



جامعة الكوفة
KUFA UNIVERSITY



وصف البرنامج الأكاديمي
Academic Program Specification

Master of sciences in Chemistry	1. اسم البرنامج Programme Title
MSc	2. رمز البرنامج Programme Code
University of kufa	3. المؤسسة التعليمية Teaching Institution
Faculty of sciences	4. الكلية Faculty
Department of chemistry	5. القسم Department
Semesters / Annual	6. النظام الدراسي Attendance Type
Courses (1 st) - Courses (2 nd) -Research	7. الفصل الدراسي Academic Session
33	8. عدد وحدات البرنامج Credits
Master of sciences in Chemistry	9. الشهادة الممنوحة Final Award
Ministry of higher education and scientific research\Iraq	10. الجهة المعتمدة للبرنامج Programme Accredited
Prof. Dr. Ezzat H. Zimam	11. اسم منسق البرنامج Programme Coordinator
08.11.2018	12. تاريخ اعداد البرنامج Date of Programme

This program aims to:

1. introduce you to the main branches of chemistry;
2. Provide you with a solid foundation for a successful career as a chemist. .
3. Enable you to develop a knowledge and laboratory skills through undertaking laboratory work using a range of chemical techniques.
4. provide you with some of the basic skills which may necessary for further study and employment, including word-processing, data analysis and use of the internet.
5. develop your ability to seek out, organize, critically analyse and communicate technical information and concepts through writing a dissertation and giving seminars;
6. help you to develop a deeper insight into the theoretical framework underlying the principles of Chemistry ;
7. enable you to prepare and present seminars on advanced chemistry topics;
- 8- Graduate scientific cadres able to manage the industrial projects.
- 9- Graduate scientific cadres able to manage the universities and institutes scientifically and administratively.

طرائق التعلم والتعليم المستخدمة في تطوير المعرفة والفهم Learning and Teaching Methods

A range of learning and teaching approaches are used including

- 1- Lectures
- 2- Tutorials
- 3- Guided reading of books
- 4- hold conferences and workshops to participate in scientific discussion
- 5- Interactive teaching sessions
- 6- Practical classes
- 7- Extended projects
- 8- Practical and projects reports

طرائق تقييم المعرفة والفهم المكتسبة Assessment Methods

- 1- Rapid test orally and writing suddenness.
- 2- Monthly regular exams previously prepared.
- 3- Final examination (theoretically and practically).
- 4- The students carry out a research project.

3-14 المهارات المهنية والعملية Practical Skills

Having successfully completed this programme you will be able to:

- 1- Plan and carry out experimental investigations, using standard experimental equipment and apparatus of chemical processes.
- 2- Analyze, interpret and evaluate experimental data, make a quantitative evaluation of the errors in the experimental measurements.
- 3- Apply computer software to analyse experimental data and to write scientific reports.
- 4- using the literature and material to write a report about a certain experiment data

Learning and Teaching Methods طرائق التعلم والتعليم المستخدمة في تطوير المهارات العملية

- 1- Writing a report on an experiment with explaining the result.
- 2- Using the computer to show mechanism of chemical reactions.
- 3- Training lecture in video and photographic for display later in order to avoid mistakes.

Learning and Teaching Methods طرائق التعلم والتعليم المستخدمة في تطوير المهارات العامة

- 1- Written and oral communication forms part of all laboratory and project work.
- 2- Encourage students to participate in a group work, seminars and conferences.

Assessment Methods طرائق تقييم المهارات العامة والمنقولة

- 1-Oral examination, practical repor and presentation
- 2-Participation in scientific conferences and publication in scientific journals.

بنية البرنامج

Programme Structure**Year 1** (الفصل الاول) -السنة الدراسية الاولى

عدد الوحدات المعتمدة	عدد الساعات نظري	رمز المقرر Code No.	اسم المقرر
2	3	MSc111AO	Adv. Organic Chemistry
2	3	MSc111AA	Adv. Analytical Chemistry
2	3	MSc111AP	Adv. Physical Chemistry
2	3	MSc111AB	Adv. Biochemistry
2	3	MSc111AI	Adv. Inorganic Chemistry
1	2	MSc111E	English Language
1	1	MSc111S	Seminar
12	عدد الوحدات الكلية		
Year 1 (الفصل الثاني) -السنة الدراسية الاولى			

عدد الوحدات المعتمدة	عدد الساعات نظري	رمز المقرر Code No.	اسم المقرر
2	3	MSc222S1	Select 1
2	3	MSc222S2	Select 2
2	3	MSc222S3	Select 3
2	3	MSc222S4	Select 4
2	3	MSc222S5	Select 5
-	-	MSc222E	English Language
1	1	MSc222S	Seminar
11	عدد الوحدات الكلية		

عدد الوحدات الكلية (10)	3 - السنة الدراسية الثانية Year 2 (Master Thesis)
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13. دعم مصادر التعلم Support for Student Learning
<p>The department support of student learning by:-</p> <ol style="list-style-type: none"> 1. All students have a senior tutor who will provide support including pastoral and welfare. 2. The year directors and head of department are available to give help and advice. 3. Students work in pairs on the projects, which are supervised by a member of academic staff. 4. Most courses provide printed lectures notes, problems sheets and practical exercises and also can be obtained from the departmental office and website. 5. Members of staff are happy to give help and advice. 6. The department runs teaching laboratories and each laboratory has a coordinator who reports to senior academics. 7. A member of quality assurance in university will visit the student during the course to ensure satisfactory program. 8. There is library provision and computer room within the department and at college level. 9. In the final year, students will have a local project supervisor, with whom they will meet regularly and he will be responsible for their activities

University Support for Student Learning:

1. library services.
2. computer workstations.
3. Careers Advisory Service.
4. Chaplaincy.
5. disability coordinator.

طرائق تقييم وتحسين معايير طرائق التعلم والتعليم المستخدمة

Methods for Evaluating and Improving the standard of Learning and Teaching

The quality of the programme :

- 1- Students provide a feedback at the end of unit, which are used to review and improve the unit.
- 2- The department management board and academic staff with students, which meets regularly, and provides a forum where any aspect of the teaching can be discussed.
- 3- Student membership of the department and faculty management board.
- 4- The discussions of the students with personal tutors and the Directors of Studies for each year.

Assuring and enhancing the quality of the programme:

- 1- The programme is periodically reviewed by external examiners.
- 2- Annual evaluation of each unit by the coordinator.
- 3- Periodic programme reviews by academic staff.
- 4- External check up by the Quality Assurance of college.
- 5- The department external advisory panel, which includes representatives from students and industry and advisers on this course.
- 6- All academic staff regularly undergo observation of their teaching by colleagues.