Module Description

University of AL-Kafeel / College..... Academic Year (2020-2021)

Stage:	Third stage
Specialization:	Pharmacy
Name of the Course in Arabic	الكيمياء الصيدلانية اللاعضوية
Name of the Course in English	Inorganic Pharmaceutical Chemistry
Goals:	The Inorganic Pharmaceutical Chemistry course aims to provide a review of the principles of inorganic chemistry applied to medicinal and pharmaceutical chemistry. This includes understanding atomic and molecular structures, explaining atomic structures and the relationship with bonding forces and complex formation and their applications to understand the work of some complex drugs such as anticancer drugs and .antitoxins with heavy metals
Description	Inorganic pharmaceutical chemistry describes inorganic products used as pharmaceuticals, for example preparations applied to the skin, dental preparations, radiopharmaceuticals, and radiological diagnostic preparations.
Number of Theoretical lectures	Theory 2
Number of Practical lectures	Laboratory 2
Credits	3
Name of Instructor in Arabic	أ.م.د. زيد مهدي جابر العبيدي (نظري) ,جواد كاظم جواد (عملي)
Name of Instructor in English	Assist. Prof. Dr. Zaid Mahdi Jaber Al-Obaidi Jawad kadhum jawad alshamis
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Curriculum / Theoretical:

Week	Syllabus
1	Atomic and molecular structure/ complexation
2	Atomic and molecular structure/ complexation continue…
3	Essential and Trace Ions
4	Lec4: Non-Essential Ions
5	Gastrointestinal agents: Antacids
6	Protectives, Adsorbents, and Topical Agents
7	Topical Agents… continue
8	Dental agents.
9	Radiation and Radiopharmaceuticals
10	Radiopharmaceutical preparations, Radiopaque and Contrast Media

Curriculum / Practical:

Week	Syllabus
1	Preparation and standardization of 1N HCl (known sample).
2	Preparation and standardization of 1N HCl (quiz and unknown).
3	Preparation and standardization of 1N 1NaOH (known sample).
4	Preparation and standardization of 1N NaOH (quiz and unknown).
5	Assay of NaOH solution (known sample).
6	Assay of NaOH solution (unknown sample).
7	Assay of sodium benzoate (known sample).
8	Assay of sodium benzoate (quiz and unknown).
9	Assay of Borax (explanation of basic concepts).
10	Assay of Borax (quiz and unknown).
11	Assay of citric acid (known sample).
12	Assay of citric acid (unknown sample).
13	Assay of magnesium hydroxide (known sample).
14	Assay of magnesium hydroxide (quiz and unknown).
15	Assay of ammoniated mercury (unknown sample).

References :

Main References :

[1] Inorganic Medicinal and Pharmaceutical Chemistry by Block, Roche Soine and Wilson, latest edition

[2] Wilson and Gisvold; Textbook of Organic medicinal and Pharmaceutical chemistry; Delgado JN, Remers WA, (eds); latest edition .

Secondary References:

1. *http://www.dentalcare.com/en-US/dental-education/continuing-education/ce410/ce410.aspx?ModuleName=coursecontent&PartID=2&SectionID=1*
2. *http://nsdl.niscair.res.in/jspui/bitstream/123456789/782/1/revised%20dental%20products.pdf*
3. *http://pocketdentistry.com/4-treatment/*