Course Specifications (2011 - 2012)

A. Basic Information



B. Professional Information

1. Overall aims of course

By the end of the course the students will be able to:

Know the basics and techniques of civil engineering drawing, properly draw the connections of steel structural elements and the irrigation structures, translate the design to drawings that are understood by practicing personnel.

2. Intended Learning outcomes of Course (ILOs)

a. Knowledge and Understanding:

a.1) Recognize concepts and theories of mathematics and sciences, appropriate to the discipline.

a.4) Understand principles of design including elements design, process and/or a system related to specific disciplines.

a.13) Apply Engineering principles in the fields of reinforced concrete and metallic structures analysis and design, geo-techniques,

b. Intellectual Skills

b.1) Select appropriate mathematical and computer-based methods for modeling and analyzing problems.

b.16) Define, plan, conduct and report management techniques.

c. Professional and Practical Skills

c.1) Apply knowledge of mathematics, science, information technology, design, business context and engineering practice to solve c.3) Create and/or re-design a process, component or system, and carry out specialized engineering designs. c.5) Use computational facilities and techniques, measuring instruments, workshops and laboratories equipment to design

d. General and Transferable Skills

d.2) Work in stressful environment and within constraints.

3. Contents

Week #	Topics	No. of Hours	ILOS	Teaching / learning methods and	Assessment method
			a1	Tutorial	Assignments
1	Connections of steel structural	3	b16		
I	elements: column base	5			
			a1,a4	Tutorial	Assignments
2	Connections of steel structural	2	b1		

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۷	elements: beam-to-beam	0	c3		
			a1,a4,a13	Tutorial	Assignments
3	Connections of steel structural	3			
Ŭ	elements: beam-to-beam	Ŭ	c1,c3		
			a1,a4,a13	Tutorial	Assignments
4	Connections of steel structural	3			
	elements: beam-to-column	·	c1,c3		
			a1,a4	Tutorial	Assignments
5	Connections of steel structural	3	b16		
	elements: beam-to-column				
			a1,a4,a13	lutorial	Assignments
6	Connections of steel structural elements: built-up steel section	3	D1,D16		
			C1,C3		
			21.24	Tutorial	Accianmonto
	Connections of steel structural		b1 b16		Assignments
7	elements: built-up steel section	3	51,510		
	clements, built up steel section				
			a1.a4.a13		Mid-term exam
			b1.b16		
8	Midterm Exam	3	c1.c3.c5		
			d2		
			a1 a4 a13	Tutorial	Assignments
			b1 b16		
9	Canal systems	3			
			a1,a4.a13	Tutorial	Assignments
			b1,b16		
10	Drainage systems	3	- ,		
1				1	

			a1,a4,a13	Tutorial	Assignments
11	Intersection of canals by	0	b1,b16		
	syphon	3			
			a1,a4,a13	Tutorial	Assignments
12	Intersection of canal with road	3	b1,b16		
12	by culvert		c1,c3,c5		
			a1,a4	Tutorial	Assignments
13	Intersection of canals by bridge system.	3	b1		
10					
			a13	Tutorial	Assignments
14	Application by computer	3	c5		
	AutoCAD program	Ũ			
			a1,a4,a13		Final exam
15	Final Exam	3	b1,b16		
		0	c1,c3,c5		
			d2		
	Total	45			

4- Teaching and Learning Methods: Check using the symbol $\sqrt{}$

Lectures
Practical training / laboratory
Seminar / workshop
Class activity
Case study
Project work
 Tutorial
 Computer based work
Other :

5- Student Assessment Methods: $\sqrt{}$

Check using the symbol

<u> </u>
 Assignments
Quiz
 Mid-term exam
Oral exam
 Final exam
Design Project
Report
Experimental write up
 Informally assessment
Other
-

to	assess
to	assess

a1,a4,a13	b1,b16	c1,c3,c5	
a1,a4,a13	b1,b16	c1,c3,c5	d2
a1,a4,a13	b1,b16	c1,c3,c5	d2

6. Assessment schedule

Assessment 1 Assignments on weeks	1,2,3,4,5,6,7,9,10,11,12,13,14
Assessment 2 Quizzes on weeks	
Assessment 3 Mid-term exam on week	8
Assessment 4 Oral Exam on week	
Assessment 5 Final exam on week	15
Assessment 6 Design Project on weeks	
Assessment 7 Report on weeks	
Assessment 8 Experimental write up on weeks	
Assessment 9 Informally assessment	

7. Weighting of Assessments

Assignments	20%
Quiz	
Mid-term exam	20%
Oral exam	
Final exam	60%
Design Project	
Report	
Experimental write up	
Informally assessment	
Other	
Total	100%

8. List of References

8.1 Course Notes

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Course notes prepared by instructor

8.2 Essential Books (Text Books)

8.3 Recommended Books

Elalfy, Y.M., "Civil Drawing for Students and Engineers", El Hakeem Pub., 1st ed,
Steel and Irrigation Drawing, Cairo University Press.
AutoCAD manuals.

8.4 Periodicals Web sites, etc

9. Facilities Required for Teaching and learning

Presentation board, computer and data show

Course Coordinator:

Course instructor:

Head of department:

Dr. Mohamed Salah Soliman	
Dr. Emad Emam Hassan Darwish	Dr. Moumed Mamoud Ibrahem
Prof. Ahmed AdbulFattah Mahmoud Ahmed	

Signature:

Date:

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20	1	2012