## Course Specifications (2011 - 2012)

## A. Basic Information

Course Title		Sanitary E	Ingineering		Course Code:	CVS 422	
Lecture:	3	Tutorial:	2 Practical 0 T			Total	5
Programme (s) on which this course is given:			B.Sc. Civil Engineering (Structures)				
Major or minor element of program:			Major			-	
Department offering the program:			Civil Engineering				
Department offering the course:		Civil Engineering					
Academic Year	of program:	Fourth		Level of progra	am:	Second Semester	1
Date of specifications approval:				16/3/2010			

## **B.** Professional Information

## 1. Overall aims of course

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

Know how to treate drinking water and waste water

### a. Knowledge and Understanding:

a.5) Recognize methodologies of solving engineering problems, data collection interpretation.

a.7) Name business and management principles relevant to engineering.

a.8) State current engineering technologies as related to disciplines.

## b. Intellectual Skills

b.2) Select appropriate solutions for engineering problems based on analytical thinking.

b.4) Combine, exchange, and assess different ideas, views, and knowledge from a range of sources.
b.7) Solve engineering problems, often on the basis of limited and possibly contradicting information.

c. Professional and Practical Skills

c.3) Create and/or re-design a process, component or system, and carry out specialized engineering designs.

d. General and Transferable Skills

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

d.3) Communicate effectively.

#### 3. Contents

Week #	Topics	No. of Hours	ILOS	Teaching / learning methods and	Assessment method
1		3	a5,a7,a8	Lectures	Assignments
	water sources&water consumption		b2,b4,b7		
			c3		
			d2,d3		

		3	a5,a7,a8	Lectures	Assignments
2			b2,b4,b7		
	purification works diagram		c3		
			d2,d3		
			a5,a7,a8	Lectures	Assignments
2	design of collection works	2	b2,b4,b7		
3	design of collection works	3	c3		
			d2,d3		
			a5,a7,a8	Lectures	Assignments
4	decign of olym works	2	b2,b4,b7		
4		3	c3		
			d2,d3		
			a5,a7,a8	Lectures	Assignments
5	coagulation	2	b2,b4,b7		
5	coagulation	5	c3		
			d2,d3		
	flocculation	3	a5,a7,a8	Lectures	Assignments
6			b2,b4,b7		
0			c3		
			d2,d3		
		3	a5,a7,a8	Lectures	Report
7	sedimentation		b2,b4,b7		
,			c3		
			d2,d3		
0	Midterm Exam				
0					
0			a5,a7,a8	Lectures	Assignments
	filtration	3	b2,b4,b7		
3			c3		
			d2,d3		
			a5,a7,a8	Lectures	Assignments

10	disinfaction	2	b2,b4,b7		
10	aisimection	5	c3		
			d2,d3		
			a5,a7,a8	Lectures	Assignments
11	ning not works	2	b2,b4,b7		
		5	c3		
			d2,d3		
			a5,a7,a8	Lectures	Assignments
12	design of pines	2	b2,b4,b7		
12	design of pipes	5	c3		
	hydroulogy of wells		d2,d3		
			a5,a7,a8	Lectures	Assignments
13		3	b2,b4,b7		
15			c3		
	waste water treatment	3	d2,d3		
			a5,a7,a8	Lectures	Report
11			b2,b4,b7		
14			c3		
			d2,d3		
			a5,a7,a8	Lectures	
15	Final Exam		b2,b4,b7		
			c3		
			d2,d3		
	Total				

# **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

	Assignments	to assess	a5,a7,a8	b2,b4,b7	c3	d2,d3
	Quiz	to assess				
$\checkmark$	Mid-term exam	to assess	a5,a7,a8	b2,b4,b7	c3	d2,d3
	Oral exam	to assess				
$\checkmark$	Final exam	to assess	a5,a7,a8	b2,b4,b7	c3	d2,d3
	Design Project	to assess				
	Report	to assess	a5,a7,a8	b2,b4,b7	c3	d2,d3
	Experimental write up	to assess				
	Informally assessment	to assess				
	Other	to assess				

## 6. Assessment schedule

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

8
15

## 7. Weighting of Assessments

Assignments	10%
Quiz	
Mid-term exam	20%
Oral exam	
Final exam	60%
Design Project	
Report	10%
Experimental write up	
Informally assessment	
Other	

Total
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100%

## 8. List of References

8.1 Course Notes

notes in saintary engineering

8.2 Essential Books (Text Books)

8.3 Recommended Books

8.4 Periodicals Web sites, etc

9. Facilities Required for Teaching and learning

Course Coordinator: Course instructor: Head of department:

Associate Prof. Badr AlDin Ezzat Emam Higazi	
Dr. Rehab Mohamed Mahmoud AlHefny	
Prof. Ahmed AdbulFattah Mahmoud Ahmed	

Signature:

Date:

