Department of Architecture

Smart Urban Growth Course book

Academic Year 2022-2023

By Smart Urban Growth Staff:

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Academic Year: 2022 -2023

Course book

1. Course name	**Smart Urban Growth**	
2. Lecturer in charge	**Dr. Kayfi Akram Mawlan**	
3. Department/ College	**Architecture / Engineering**	
4. Contact	**e-mail** kayfi.mawlan@su.edu.krd **Tel: Mobile: 0750 445 4475**	
5. Time (4hr. / week)	**Theoretical** **Practical**	**2** **2**
6. Office hours		
7. Units	**4**	

8. Course overview:

The courses cover recent smart urban growth theory and criticism, and trace its origins and its principles. The approach emphasizes the mutual influences between architectural and smart urban growth theory, and the plurality of values underlying current approaches. The course is widely illustrated with examples of both built and unbuilt projects of varying urban scales.
Concerned with the collective form of urban and suburban environments, ranging from grouping of buildings to the entire city. This involves analysis of urban patterns and outdoor spaces as well as cultural and socio-economic context in order to find out the smart urban growth approaches and clarifying the possible ways to create a smart development community.

9. Course Objective:

The primary objective of this course is to introduce students to prevailing ideas in the field of (Smart Urban Growth) and to the anticipated challenges that will likely affect the evolution of cities. By the end of the courses students will expect to gain the following:

1. Introducing new models and theories which involve the latest literatures in Smart Urban Growth sciences, new theories of urban development and sustainable form of urban design.
2. Direct experience in understanding, interpreting and applying theories of urban development.

3. A basic capacity to critique urban development for clarifying its smartness.
4. An understanding of Smart urban growth as a dynamic force integral to the evolution of cities.
5. An introduction to the language and terminology of smart urban growth.
6. A heightened awareness of the details of the built environment to foster lifelong design learning for creating a smart development.
7. To familiarize the students with the movement structure of a city and smart urban growth concepts, methods, procedures for sustainable transportation system.
8. To provide students with skills and knowledge how to treat with the new developments or revitalising old developments knowing the relation between smart growth and creating a sustainable development.
9. To examine the elements, concepts and methods of Smart Urban Growth, with emphasis given to the urban growth problems. Emphasis is placed on approaches of analysing urban development and methods of implementation.

10. Student's Obligation

- Regular attendance is required according to the university rules.
- The use of mobile phone during the class is prohibited.
- Only the students who are officially enrolled can attend the class, guests and children are not admitted.
- Daily participation and conducting assignments are required.

11.Forms of Teaching

- The courses include two parallel streams of activity; design action and design thinking.
- A semester deal with theoretical lectures, submitting report, presentations and open discussion.
- The studio work includes presentations and interactive discussions about readings in Smart Urban Growth.
- Each week all students make reports and/or presentations individually or by group work.

- Students are additionally required to make presentations demonstrating an understanding and critical engagement of course readings and will write critiques of other students' presentations. The course will be enriched with quizzes, class activities, discussions, and class work evaluation.

12. Curricular Context

- The syllabus is designed to apply the contemporary thinking in smart urban growth theory and methods urban developments.
- The class integrates the models of community-based learning and problem based learning to foster a dynamic learning environment.

13. DESIGN STUDIO

The smart urban growth class is where the synthesis of theoretical and practical aspects of smart urban growth analysis and design takes place. Using smart urban development projects of different scales and in different locations that deal with approaches, methods and techniques of smart urban growth. Through the exercises which will focus on smart developments at different scales and examining issues related to the smart urban growth the class activities will assist the students in the methodology of conducting and study smart urban development , Techniques of survey, analysis of information and presentation.

14. Assessment tools
*** Final exam 60%**
*** Total annual mark 40%**

Assessment Tool	Description	Weight (points)
Attendance	Encourage students to attend the class	
Quizzes	Students have quizzes	
Presentations	Students have presentations as groups and individuals	

Peer assessment	Students assess their peers' works and give feedback based on a rubric form	
Midterm Exam	Theoretical	
Report (Assignment)	Students have reports on different topics related to lecture subjects	
Class Activities	Students have different activities inside the classroom. Examples are: presentations, discussions and critiquing their colleagues works	
Final Exam	Theoretical	60
Total		

15. Reading list

- Dierwechter, Yonn (2017), Urban Sustainability through Smart Growth, Springer.
- Reeds, Jon (2011), SMART GROWTH From sprawl to sustainability, Green Books.
- The Lincoln Institute of Land Policy (2009), Smart Urban Growth for China.
- Jeff, A., Duany,(2011) The Smart Growth Manual.

16. Course Content:

14 Weeks: From the 4 Sept to 10th of Dec.
4 hours for theoretical and practical study /week

Week	Theoretical Lecture hours: Tuesday (1:30 pm -3:30 pm)	Practical Lecture hours: Tuesday(3:30 pm -5:30 pm)
1 6th Sept.2022	**- smart urban growth course book description**	- description of smart growth approaches and concepts
2 13th Sept. 2022	**Introduction. Smart urban growth** Definitions, approaches and principles	Discussing the meaning of smart growth and its different with urban sprawl
3 20th Sept. 2022	Smart urban Growth principles **: Walkable Neighbourhoods**	Walkability components and characteristics description

	Components, characteristics and requirements	
4 27th Sept. 2022	mixed use development approaches, types and contributions	presentation and discussion of walkability report / group work
5 4th Oct. 2022	**Compact Building design** Types, requirements and regulations	presentation and discussion of walkability report / group work
6 11th Oct. 2022	**Transportation choices** Modes, strategies, designs Sustainable transportation Transit oriented design	presentation and discussion of mixed use development report / individual work
7 18th Oct. 2022	**Mid-term Exam**	
8 25th Oct. 2022	**Housing Opportunities and Choices**	presentation and discussion of transportation system report / individual work
9 1st Nov. 2022	**Preserve Open Space, Farmland, and Environmental Areas**	presentation and discussion
10 8th Nov. 2022	**Direct development toward existing communities**	presentation and discussion
11 15th Nov. 2022	**Foster distinctive, attractive communities**	presentation and discussion
12 22nd Nov. 2022	**Encourage community & stakeholder collaboration**	presentation and discussion
13 29th Nov. 2022	**Make development decisions predictable & fair**	presentation and discussion
14 6th Dec. 2022	**Economic vitality**	presentation and discussion