

**CANKAYA UNIVERSITY
FACULTY OF ARCHITECTURE
DEPARTMENT OF ARCHITECTURE
ARCH 233 CONSTRUCTION SYSTEMS I**

2016-2017 SPRING

Instructor Selçuk UYSAL

Res. Assist. Şafak SAKÇAK

ARCH 233, covers the aspects of building components by concentrating on the main elements of building construction systems. In this respect, architectural background of building construction elements such as walls, foundations and floor systems will be analyzed. Also, terminology regarding structural behavior of various building components, elements and materials and structural systems will be considered within the content of this course.

The aim of this course is to improve the students' ability to understand and solve construction related problems and design construction details in buildings. In this context, ARCH 233 reserves almost all of its time for drafting and sketching constructional details and graphics in class works.

"ARCH 233 CONSTRUCTION SYSTEM I is a non-exam course (Article 24-2 of University's Regulation); therefore grading will be made according to the work performed by student during the term."

Evaluation will be made based on classworks. Each student fails in case of not attending %20 of total course hours.

Evaluation : 100% CLASSWORKS

Attendance Requirement : 80%

Schedule:

Week 1	15.02.2017	Introduction to Building Technologies	
Week 2	22.02.2017	Structural Loads, Classification of Structural Systems	CW (1)
Week 3	01.03.2017	Building in Context of Topography and Site Development, Masonry Buildings	CW (2)
Week 4	08.03.2017	Masonry Systems, Walls	CW (3)
Week 5	15.03.2017	Masonry Systems, Foundations	CW (4)
Week 6	22.03.2017	Framing Systems, (Reinforced concrete) Floors	CW (5)
Week 7	29.03.2017	Framing Systems, (Reinforced Concrete) Floors	CW (6)
Week 8	05.04.2017	Framing Systems, (Pre-Tension and Post-Tension) Floors	
Week 9	12.04.2017	Framing Systems (timber), walls, floors and foundation	CW (7)
Week 10	19.04.2017	Framing Systems (timber), walls, floors and foundation,	CW (8)
Week 11	26.04.2017	Framing Systems (steel) walls, floors and foundation	
Week 12	03.05.2017	Framing Systems (steel) walls, floors and foundation	CW (9)
Week 13	10.05.2017	Long Span Frame Systems, Trusses, Space Frames	CW (10)
Week 14	17.05.2017	General Revision and Discussion, Final Works	

References:

1. Larden, O.P., Reciprocal Frame Architecture, Elsevier, 2008
2. Moussavi, F., Biçimin İşlevi, YEM Yayınları, İstanbul, 2011
3. Engel, H., Structure Systems 3rd ed., Hatje Cantz, 2007
4. Türkçü, H.Ç., Yapım 4.baskı, Birsen Yayınevi, 2010
5. Türkçü, H.Ç., Çağdas Taşıyıcı Sistemler, Birsen Yayınevi, 2009
6. Ching, F.D.K., Adams, C., Building Construction Illustrated, John Wiley&Sons Inc., Canada, 2001
7. Hunt, T., Tony Hunt's Structures Notebook 2nd ed., Architectural Press, 2003
8. Chilton, J., Space Grid Structures, Architectural Press, 2000
9. Watts, A., Modern Construction Envelopes (Modern Construction Series), Springer Vienna Architecture, 1st edition, 2010
10. Brookes AJ, Meijs M., Cladding of Buildings 4th Edition, Taylor and Francis, 2008
11. Hasol, D., Yapı Terimleri Sözlüğü, Yem Yayınları
12. Yapı Kataloğu, Yem Yayınları, 2013
13. Burberry, Peter, Mitchell's Building Series: Environment and Services, Addison Wesley Longman Ltd., Harlow, England, 1997, ISBN 0-582-24521-4
14. Ching, Francis D.K. Building Construction Illustrated , Van Nostrand Reinhold, New Adams, Cassandra York, 1991.
15. Ching, Francis D. K. A Visual Dictionary of Architecture , John Willey & Sons, Inc., 1997.
16. Ching, Francis D. K. Building Codes Illustrated, , John Willey & Sons, Inc., 2003.
17. Ching, Francis D. K. Çizimlerle Taşıyıcı Sistemler, Yapı Endüstri Merkezi Yayınları, İstanbul, 2010
18. Onouye. Barry S. Zuberbuhler, Douglas, Engel, Heino, Strüktür Sistemleri, Tasarım Yayın Grubu, İstanbul, 2004
19. Foster, Jack Stroud Mitchell's Building Series : Structure & Fabric Part 1, Pearson Education Limited Longman, Harlow, England, 2000, ISBN 0-582-40447-9
20. Foster, Jack Stroud & Mitchell's Building Series : Structure & Fabric part 2, Pearson Education Limited, Harlow, Harrington, Raymond Longman England, 2000, ISBN 0-582-40520-3
21. Hasol, Doğan Dictionary, Architecture + Building English-French-Turkish, Yapı Endüstri Merkezi Yayınları, İstanbul, 1993.

Journals: 1. Yapı <http://www.yapidergisi.com/>

2. Detail <http://www.detail-online.com/>