

University: Benha

Faculty of Science

Course specifications:

Programme (s) on which the course is given: Biology

Major or minor element of programmes: Major

Department of offering the programme: Biology

Department offering the course: Chemistry

Academic year /Level: 2nd year / 2nd term

Date of specification approval: 2008

A – Basic information

Title: Principle of inorganic chemistry

Code: 220 CH

Credit Hours:

Lecture: 2 hrs /w

Tutorial:

Practical: -

Total: 2 hrs /w

B – Professional Information

1- Overall aims of course: At the end of this course the student able to:

At end of this course student able to:

- a- Understand Chemistry of the main groups of periodic table
- b- Study of important elements in groups and applied in industry
- c- Understand Water hardness and pollution

2-

3- Intended learning outcomes of course (ILOS):

a- Knowledge and understanding:

At the end of this course student able to:

- a1- understand how to classify elements in periodic table
- a2- understand the physical and chemical prosperities
- a3- understand how to keep clean environments

b- Intellectual skills:

At the end of this course student able to:

- b1- How to write electronic structures of all groups elements
- b2--How to write the chemical reaction of elements and
- b3- Used the product in industry , get ride of pollution

c- Professional and practical skill:

At the end of this course student able to:

- c1- Know the of atomic structure of groups elements
- c2- Know the basis of water treatment
- c3- Know the industrial application of certain elements e.g. Insecticides , Petroleum additive and polymers productions

d- General and transferable skills:

- d1- Use the computer
- d2- Communicate with topics and internet
- d3- Community linked thinking

4- Contents:

Topic	No. of hours	Lecture	Tutorial /practical
Introduction	2	2	-
S- block element	8	8	-
P- block element	10	10	-
Hydrogen and water treatment	4	4	-
Total	24	24	-

5- Teaching and Learning methods:

- 4.1- lectures
- 4.2- discussion
- 4.3- Overhead projector

6- Student assessment methods:

- 5.1 Discussions to assess applying and evaluating the information
- 5.2 Practical to assess the acquired profession skills
- 5.3 Mid term exam to assess understanding **intellectual** skills
- 5.4 End of term exam to assess knowledge with understanding

2-Assessment Schedule

Assessment 1: Discussions	Week 1-12
Assessment 2: Essay	Week 3
Assessment 3: Mid term	Week 7
Assessment 4: Final exam	Week 14

Weighting of assessments

Mid term examination	5%
Final term examination	80%
Oral examination	5%
Practical examination	10%
Semester work	%
Other types of assessment	%
Total	100%

Any formative only assessments

7- List of references:

- 6.1 **course notes:** Notes in inorganic chemistry
- 6.2 **Essential books (text books):** Advanced inorganic chemistry (Cotton & Wilkenson)
- 6.3 **Recommended books:** Text books in inorganic chemistry
- 6.4 **Periodicals, Web sites:** Google.com

8- Facilities required for teaching and learning:

Slit overhead projector.

Course coordinator: Prof. Dr.\ Moustafa Mahmoud Moustafa
Head of Department: Prof. Dr.\ Hassan A. Desoki
Date: / /