**EASTERN MEDITERRANEAN UNIVERSITY**

**COURSE OUTLINE**

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| **COURSE CODE** | MARC 541 | **COURSE LEVEL** |  Semester / year 6/3 |
| **COURSE TITLE** | **Integrated Systems in Architecture** |
| **COURSE TYPE** |  *Department Master program Course*  |
| **LECTURER** |  **Assoc. Prof. Dr. Halil Zafer Alibaba** |
| **CREDIT VALUE** | (2-2) 3 | **ECTS VALUE 3** |  |
| **PREREQUISITES** |  - |
| **COREQUISITES** |  None |
| **DURATION OF COURSE** |  3 HOURS |
| **WEB LINK** |  - |
| **CATALOGUE DESCRIPTION**

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| A course which emphasizes the Building design and construction process as a total system problem: overall structural planning and sequence of assembly, review of design for constructability; structural systems and their components;Structural thought and structural systems in architecture; selection of structural material type and system; arrangement of structural members, integration of building elements with the other sub-systems of building. |

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| **AIMS & OBJECTIVES**The course will study mainly the application and problems of advanced structural techniques. Problems associated with structural and building constructional detailings will be dealt. Special emphasis will be given to structural systems of architectural design, integration of HVAC into structure, thermal and acoustic issues, fast building techniques, curtain walls, steel structures and system detailing.  |
| **GENERAL LEARNING OUTCOMES (COMPETENCES)*****Procedures For Finalising The Course:***On successful completion of this course, all students will have developed knowledge and understanding of :-Structural system of building,-Use of steel in structure,-Use of Reinforced concrete in structure,-Use of precast concrete in structure,-Integration of building services into structure,-Structural glass as building skin and structure. |
| **GRADING CRITERIA**Analysis of specific structure : 30 %Report on given structure : 30 %Article submission : 40 % |
| **RELATIONSHIP WITH OTHER COURSES**It is very much related to all other courses because the skills obtained here will be used in them as well. |
| **LEARNING / TEACHING METHOD**There will be regular lectures.  |
| **ASSIGNMENTS** Homework will be given on related subject. |
| **METHOD OF ASSESSMENT**Analysis of specific structure : 30 %Report on given structure : 30 %Article submission : 40 % |
| **ATTENDANCE**Attendance at 80% level to the course hours.90% for completing and submission of assignments and homework at the right time.  |
| **TEXTBOOK/S**None |
| **INDICATIVE BASIC READING LIST**1. Foster, J.S., Mitchell’s Building Series-Structure and Fabric, Part 1, Fifth Edition., Longman, 1994.
2. Ching, F.D.K., Building Construction Illustrated-second edition., John Willey & Sons, Inc., Canada, 1991.
3. King H. and Osbourn D., Mitchell’s Building Series-Components, Anchor Press Ltd, London, 1979.
4. Foster, J.S and Harington, R., Mitchell’s Structure & Fabric Part 2, sixth edition., Longman, 2000.
5. Osbourn D. and Greeno R., Mitchell’s Building Series, Introduction to Building, Second edition., Longman, 1997.

 Binan, M., Ahşap Çatılar., Birinci Baskı., Birsen Yayınları,., Istanbul, 1990.1. Grundy, J.T., Construction Technology, volume 1., Edward Arnold., London, 1977.
2. Chudley, R., Connstruction Technology, volume 2., Longman., London, 1979.
 |
| **EXTENDED READING LIST**1. Vandenberg, M (edt.)., AJ Handbook of Building Enclosure., The architectural Press., London, 1984.
2. Ambrose, J., Building Construction and Design., Van Nostrand Reinhold., New York, 1992.
3. Rush, R. D., The Building Systems Integration Handbook., Butterworth, AIA, New York, 1986.

 Orton, A., The Way We Built Now-form, scale and technique., E&FN SPON-Imprint of Chapman&Hall.,  London, 1988. 4- Kicklighter, C.E., Modern Masonry-brick,blok,stone., The Goodheart-Willcox Company, Inc. Holland, 1980 |
| **SEMESTER OFFERRED**2019-2020 Fall Semester |
| **CONTENT & SCHEDULE****Lectures will be held on Monday (16:30 pm – 20:20 pm) in A10. The lecture topics with the semester are as in the following schedule.****TIME TABLE****WEEK DATE SUBJECTS****1 23.9.2019 Introduction to the course****2 30.9.2019 Classification of Systems in Architecture****3 7.10.2019 Reinforced concrete and Steel as structural system in architecture****4 14.10.2019 Steel as structural system in architecture****5 21.10.2019 Construction detailing of reinforced concrete and steel as structural systems****6 28.10.2019 Group presentations****7 4.11.2019 Group presentations****8 11-14.10.2019 Mid-Term Jury Week** **9 18-22. 11. 2019 Mid-Term Exam Week** **10 25.11.2019 Heat, water and acoustic within system for building structure****11 02.12.2019 Fire precautions within system for building structure****12 9.12.2019 Individual presentation.****13 16.12.2019 Individual presentation** **14 23.12.2019 Course revision****15 30.01.2019 Submission of final article****15 06-23.01.2020 Final Exams Jury- Exam Week** |
| **PLAGIARISM**This is intentionally failing to give credit to sources used in writing regardless of whether they are published or unpublished. Plagiarism (which also includes any kind of cheating in exams) is a disciplinary offence and will be dealt with accordingly. |