Course Specifications

University of Menoufia **Faculty of science.**

Course Specifications
Programme(s) on which the course is given
Major or Minor element of programmes
Department offering the programme
Department offering the course
Prerequisite: CH3711
Academic year / Fourth 2013

A- Basic Information

Title: Practical ph. Anal. and Inorg. Chemistry (4)
Code: CH4710
Credit Hours: 4 h Lecture: -
Tutorial: 4 Practicals: 2h Total: 8h

B- Professional Information

1 – Overall Aims of Course

- Understand the basics laws of density, viscosity, adsorption, and kinetics.
- Perform some measurements and to verify basic laws of physical chemistry

2 – Intended Learning Outcomes of Course (ILOs)

a-Knowledge and Understanding:

After completing the course the graduate should be able to

a1- Know the basic laws of density, viscosity, adsorption, and kinetics
a2- Study the basics of melting point, boiling point, polarity and miscibility

b-Intellectual Skills

b1- build the graduates' capability for experimental work
b2- Improve the capability of thinking of graduates in the field of practical physical chemistry.

c-Professional and Practical Skills

c1- setup of different experiments of physical chemistry

c2- measure some physical constants

c3- verdict some laws of physical chemistry

d-General and Transferable Skills

d1- use the different measurement instruments

d2- enhance the representation of scientific data

d3- reduce the experimental error

3- Contents

Topic	No. of hours	Lecture	Tutorial/ Practical
Determination of density	3		6
Determination of viscosity	4		8
Determination of boiling point	4		8
Determination of melting point	3		6
Calculation of adsorption area on harcoal	4		8
Calculation of first order rate constant	4		8
Calculation of distribution coefficient	4		8
Calculation of critical temperature of miscibility	4		8
Determination of polarity	4		8

4– Teaching and Learning Methods

4.1-lectures

4.2 practical work

4.3-disscutions

5- Graduate Assessment Methods

5.1 sheet exams … ……. to assess the theoretical knowledge

5.2-practical exams ……. to assess practical skills.

5.3 discussions ……. to assess graduate scientific thinking

5.4 research projects …. to assess the overall outcome

Assessment Schedule

Assessment 1 short exam Week (every 2 weeks).

Assessment 2 mid term Week mid term

Assessment 3 final term Week final term

Weighting of Assessments

Mid-Term Examination 20 %

Final-term Examination 60 %

Semester Work 20 %

Total 100%

Any formative only assessments

6- List of References

6.1- Course Notes

General chemistry experiments , chemistry department,2007.

6.2- Essential Books (Text Books)

Advanced physical chemistry

6.3- Recommended Books

6.4- Periodicals, Web Sites, … etc

7- Facilities Required for Teaching and Learning

Experimental lab…

Course Coordinator:

Head of Department: Prof. Dr. Adel Nassar

Date: / /