ISTANBUL TECHNICAL UNIVERSITY \* FACULTY OF ARCHITECTURE

**DEPARTMENT OF ARCHITECTURE**

**CRN 13273 – MIM 331E**

**BUILDING PRODUCTION SYSTEMS**

**2017-2018 FALL SEMESTRE PROGRAM**

Credit/Course Hr : 2 (2,0)

Pre-requisite : None

Day/Hour : Friday 13:30 - 15:30

Class : 229, Taşkışla

Instructor : Alaattin KANOGLU, PhD, Professor

Teaching Assistants : NA

|  |  |  |
| --- | --- | --- |
| **W** | **Date** | **Content of the lesson** |

|  |  |  |
| --- | --- | --- |
| 01 | 15/09/17 | Introduction to building production systems; Syllabus, aim and content of the course, assignments |
| 02 | 22/09/17 | Basic concepts: Production, System, Development of production and production patterns, Individual production, Batch production, Mass production, Produce to stock, Custom-made production, |
| 03 | 29/09/17 | Industrial production and principals: Division of work, repetition, specialization, standardization, mechanization, scientific management, |
| 04 | 06/10/17 | Basic concepts: Building system, building production system, development of building production systems, patterns of building production systems: conventional, traditional, rationalized, industrialized building production systems |
| 05 | 13/10/17 | Phases of building production process, participants, their roles and relationships; Factors affecting the develoment of building production systems and their progress, |
| 06 | 20/10/17 | Construction technologies as one of the basic components of building production systems, Classification of construction technologies: Conventional, traditional, rationalized, industrialized building construction systems, |
| 07 | 27/10/17 | Rationalized construction technologies: Modular formwork systems, adjustable, moving, traveling, climbing, sliding, etc., and permanent formwork systems, problems, advantages, limitations and their effects on design and construction process, |
| 08 | 03/11/17 | Fall Break |

|  |  |  |
| --- | --- | --- |
| **W** | **Date** | **Content of the lesson** |
|  |  |  | |
| 09 | 10/11/17 | Rationalized construction technologies: Tunnel moulding system, problems, advantages, limitations and their effects on design and construction process, its place and importance in industrial building production system | |
| 10 | 17/11/17 | Industrialized construction technologies: Prefabricated panel systems, problems, advantages, limitations and their effects on design and construction process, its place and importance in industrial building production system, **Submission of Assignment-01 (Compulsory)** | |
| 11 | 24/11/17 | **Mid-term Exam** | |
| 12 | 01/12/17 | Industrialized construction technologies: Skeleton systems, problems, advantages, limitations and their effects on design and construction process, its place and importance in industrial building production system, **Submission of Assignment-02 (Optional)** | |
| 13 | 08/12/17 | Industrialized construction technologies: Cellular systems, problems, advantages, limitations and their effects on design and construction process, its place and importance in industrial building production system, | |
| 14 | 15/12/17 | Criteria and techniques of selecting appropriate construction technology | |
| 15 | 22/12/17 | Quiz and Evaluation of the course content | |