



**ATTACHMENT 5.**

**Kingdom of Saudi Arabia**  
**The National Commission for Academic Accreditation &  
Assessment**

**T6. Course Specifications**  
**(CS)**

**Research Seminar**

**(402651-3)**





## Course Specifications

Institution: <b>Umm Al-Qura University</b>	Date of Report: <b>2017</b>
College/Department : <b>Applied Science / Department of Chemistry</b>	

### A. Course Identification and General Information

1. Course title and code: <b>Research Seminar /402651-3</b>			
2. Credit hours: <b>3 hrs</b>			
3. Program(s) in which the course is offered.: <b>M. Sc. in Chemistry</b> (If general elective available in many programs indicate this rather than list programs)			
4. Name of faculty member responsible for the course: <b>Dr. Ahmed Fawzy</b>			
5. Level/year at which this course is offered: <b>3<sup>rd</sup> / 2<sup>nd</sup></b>			
6. Pre-requisites for this course (if any): <b>not applicable</b>			
7. Co-requisites for this course (if any): <b>not applicable</b>			
8. Location if not on main campus: <b>El-Abedyah, El-Azizya, and El-Zaher</b>			
9. Mode of Instruction (mark all that apply)			
a. traditional classroom	<input checked="" type="checkbox"/>	What percentage?	50%
b. blended (traditional and online)	<input checked="" type="checkbox"/>	What percentage?	<b>10%</b>
c. e-learning	<input checked="" type="checkbox"/>	What percentage?	20%
d. correspondence	<input type="checkbox"/>	What percentage?	<input type="text"/>
f. other	<input checked="" type="checkbox"/>	What percentage?	20%
Comments:			



## B Objectives

1. Summary of the main learning outcomes for students enrolled in the course.

By the end of this course the students will be able to:

1. Carry out a theoretical or experimental search in one of the chemistry branches (inorganic, physical, organic or analytical) under supervision of one of the department staff members.
2. Present a full report about his seminar topic.
3. Give a seminar with discussion about his obtained results.

2. Briefly describe any plans for developing and improving the course that are being implemented. (e.g. increased use of IT or web based reference material, changes in content as a result of new research in the field)

- Increased use of IT or web based reference material.
- Encourage students to carry out research reports in modern topics of if modern topics in chemistry using the library, data base services, and/or websites.

## C. Course Description (Note: General description in the form used in Bulletin or handbook)

Course Description:

### 1. Topics to be Covered

List of Topics	No. of Weeks	Contact hours
Student will carry out a theoretical or experimental search in one of the chemistry branches (inorganic, physical, organic or analytical) under supervision of one of the department staff members. After finishing his search, he should present a full report and give a seminar with discussion about his obtained results.	<b>13</b>	<b>39</b>

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



	Lecture	Tutorial	Laboratory	Practical	Other:	Total
Contact Hours	39	-	-	-	-	39
Credit	3	-	-	-	-	3

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

None

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

On the table below are the five NQF Learning Domains, numbered in the left column.

**First**, insert the suitable and measurable course learning outcomes required in the appropriate learning domains (see suggestions below the table). **Second**, insert supporting teaching strategies that fit and align with the assessment methods and intended learning outcomes. **Third**, insert appropriate assessment methods that accurately measure and evaluate the learning outcome. Each course learning outcomes, assessment method, and teaching strategy ought to reasonably fit and flow together as an integrated learning and teaching process. (Courses are not required to include learning outcomes from each domain.)

Code #	NQF Learning Domains And Course Learning Outcomes	Course Teaching Strategies	Course Assessment Methods
1.0	<b>Knowledge</b>		
1.1	Describe the selected techniques applied in chemistry field.	<ul style="list-style-type: none"> <li>• Use of the internet to carry out some reports.</li> <li>• Scientific discussion.</li> <li>• Use the library to work duties and a small search.</li> </ul>	<ul style="list-style-type: none"> <li>• Long and short essays.</li> <li>• Final presentation and exam.</li> </ul>
1.2	Remember the role of modern applications of chemistry in our life.		
1.3	Write on some selected topics in different branches of chemistry.		
1.4	Determine the mechanism of some selected new chemical reactions.		
1.5	Clarify some selected subjects in chemistry.		
2.0	<b>Cognitive Skills</b>		



2.1	Report the properties and structure of some new chemical compounds.	<ul style="list-style-type: none"><li>• Web-based study.</li><li>• Scientific discussion</li><li>• Library visits.</li></ul>	<ul style="list-style-type: none"><li>• Measuring the response to the assignments.</li><li>• Final presentation and exam.</li></ul>
2.2	Estimate the properties of newly prepared compounds.		
2.3	Apply the modern analytical and spectral techniques in chemistry.		
2.4	Predict the distinctive features of new investigated compounds.		
2.5	Design new compounds for special applications.		
<b>3.0</b>	<b>Interpersonal Skills &amp; Responsibility</b>		
3.1	Develop the student's ability in self-reliance and responsibility.	<ul style="list-style-type: none"><li>• Periodic individual duties to develop the skill of taking responsibility and self-reliance.</li><li>• Dividing students into groups to carry out collective scientific reports.</li></ul>	<ul style="list-style-type: none"><li>• Assessment of individual tasks and duties to determine the student's ability to self-reliance.</li><li>• Evaluate the results of collective works and duties as well as knowing the contribution of each individual through dialogue and discussion.</li></ul>
3.2	Choose the suitable method to solve problems in selected topics in inorganic chemistry.		
3.3	Operate in team work and accept his college's opinions.		
<b>4.0</b>	<b>Communication, Information Technology, Numerical</b>		
4.1	Communicate effectively in oral and written forms.	<ul style="list-style-type: none"><li>• The use of computers</li></ul>	<ul style="list-style-type: none"><li>• Web-based</li></ul>



4.2	Use basic mathematical and statistical techniques to perform data analysis.	in the training room of the department.	student performance systems.
4.3	Use computers and the international information network (the Internet) to perform calculations and to identify recent research relevant to decision sources.	<ul style="list-style-type: none"> <li>• Using the internet for collecting data.</li> <li>• Visiting research centers.</li> </ul>	<ul style="list-style-type: none"> <li>• Individual and group presentations.</li> <li>• Evaluation of the duties associated with the proper use of numerical and communication skills.</li> </ul>
5.0	<b>Psychomotor</b>		
5.1	Not applicable.		
5.2			

5. Schedule of Assessment Tasks for Students During the Semester			
	Assessment task (e.g. essay, test, group project, examination, speech, oral presentation, etc.)	Week Due	Proportion of Total Assessment
1	Assignments and activities.	weekly	40%
2	Final presentation and exam.	16	60%

#### D. Student Academic Counseling and Support

1. Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice. (include amount of time teaching staff are expected to be available each week) <ul style="list-style-type: none"> <li>• We have faculty members to provide counselling and academic advice.</li> </ul>
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- 2 hours per week as office hours are available for discussion with the students.

#### E. Learning Resources

##### 1. List Required Textbooks

- The list of required text book will be changed according to the selected topics.

##### 2. List Essential References Materials (Journals, Reports, etc.)

- The essential references materials will be changed according to the selected topics.

##### 3. List Recommended Textbooks and Reference Material (Journals, Reports, etc)

- The recommended textbooks and reference material will be changed according to the selected topics.

##### 4. List Electronic Materials, Web Sites, Facebook, Twitter, etc.

- <http://www.chemweb.com>
- <http://www.sciencedirect.com>
- <http://www.rsc.org>

##### 5. Other learning material such as computer-based programs/CD, professional standards or regulations and software.: **Non.**

#### F. Facilities Required

Indicate requirements for the course including size of classrooms and laboratories (i.e. number of seats in classrooms and laboratories, extent of computer access etc.)

##### 1. Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)

- \* Appropriate teaching class including white board and data show.

##### 2. Computing resources (AV, data show, Smart Board, software, etc.)

- \* Computer halls access for the students will be helpful in doing their tasks during the course.

##### 3. Other resources (specify, e.g. if specific laboratory equipment is required, list requirements or attach list) : \* No other requirements.

#### G Course Evaluation and Improvement Processes

##### 1 Strategies for Obtaining Student Feedback on Effectiveness of Teaching



<ul style="list-style-type: none"><li>• Student discussion with the instructor allow for continuous feed back.</li><li>• Student evaluation questionnaires.</li></ul>
2 Other Strategies for Evaluation of Teaching by the Program/Department Instructor <ul style="list-style-type: none"><li>• Discussions within the group of faculty teaching the course.</li><li>• Peer consultation on teaching strategies and its effectiveness.</li></ul>
3 Processes for Improvement of Teaching <ul style="list-style-type: none"><li>• Workshops given by experts on new teaching and learning methodologies will be attended.</li><li>• Improving of the teaching strategies by monitoring the evaluation of the students progress through the semester.</li></ul>
4. Processes for Verifying Standards of Student Achievement (e.g. check marking by an independent member teaching staff of a sample of student work, periodic exchange and remarking of tests or a sample of assignments with staff at another institution): Non.
5 Describe the planning arrangements for periodically reviewing course effectiveness and planning for improvement. <ul style="list-style-type: none"><li>• Consult other staff of the course.</li><li>• Workshops for teachers.</li></ul>

Name of Instructor: **Dr. Ahmed Fawzy**

Signature: 

Date Report Completed: **2017**

Name of Field Experience Teaching Staff \_\_\_\_\_

Program Coordinator: \_\_\_\_\_

Signature: \_\_\_\_\_

Date Received: \_\_\_\_\_

