جامعة المجمعة
Majmaah University

Course Specifications

Institution:	Collage of Education -Zulfi
Academic Department :	Chemistry
Programme :	Chemistry
Course :	Chemistry of organic reactions mechanisms
Course Coordinator :	Nawal Mahgoub Suleman
Programme Coordinator :	Dr.Gehan Alaemary
Course Specification Approved Date :	15/ 12 / 1435 H☐

This form compatible with NCAAA 2013 Edition

A. Course Identification and General Information

1 - Course title : Chemistry of organic reactions mechanisms	Course Code: CH (M 422
2. Credit hours : 2	
3 - Program(s) in which the course is offered: Chemistry	
4 – Course Language : Arabic	
5 - Name of faculty member responsible for the course: Nawal Mahgoub	
6 - Level/year at which this course is offered : 8th level	
7 - Pre-requisites for this course (if any) : • -	
8 - Co-requisites for this course (if any) : -.	
9 - Location if not on main campus : (-)	

10 - Mode of Instruction (mark all that apply)

A - Traditional classroom	☐	What percentage?	90%
B - Blended (traditional and online)	☐	What percentage?	..... %
D - e-learning	☐	What percentage?	10%
E - Correspondence	☐	What percentage?	..... %
F - Other	☐	What percentage?	..... %

Comments :

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B Objectives

What is the main purpose for this course?

To know the student : the basis of stereochemistry. Establishing rules and methods of various organic reactions mechanisms , and the statement of relationship of stereochemistry with reaction mechanisms. Training of some applications in the field of organic reactions Mechanisms.

Briefly describe any plans for developing and improving the course that are being implemented : **The use of different teaching methods, such as: Blended education and E-learning**

C. Course Description

1. Topics to be Covered

List of Topics	No. of Weeks	Contact Hours
Nucleophilic substitution reactions on saturated carbon atom.	2	4
Nucleophilic and electrophonic substitution reactions on aromatic compounds .	3	6
Elimination reactions and the factors that affect them	2	4
Addition reactions on the double bond (carbon-carbon).	3	6
Addition reactions on the conjugated double bond	2	4
Addition reactions on carbonyl group	2	4
Rearrangement reactions	1	2

2. Course components (total contact hours and credits per semester):

	Lecture	Tutorial	Laboratory	Practical	Other:	Total
Contact Hours	2	-	-	-	-	2
Credit	2	-	-	-	-	2

3. Additional private study/learning hours expected for students per week.

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4. Course Learning Outcomes in NQF Domains of Learning and Alignment with Assessment Methods and Teaching Strategy

	NQF Learning Domains And Course Learning Outcomes	Course Teaching Strategies	Course Assessment Methods
1.0	**Knowledge**		
1.1	**Know the mechanisms of nucleophilic substitution reactions on saturated carbon atom. Know the mechanisms of electrophilic substitution reactions on aromatic compounds.**	lecture	Written and oral tests.
1.2	**Can write mechanisms of addition reactions on the double bond (carbon-carbon).**	lecture	**Written and oral tests.**
١.٣	**Can listed the different rearrangement reactions**	lecture	Written and oral tests.
١.٤	**Describe addition reactions on the conjugated double bond**	lecture	Written and oral tests.
١.٥	**Defines nucleophilic substitution reactions on aromatic compounds**	lecture	Written and oral tests.
١.٦	**Remember the mechanisms of addition reactions on carbonyl group**	lecture	Written and oral tests.
2.0	**Cognitive Skills**		
2.1	**Can rewrite mechanisms of electrophilic substitution reactions on aromatic compounds**	lecture	Written and oral tests.
2.2	**Can apply mechanisms of addition reactions on carbonyl group**	lecture	Written and oral tests.
٢.٣	**The distinction between electrophilic and nucleophilic substitution reactions on aromatic compounds**	lecture	Written and oral tests.
٢.٤	**applications of different mechanisms under study**	lecture	Written and oral tests.
٢.٥	-	-	-
٢.٦	-	-	-
3.0	**Interpersonal Skills & Responsibility**		
3.1	**Solving some of the exercises in groups**	lecture	Written and oral tests.
3.2	**Doing a search as a group**	lecture	Written and oral tests.
٣.٣	**write the equations of the mechanism reactions under study alone**	lecture	Written and oral tests.
٣.٤	-	-	-

	NQF Learning Domains And Course Learning Outcomes	Course Teaching Strategies	Course Assessment Methods
٣.٥	-	-	-
٣.٦	-	-	-
4.0	**Communication, Information Technology, Numerical**		
4.1	**Deal with the computer through the use of the World Wide Web.**	Discussion	Written and oral tests.
4.2	**Research in the form of PowerPoint**	Discussion	Written and oral tests.
٤.٣	**Homework through the D2l program**	E-learning	Written and oral tests.
٤.٤	-	-	-
٤.٥	-	-	-
٤.٦	-	-	-
5.0	**Psychomotor**		
5.1	-	-	-
5.2	-	-	-
٥.٣	-	-	-
٥.٤	-	-	-
٥.٥	-	-	-
٥.٦	-	-	-

5. Schedule of Assessment Tasks for Students During the Semester:

	Assessment task	Week Due	Proportion of Total Assessment
1	**Oral and written exercises**	weakly	15%
2	**Search in the form of groups presented with PowerPoint**	14	5%
3	**Mid-semester test**	8	20%
4	**Final theoretical test**	18	60%
5	-	-	-
6	-	-	-
7	-	-	-

8	-	-	-

D. Student Academic Counseling and Support

Two hours per week found in Table professor lecturing and unannounced in Billboard

E. Learning Resources

1. List Required Textbooks :

- Entrance to the mechanics of organic reactions, "D.alsidik Abdullah Obaid and Dr. Ali Mohammed cobra, University Publications, October 6, Libya, 2010
- Mechanics of organic reactions," Salim bin Schoeman and others, Deanship of Library Affairs, King Saud University, Riyadh 1407/1987
- "Mechanisms of organic chemistry" ; H. Maskil published by Oxford University Pp,?Walton Street OX 26 DP. 1996 .

2. List Essential References Materials :

- "Mechanics of organic reactions," Salim bin Schoeman and others, Deanship of Library Affairs, King Saud University, Riyadh 1407/1987
- Entrance to the mechanics of organic reactions, "D.alsidik Abdullah Obaid and Dr. Ali Mohammed cobra, University Publications, October6,Libya,2010

3. List Recommended Textbooks and Reference Material :

- Journal of Saudi Chemical society

4. List Electronic Materials :

- www.googel.com.
- http://en.wikipedia.org/wiki/Organic_chemistry
- www.Spriger .com
- http://www.organic-chemistry.org
- http://www.chemhelper.com/mechanisms.html

5. Other learning material :

- PowerPoint
- Java
- Photoshop

F. Facilities Required

1. Accommodation

- Building No. 1 Hall 68 is equipped with 25 chair and display screen

projector
2. Computing resources • Laptop faculty member.
3. Other resources • -

G Course Evaluation and Improvement Processes

1 Strategies for Obtaining Student Feedback on Effectiveness of Teaching: • Form calendar course • Discuss with the students to learn about their views, teaching methods used
2 Other Strategies for Evaluation of Teaching by the Program/Department Instructor : • Benefit from the expertise of the members of the section and discussion in order to improve job performance • assessment questionnaire Staff Member of the decision workshops to develop evaluation methods.
3 Processes for Improvement of Teaching : • Training courses for the development of teaching and learning methods • Refer to the Web sites to learn new teaching methods
4. Processes for Verifying Standards of Student Achievement • Checking and correcting sample of student work by independent teachers. • Exchange with another college to correct sample test
5 Describe the planning arrangements for periodically reviewing course effectiveness and planning for improvement : • Writing a report on the course • plan for improvement and development . • contact similar departments within the Kingdom • contact sections of similar universities outside the Kingdom

Course Specification Approved
Department Official Meeting No (…..) Date … / …. / ….. *H*

Course's Coordinator☐ [Department Head ☐

Name : Nawal Mahgoub	***Name :*** .....
Signature : 	***Signature :*** .....
Date : 15 / 12 / 1435 *H*	***Date :*** …./ … / …… *H*