

Course specifications

Programme(s) on which the course is given: B.Sc. chemistry
Major or minor element of programmes: Major
Department offering the programme: chemistry
Department offering the course: chemistry
Academic year / Level: 3rd level
Date of specification approval: 2013

A- Basic Information

Title: kinetic chemistry

Code: CH 312

Credit Hours: 2 **Lecture:** 1.5
Tutorial: 1 **Practical:** 2 **Total:** 2
Teaching staff: Dr / Naema Salem

B- Professional Information

1 – Overall aims of course

- Understand the basic concepts of chemical kinetics
- Study the various types of reactions and their applications in different fields of chemistry.

2 – Intended learning outcomes of course (ILOs)

a-Knowledge and understanding:

After completing the course the graduate should be able to

- a1-Take an account on energy changes in reactions.
- a2- Define collision theory of reaction rate.
- a3- Know the factors affecting the reaction rate.

b-Intellectual skills

- b1- Create the graduates capability to understanding.
- b2- Analyze many of natural phenomena that take place and
- b3- Explain many of natural phenomena from kinetic point of view.

c-Professional and practical skills

- c1- Solve many problems for understanding the applications of different laws

c2- Use lab. experiments of first, second order and third order reactions.

d-General and transferable skills

d1- Improve of the graduates skills especially in thinking,

d2- Have mutual discussion and oral presentation.

Any formative only assessments

6- List of references

**1-Physical Chemistry, Third Edition, Robert G. Mortimer
Professor Emeritus Rhodes College Memphis, Tennessee.**

**2- Kinetic Processes, Kenneth A. Jackson Copyright, 2004
WILEY-VCH Verlag GmbH & Co. KGaA, Weinheim**

**3- Steven S. Zumdahl, Susan A. Zumdahl and Donald J.
DeCoste (2007). Instructor's Resource Guide Chemistry.
Seventh Edition, Boston, New York.**

**7- Facilities required for teaching and learning
over head projectors**

Course coordinator: Dr. / Naema Salem

Head of Department: Prof. Dr. Adel A. Nassar

Date: / /