Even Semester 2023-24 | Department of Design | Indian Institute of Technology Delhi
Course Type: Core Subject | Bachelor of Design

DDL226 SYSTEM-ORIENTED DESIGN

Course Faculty: Prof. Saurabh Tewari, Department of Design | st[at]iitd.ac.in
Course TAs: Himani Kanojia, Rana Shinde
Visiting Faculty: Gunraagh Singh Talwar

Image: Systems thinking. (2013, November 22). The Hunger Project Global Advocacy. https://advocacy.thp.org/crosscutting-themes/systems-thinking/

LEARNING OUTCOME

- Understanding Design in Systems
- Systems mapping techniques to visualise and analyse interconnected elements in various Community systems
- Community Engagement

ASSESSMENT

- Continuous assessment based on class participation, engagement in discussions, and completion of hands-on exercises.
- Group projects assessing the application of systems thinking principles in designing community solutions.
- Individual reflections on personal growth and learning throughout the course.
- Final presentation evaluation, emphasising the holistic approach, adaptability, inclusivity, and sustainability of the System-design solutions.

DELIVERABLES

- 2 Project Presentation (Individual/ Group)
- Systems Mapping
- A Design Proposal (Group)

EVALUATION CRITERIA

- Site Visit Reports (10%)
- Concept (20%)
- Design Development (20%)
- Final Project Presentation (40%)
- Class Participation (10%)

SCHEDULE

Day	Date		Topic (Lecture/Seminar/Discussion)	Submission, Deadline and Marks
1	**11 March , Mon**	11 AM	**Lecture:** Introduction to Design, Systems and System-oriented Design Wicked Problem **Class Activity**	Class Activity (10%)
		2 PM	Lecture: Introduction to the Project Site and Initiatives **Class Activity**	
2	**12 March , Tue**	10 AM	**Site Visit** - Start for Jehangirpuri Metro Station (Yellow Line) from the IIT Campus Take E-Ricksaws to reach Bhalaswa Land Fill, North Delhi	
		11:30 AM	**Walking through** Landfill > Communities at Landfill > Bhalaswa Dairy > Bhalaswa Lake Observing Dimensions of Community Systems	
		2:30 PM	Lunch and Discussion Group Work: Reflections on Site	Individual Blogs on Medium.com (Marks 10 %)
3	**1 April, Mon**	AM	**Thematic Group Presentations:** Each group will get 30 minutes to present their case centred around their theme and get feedback from the faculty group.	Site Visit Presentations 1: A poster: A0 size portrait, 841 mm x 1189 mm, is mandatory with a supporting PPT, Movie or Documentary. **(Marks 20%)**
		PM	Reporting	
4	6 April, Sat		Mapping Systems, along with interconnected stakeholder participation within the community	Reaching a preliminary Design Idea

5	8 April. Mon	AM	Analyse and Design a system-oriented solution for a specific challenge	Project Presentation 2 (20%)
		PM	Presentations	
6	**16 April, Tue**	AM	**Iterative Design Proposals** **Talk to mentors**	
		PM	**Detail the proposal and discuss the presentation options**	
7	**19 April, Fri**	11 AM	**Finishing up the work**	
		3 PM	**Final System-Design Presentation and Reflection**	**Final Project (30%)**
		5 PM	**Exhibition**	

REFERENCES

Alexander, C., Ishikawa, S., & Silverstein, M. (1977). A Pattern Language: Towns, Buildings, Construction. Oxford University Press.

Meadows, D. H. (2008). Thinking in Systems: A Primer. Chelsea Green Publishing.

Simon, H. A. (1996). The Sciences of the Artificial (3rd ed.). The MIT Press.

Sevaldson, B. (2022). Designing Complexity: The Methodology and Practice of Systems Oriented Design. United States: Common Ground Research Networks.

Nelson, H. G., & Stolterman, E. (2012). The design way: intentional change in an unpredictable world: foundations and fundamentals of design competence. Englewood Cliffs: 1st ed. Educational Technology, 2nd ed. MIT press.