



Course File Summary (Spring 2014)

Course Information:

Course Title:	Execution Drawing 1		
Code:	AR455		
Hours:	Lectures: 2	Tutorials: 4	Credits: 3
Prerequisites:	AR 354		
Lecturer:	Dr. Sherif Ezzeldin		
Assistants:	Arch. Mohamed Emara	Arch. Ahmed Essam	
	Arch. Ibrahim El Harony	Arch. Mostafa El Shazly	
Room:	A301		

Grading:

Midterm # 1/ Assignments: (7 th week)	30 %
Midterm # 2/ Assignments: (12 th week)	20%
Class Performance / Attendance	10%
Final Exam	40%

Course Description:

The course introduces the student to the fundamentals of execution design drawings based upon the wide range vocabulary taught through the previous courses of building technology. Topics include the different basic execution instructions and the way of organizing them to form an easy readable complete execution documents. These documents are presented in the form of plans, sections, elevations, schedules, types and details of different elements of building. This experience is applied on a simple given project.

Text Books:

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- KEITH, Styles. Working Drawing Handbook, 3rd Ed. – Oxford: Butterworth – Heinemann, 1995

Reference Books:

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- BARRY, R. – **The Construction of Buildings** – (Vol. I-IV) Edition Granada Technical Books, London, 1980.
 - BASSETT, Colin - **Cladding of Buildings**, Longman Inc., 1st Edition, New York, 1983.
 - CHUDLEY, R. – **Construction Technology** – 2nd Edition, Essex, England, Longman, 1987.
 - COWAN, Henry J. - **Science and Building**, John Wiley & Sons, New York, 1981.
 - ENGEL, Heino - **Structure Systems**, Verlag Gerd Hatje, Ostfildern-Ruit, Germany, 1999.
 - GREENO, R. – **Principles of Construction** – 2nd Edition, Essex, England Longman, 1986.
 - MARTIN, Bruce - **Joints in Buildings**, John Wiley & Sons, New York, 1979.
 - MCKAY, W.B. – **Building Construction** – (Vol. I) Last edition, Longman, London.
 - MCROVEN, CH. – **Building with Stone** – Lippincott & Crowell Publishers, New York, 1980.
 - NASHD, F. – **Time-Saver Details for Exterior Wall Design** – Mc Graw-Hill, New York, 1996.
 - ROSEN, H. J. – **Architectural Materials for Construction** - Mc Graw-Hill, New York, 1996.
 - SEELY, I.H. – **Building Technology** – Mac Millan, London, 1993.
 - Dennis J. Hall and Charles Rick Green – **The Architect's Guide to the U.S. National CAD Standard** – Wiley, 2006.
 - Books available in the AAST Library.

Course Aim:

The overall aim of this course is to develop student's ability to translate the design ideas into a complete set of instructions for building execution.

Course Objectives:

Students learn how to prepare a complete set of execution drawings for simple buildings including different execution instructions .This is achieved through application on a given simple project

Course Outline:

Week No.1:

Introduction to the course, Execution Design and Execution Drawings, the U.S. National Cad Standards, and Building Construction Technique.
Introduction to the Term project and list of deliverables

Week No.2:

Introduction to **the different structural systems**
Architectural and Structural Design Coordination
Design Development of the project

Week No.3:

Execution Drawings' Fundamentals for **the different Floor Plans**
Execution Drawing of the Main Floor Plan

Week No. 4:

Execution Drawings of the different and looking-up Floor Plans

Week No.5:

Execution Design Fundamentals for **the Cross-Sections**
Execution Design of the main Cross-Section of the Project

Week No.6:

Execution Drawing's Fundamentals for **the Cross-Sections**
Execution Drawing of the main Cross-Section of the Project

Week No.7:

7TH WEEK EXAM.

Week No.8:

Execution Drawings' Fundamentals for **the Façades/Elevations**
Execution Drawing of the Main Elevation of the Project

Week No.9:

Execution Drawings' Fundamentals **for the Layouts**
Execution Drawing of the Project's Layout

Week No.10:

Execution Drawings' Fundamentals **for the Staircases** (Plans and Section)
Execution Drawing of the Main Staircase of the Project

Week No.11:

Execution Drawings' Fundamentals **for the Miscellaneous Details**
Execution Drawing of the Main Miscellaneous Details of the Project

Week No.12:

12TH WEEK EXAM.

Week No. 13:

Project Coordination/Review (Plans, Section, Facades, Layout, Staircase, Details)

Week No.14:

Final Submission of the Project
File Presentation, Materials and Products

Week No.15:

Summary of the Execution Design module (General Revision)

Best Wishes,

Architectural Department Staff

MPC 3/2 – App. 7.2