Course specifications of Chemistry
(B 142) 2009 / 2010

University Banha **Benha Faculty of engineering**

Program on which the course is given: All programs

Major or Minor elements of program.

Department offering the program: All departments

Department offering the course: Department of Basic Science

Academic Year / Level: First year, secong semesters

Date of specification approval: / / 2009

A – Basic Information

Title: chemistry Code: B142

Credit Hours: N. A Lecture: 2

Tutorial: 1 Lab: 1

B – Professional Information

1. Overall aims of the course

By the end of this course the student will be able to:

Drive, Know and use the main theories dealing with the structure of:

Electrochemistry, Water treatment, Thermodynamic, cement, Chemical Explosive, lubricants and detergents , polymers, organic chemistry, chemical kinetics and chemical equilibria.

2. Intended Learning Outcomes of course (ILOs)

a- Knowledge and understanding

Understand basic chemical theories and laws.

b – Intellectual skills

Solve problems in the field of basic physical and Applied Engineering chemistry

Suggest alternative solutions for chemical problems.

c- Professional and practical skills

Achieve high degree of experimental preparation of some polymers

d- General and transferable skills

Practice to make scientific chemical report

3- Contents

(II)

contents	No of weeks	No of hours	Lecture(hr)	Tutorial	Experimental
Electrochemistry	٢	8	٤	٤	
Water treatment	١	٤	٢		٢
Thermodynamic	٢	٨	٤	٤	
cement	١	٤	٢		٢
Chemical Explosive	١	٤	٢		٢
lubricants and detergents	٢	٨	٤		٤
polymer.	٢	٨	٤		٢٤
Chemical kinetics	٢	٨	٤	٤	
Chemical equilibria	٢	٨	٤	٤	

4. teaching and learning methods

(a) Lectures
(b) Class tutorials
(c) Experimental

5. Student's assessment methods

(a) Midterm examination
(b) Assignments and quizzes
(c) Final examination

5.1 assessment schedule

Weekly

5.2 Weighting of assessments

Experimental	٢٠%
Midterm examination	20%
Final examination	60%

6- List of references

6.1 course notes

Chemistry staff members," Chemistry for Engineering Students"

6.2 Essential books (text books)

Chemistry for engineering and applied science -

7- Facilities required for teaching and Learning

* Powerful data projectors.

Course coordinator: Prof. Dr. M.N.Ismail

Head of department: Prof. Dr. Hassan Nasr A. Ismail

Date: / / 2009