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| logo  College: Engineering Department: Civil Engineering  Course Title: Building Construction  Course No: : **0901401**  Credit Hours: 3  Semester:Second /2018-2019  **About The Course**  Course Title: Building Construction Class: Third year  Course No: **0901401**  Credit Hours: 3 Lecture Room: 411  Obligatory/ Optional: Obligatory  Text Book: Francis D. K. Ching, Building Construction Illustrated, 5th Ed 2014 .  **The Instructor**  Name: Dr. Essam Ali Mahmood Title:Assistant Professor  Office Tel:  Office No: Office Hours: **12:30-1:30**  E-maile: e.a.alnuaimy@gmail.com |
| C**ourse Description** |

Students in this course are introduced to the structural members of building and their function in creating equilibrium and stability of the structure. Universally and locally construction materials are covered in this course. This course will enable students comprehend more advance courses in following levels.

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| **Course Objectives** |

 Recognize the function of each Structural member

 Recognize how the system gains its equilibrium and stability.

 Recognize the construction materials in civil engineering and its properties.

 Develop a good feeling to the process of analyzing and designing of building when completing more advance related topics

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| **Learning Outcome** |

1. Recognize the function of each Structural member.

2. Recognize how the system gains its equilibrium and stability.

3. Develop a good feeling to the process of construction when completing more advance related topics.

4. Read and understand structural plans and details.

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| **Course Outline and Time schedule** |

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| Course Outline | Week |
| Introduction: construction building stages, types of building systems. | First week |
| Earth work: Excavation and filling process. | 2nd week |
| Foundations: types and functions. | 3rd week |
| Columns: types and functions. | 4th week |
| Beams: types and functions | 5th week |
| Slabs: Solid, hollow and waffle types ,transfer of load to supporting beams | 6th week |
| Walls: Structural Walls, Architecture Walls: types and functions. | 7th week |
| Lintels: dimensions and requirement by building code. | 8th week |
| Stairs: Types, dimensions and functions. | 9th week |
| Masonry Work : building stones. Local terminology and methods of construction | 10th week |
| Timber and form work : Concrete vertical and lateral Pressure on Formwork | 11th week |
| Joints in Structures: requirements and functions. | 12th week |
| Construction materials: concrete: preparing, mixing, handling, placing and compacting. | 13th week |
| Reading Structural Plans and details of different members. | 14th week |
| Reading Structural Plans and details of different members. | 15thweek |

**Presentation methods and techniques**

Methods of teaching varied according to the type of text, student and situation. The following techniques are usually used:

1. Lecturing with active participations.

Involve the civil engineering students in asking some questions related to the target topic of the course.

1. Problem solving.

Encourage the students to solve the given assignments and submit them at the definite time,

1. Cooperative learning.

By enhancing the students studying in groups .

1. Discussion.

To discuss the results and the answers of the target problems.

1. Learning by activities.

To encourage the students to some group activity.

1. Connecting students with different sources of information.
2. Connecting students with different sources of information

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| Sources of information and Instructional Aids |

Computer

power point

Wihte Board

Library sources

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| **Assessment Strategy and its tools** |

The assigned syllabus is assessed and evaluated

Through: feed back and the skills that are acquired by the students

The tools:

1. Formal (stage) evaluation

a) Class Participation 10%

b) Ist Exam 20%

c) 2nd Exam 20%

d) Group activity and Quizzes 10%

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| **Tool & Evaluation** |

Tests are permanent tools & assessment, in addition to the activity file which contains curricular and the co-cussiculor activities, research, report papers and the active participation of the student in the lecture.

The following table clarifies the organization of the assessment schedule:

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| **Grade** | **Date** | **Test** |
| 20% | 31/3/2019 | First Exam |
| 20% | 1/5/2019 | 2nd Exam |
| 20% | Students should be notified about their marks | Activities & Participation and Quizzez |
| 40% |  | Final Exam |

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| **Activities and Instructional Assignment** |

1. Practical assignments to achieve the syllabus objectives.
2. Quizes

**Regulations to maintain the teaching-Learning Process in the Lecture:**

1- Regular attendance.

2- Respect of commencement and ending of the lecture time.

3- Positive relationship between student and teacher.

4- Commitment to present assignments on time.

5- High commitment during the lecture to avoid any kind of disturbance and distortion.

6- High seuse of trust and sincerity when referring to any piece of information and to mention the source.

7- The student who absents himself should submit an accepted excuse.

8- University relevant regulations should be applied in case the studen,s behavior is not accepted.

9- Allowed Absence percentages is ( 15 %).

**References :**

**1** Fundamentals of Building Construction: Materials and Methods 6th Edition, Kindle Edition, 2013.

**Syllabus Classification**

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| **Objectives** | ***Learning outcome*** | ***Assessment tools*** |
|  Recognize the function of each Structural member | ABET 3a, 1c, 3e | Quize+Exams |
|  Student will be able to analyse force systems (2D and 3D) | ABET 1a, 3a, 3e | Quize+Exams |
|  Recognize the construction materials in civil engineering and its properties. | ABET 3a, 3e | Quize+Exams |
|  Develop a good feeling to the process of analyzing and designing of building when completing more advance related topics | ABET 3a, 2c, 1e | Quize+Exams |