



**Department of Architecture**  
**College of Engineering**  
**University of Cihan**

**Subject: Building Material**  
**Course Book – First Stage**

**Lecturer's name** BSc, PGdip, MSc, PhD

**Dr. Arez Mohammed Ismael**  
**Academic Year: 2015/2016**

# Course Book

<b>1. Course name</b>	<b>Building Material</b>
<b>2. Lecturer in charge</b>	<b>Dr. Arez Mohammed Ismael</b>
<b>3. Department/ College</b>	<b>Architecture/Engineering</b>
<b>4. Contact</b>	<b>e-mail: arezsml@yahoo.com Tel: 07700000477</b>
<b>5. Time (in hours) per week</b>	<b>Theory: 2 Practical: 0</b>
<b>6. Office hours</b>	<b>Sunday-Thursday ( 1:00pm to 2:00pm)</b>
<b>7. Course code</b>	
<b>8. Teacher's academic profile</b>	<b>Earned the bachelors degree in civil engineering, the master's degree in structure made by light weight concrete and PhD. in deformation and strength of damaged reinforced concrete T beams.</b>
<b>9. Keywords</b>	
<b>10. Course overview:</b>	
<p>This course provides an introductory overview of the various materials used in construction. After receiving an introduction into fundamental principles of structural, physical and long-term performance, students learn about material and product manufacturing techniques and how they relate to mechanical and non-mechanical properties of the various materials. Common construction methods are introduced and building details are explored.</p>	
<b>11. Course objective:</b>	
<p>Students have the opportunity to experience material capacity and behavior as well as construction methods in demonstrations and lab experiments. Furthermore, material applications and detailing in structural and non-structural building components are explored. Resulting from this course, students will gain a comparative knowledge of material properties and possible applications in construction and architecture.</p>	
<b>12. Student's obligation</b>	
<p><b>Students are Required to attend class, do their homeworks and do the quizzes, they have to study after each class and will have two take two exams for the semester</b></p>	

**13. Forms of teaching**

The materials are explained mainly by data show and the board is used

**14. Assessment scheme**

**30% homework**

**10% daysketch**

**5% presence**

**5% daily assessment**

**50% final exam**

**15. Student learning outcome:**

- Comparative knowledge of material properties (physical, structural, ...) for most common and advanced building materials,
- Understanding of typical and potential applications of these materials,
- Understanding of relationship between material properties and structural form,
- Ability to identify crucial problem areas in manufacture and applications of building materials,
- Understanding of importance of experimental verification of material properties.

**16. Course Reading List and References:**

-Commercial design and drafting

-The constructions of buildings. Berry

-Time sever standards for architectural design data-6th edition john hancock

-Building construction Al Suhairy, Atef

-Tasheed Al-Mabani, Dr. farouq abbas

-Building Architecture by Assist. Prof. Dr. Muhammad Hasan younis & Sherko Karim kader

**17. The Topics:****Lecturer's name**

Weeks No.	Topic	Dr. Arez Mohammed Ismael
1	Introduction	
2-4	Soil and soil components	
5-7	Material Drawing	
7-9	Raw Clay bricks- sun dry bricks	
8-11	Red bricks and paste mixture	

12-14	Red Brick Types	
15-16	Stone-types of stone masonry	
17-19	Concrete blocks	
20-22	Wood and timber	
23-26	Concrete	
27-30	Light weight Concrete	
31-32	Review	
<b>18. Practical Topics (If there is any)</b>		
Drawing		
<b>19. Examinations:</b> <b>Sketches, composition and content written</b>		
<b>20. Extra notes:</b>		
<b>21. Peer review</b>		