dishonesty is a “failure to maintain academic integrity.” Failing to maintain academic integrity includes obtaining or giving help on an examination, doing work for another student, and plagiarism. Plagiarism is a serious issue in academic settings, including the “Self-plagiarism” (!) There is a general rule for avoiding plagiarism: never attempt to pass off another's work as your own, or use your work from other courses directly in this course without giving references. More specific guidelines are:

- Do not copy words from any source without quoting and citing that source. The quotation should be reproduced in the exact manner in which it was taken.
- Do not use the ideas, concepts or opinions from any source without citing that source. Included are key terms, technical concepts and original views.
- Paraphrasing is acceptable; however, one must take care to cite the source and not misrepresent the original thesis. Paraphrasing is often the area in which most charges of plagiarism result.
- If any of AI (artificial intelligence) tools are used, specify them, mentioning that this is an opinion of AI or work done in collaboration with AI (ChatGPT, MidJourney, other AI apps).

TEACHING AND LEARNING PLAN



The teaching philosophy of the instructor is based on the fundamental belief that everyone is naturally gifted with creativity. The purpose of the true educator is not to purely supplement knowledge, but to help students untap their potential for why and *how to learn*, which is one of the core values of liberal arts education. Students are expected to proactively exchange learning through teacher-to-student, peer-to-peer, designer-to-customer/user, innovator-to-ecosystem forms of interaction.

- In order to better facilitate the learning network, there are **e-course materials** and **Telegram group** where students are encouraged to document and share their learning journals among peers in a safe digital space.
- Design Thinking requires documenting the learning progress along the way. Therefore, there will be **Miro board exercise** conducted to share the learning progress in the field practices.
- There are individual and team exercises. From weeks 4–16, students are expected to conduct **field practices** with their teams. Most of the semester, students spend time with their teams. Therefore, it is important to learn to be good team players. Students' performance is partially assessed by their peers.

The course plan is divided into two parts (for details, see “Course Schedule”):

- Part 1 provides students with the core concepts of design thinking and innovation. Students learn from lectures delivered by the instructor and guest speakers, as well as from their peers' presentations (Week 11–13);
- Part 2 exposes students to a “Real World Challenge” by bringing teams to real problems to practice learning (Week 4–16).

There are two options for students:

- either students help solve one corporate/organizational problem with design thinking;
- or students initiate their own startup ideas with design thinking. All students shall present their tested prototypes in the final pitch competition.

Student participation is an important part of the course. The “participation rate” is not only accessed in class but also outside the class (in the fields). In order to maximize the learning experience and maintain a good learning environment, it is important to keep in mind the following notes:

- Tolerate and celebrate differences in opinions. Be respectful to others.
- Express your opinions clearly and briefly. Do not dominate discussions.
- Communicate your feedback in a constructive way. Do not personalize critiques.
- There is neither a stupid question nor a crazy idea! Do not be shy asking or sharing.
- There are no failers in design thinking, get used to experimenting and always learning and improving culture and mindset.
- You are encouraged to use social media platforms (LinkedIn, Facebook, Twitter, Medium, etc.) to share your personal learning, and/or the group learning. Please use the hashtags **#AUCALAS**, **#AUCADesignThinking** for the instructor to assess your public communication.

GRADING AND ASSESSMENT

Assignments and Assessments

Description	Channel	% Points	Deadline	Evaluation based on
Participation (class & field)		10%		Attendance rate, preparedness, and class contribution
Individual exercises: The Wallet Project, 2040 essay, game, case study	At class	15%		Instructor's assessment (2%, 3%, 2%, 3%)
Field practice exercises, Miro and PPT teamwork	At class	35%	Week 5 – 14	Instructor's assessment & peer reviews. "Real Life Challenge" team work (20%), Miroboard (5%), Pitch-deck preparation (5%)
Mid-term Team Presentation		20%		Instructor's assessment
"Innovation by Design" pitch competition	AUCA CH	20%	Week 15	The competition committee, consisting of field experts, professors, businessmen, social entrepreneurs, and partners
*Bonus: Writing a blog to reflect learning experience, and to public at social media/AUCA with a review from the instructor (<500 words)	LinkedIn & Medium	1%		Reflection on the learning and demonstration of communication skills
*Bonus: Leadership		1% - 3%		Demonstration of strong leadership skills in teamwork. Mentorship of a peer in the group. Evaluation will be based on the instructor's observation & peer evaluation.
TOTAL		100%		

Grade Scale

Grade	A	A-	B+	B	B-	C+	C	C-	D	F
4.0 Scale	4	3.7	3.3	3.0	2.7	2.3	2.0	1.7	1.0	0.0
% Points	95–100	90–94	87–89	84–86	80–83	77–79	73–76	70–72	61–69	0–60

COURSE MATERIALS

*Note: This may change during the course to accommodate guest presenters & student needs.

The list of detailed readings is sent a week beforehand. Key reading materials are available at AUCA library and at AUCA e-course:

- Brown T. (2009). *Change by Design: How design thinking transforms organizations and inspires innovation*. HyperBusiness.
- Cross N. (2011). *Design Thinking: Understanding how designers think and work*. Bloomsbury Visual Arts.
- Kelley T. (2016). *The Art of Innovation: Lessons in creativity from IDEA, America's leading design firm*.
- Patnaik D. (2009). *Wired to Care: how companies prosper when they create widespread empathy*. Pearson Education.
- Andrew Pressman (2019). *Design thinking: a Guide to Creative Problem Solving for everyone*.
- Ries, E. (2011). *The lean startup: How today's entrepreneurs use continuous innovation to create radically successful businesses*. Crown Business.
- Matt Riddley (2020) How innovation works.
- Vanness Ratten (2019) Frugal Innovation.
- Routledge Studies (2020), Frugal Innovation: A Global research companion
- Yasser Bhatti, Radha Ramaswami Basu, David Barron and Mark J. Ventresca (2018). Frugal Innovation: Models, Means, Methods
- Mathew D. Duerden (2019), Designing Experience
- The Designing for Growth: Field book (2019)
- Idris Mootee. (2013) Design thinking for strategic innovation
- Thomas Lockwood and Edgar Papke. (2018) Innovation by design

TENTATIVE COURSE SCHEDULE

Week	Theme/Topic	Readings	Assignments/Deadlines
1	L: Introductory session S: Linked by one chain	Syllabus	
2	L: Innovation mindset and design thinking S: The Wallet Project	AUCA e-course	Individual assignments: Essay reflecting 2040 movie & The Wallet Project
3	L: Design thinking – stakeholders and emphasizing S: Practice: Teamwork • The challenge/"Big idea"/problem • Persona and stakeholders • Assumptions of the team	AUCA e-course	Teamwork
4	Guest lecture: Product design framework by Azhar Mambetova S: Teamwork – field work • The challenge/"Big idea"/problem • Person and stakeholders • Assumptions of the team • Interview questionnaire	AUCA e-course	Teamwork
5	L: Design thinking – Empathy and define phases S: Teamwork – presentations	AUCA e-course	Teamwork
6	L: Design thinking – Empathy and define phases S: Teamwork – presentations	AUCA e-course	Miroboard exercise

7	L: Design thinking – Empathy research preparation S: Teamwork – Presentations of questionnaires and ideation	AUCA e-course	Teamwork
8	L: Design thinking – Empathy maps, presentations, and define stages S: Ideation practice	Reviewing PPTs	Miroboard
9	L: Peer assessment Mid-term team presentations		Peer assessment, team presentations
10	L: Design thinking and prototyping S: Teamwork – presentations	AUCA e-course	Teamwork
11	L: Design thinking and pitching S: Teamwork – presentations	AUCA e-course	Pitch-deck preparation
12	L: From a problem to a lean startup S: Playing the future game	AUCA e-course	Participation
13	Guest Lecture: Art of Pitching: How to win the hearts of people S: Real Life Challenge	AUCA e-course	Teamwork
14	L: An overview of frugal innovation S: Case study	AUCA e-course	Individual assignment
15	“Innovation by Design” pitching contest		Peer assessment, team presentations