

T6. Course Specification (CS)

Institution : Najran University	Date: 6/2/2017
College/Department : Sciences & Arts / Chemistry	

A. Course Identification and General Information:

1. Course title and code : Organic Diagnosis (practical) 447Chem-2			
2. Credit hours : 2 hours per week (0+2)(Theoretical + practical) (0 + 2 Practical)			
3. Program(s) in which the course is offered. Chemistry (If general elective available in many programs indicate this rather than list programs)			
4. Name of faculty member responsible for the course : Prof. Abou-El-Hamd H. Mohamed			
5. Level/year at which this course is offered : 7th level / 4th Year			
6. Pre-requisites for this course (if any) : Spectra of Organic Compounds (345 Chem-2)			
7. Co-requisites for this course (if any) : N.A.			
8. Location if not on main campus : Science & Arts College			
9. Mode of Instruction (mark all that apply) (
a. Traditional classroom	<input checked="" type="checkbox"/>	What percentage?	100%
b. Blended (traditional and online)	<input type="checkbox"/>	What percentage ?	<input type="text"/>
c. e-learning	<input type="checkbox"/>	What percentage?	<input type="text"/>
d. Correspondence	<input type="checkbox"/>	What percentage?	<input type="text"/>
f. Other	<input type="checkbox"/>	What percentage?	<input type="text"/>
Comments :			

B. Objectives

1. What is the main purpose for this course?
<ul style="list-style-type: none"> - Studying the different methods of detecting unknown organic compounds and how to write a detailed report on the steps to identify unknown compounds, Training students on the methods of chemical descriptive analysis of organic compounds by studying the identification of the groups to which they belong, and then conducting the most important reactions to these compounds and the preparation of solid derivatives
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)
<p>1 - Encouraging students to work research reports in the field of chemistry.</p> <p>2 - Provide laboratories with chemicals and equipment necessary for the effective training of female students.</p>

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

<p>Course Description :</p> <p>This course description provides a brief summary of the main characteristics of the course and the expected learning outcomes of the students. Demonstrating whether he had made the most of the available learning opportunities. It must be linked to a description the program.</p>
--

1. Topics to be Covered :		
List of Topics	No. of Weeks	Contact Hours
Identify the laboratory in general	1	4
Measurement of physical constants (Melting and Boiling points) of some known and unknown organic compounds.	1	4
Solubility and solubilization tests planned in the various solutions	1	4
Analysis of elements (sulfur, nitrogen and oxygen)	2	8

Identify functional groups and identification tables for different compounds	3	12
Preparation of derivatives of some organic materials and measurement of their melting points.	2	8
Training on identification of unknown organic materials	3	12
Separation of different organic mixtures	2	8

1.Course components (total contact hours and credits per semester):						
	Lecture	Tutorial	Laboratory or studio	Practical	Other:	Total
Contact Hours	-----	-----	60	-----	----	60
Credit	-----	-----	2	-----	----	2

3-Additional private study/learning hours expected for students per week: 3 Hours
--

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 # مستل	NQF Learning Domains And Course Learning Outcomes	Course Teaching Strategies	Course Assessment Methods
1.0	Knowledge At the end of the course the student be able to:		
1.1	Know the safety and security rules in the lab; the functional groups of organic compounds; ways to prepare different types of derivatives for organic compounds and finally how to write a report on a solid unknown organic compound.	Laboratory training - brainstorming	Quarterly and final tests
2.0	Cognitive Skills At the end of the course the student be able to:		
2.1	Identify the unknown organic compounds using different methods (Function groups, melting points and derivatives preparation).	Discussion Problem Solving	Quarterly tests and final
3.0	Interpersonal Skills & Responsibility At the end of the course the student be able to:		
3.1	- Cooperate with colleagues through teamwork	Self-learning, Learning in groups Cooperative learning	participation, Observation
3.2	- Depend on herself to identify the organic compound	Self-learning, Learning in groups Cooperative learning	participation, Observation
4.0	Communication, Information Technology, Numerical At the end of the course the student be able to:		
4.1	- Communicate with students and faculty members effectively	Self-learning Learning in groups	Duties, participation and observation
4.2	- Use computer programs in chemistry	Self-learning Learning in groups	Duties, participation and observation
4.3	- Present laboratory results.	Self-learning Learning in groups	Duties, participation and observation
5.0	Psychomotor At the end of the course the student be able to:		
5.1	Deal safely with chemicals and scientifically with Instruments.	Training lab.	<ul style="list-style-type: none"> • Observation • performance test

5. Schedule of Assessment Tasks for Students During the Semester

	Assessment task (e.g. essay, test, Quizzes, group project, examination, speech, oral presentation, etc.)	Week Due	Proportion of Total Assessment
1	The first quarterly practical test + Theoretical Sheet	6	20%
2	The second quarterly practical test + Theoretical Sheet	10	20%
3	Research activities, laboratory book and Duties	During the term	10%

4	The final practical test + Theoretical Sheet	16	40% + 10%
---	--	----	-----------

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)

-Attendance of faculty members to provide advice and advice.

- Direct supervision by the faculty member on the students during the practical lessons.

- Academic guidance for students.

E. Learning Resources

1. List Required Textbooks :

Organic Chemistry Process: Formation: Hassan Bakr Amin and Prof. Hassan Alhazmi, 1990, King Saud University.

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

1- The systematic Identification of organic compounds , 6th ed. By : Shriner, Fuson, Curtin & Morrill 2005.

2 -Hand book of tables for organic compound Identification Rappaport

3- Organic Chemistry Practical Dr. / Mohamed Faraj Al-Falah - Dr. / Abdul Salam Ali Almioub - Dr. / Helmy Hassan Al Hussein - National Book House – Benghazi

4- Shriner, Aldrich, Spectroscopy Organic Comp.

3. List Electronic Materials Web Sites, Facebook, Twitter, etc.

Digital Library through the University of Najran University

4. Other learning material such as computer-based programs/CD, professional standards or regulations and software.

- Presentations.

- Educational videos.

- Blackboard.

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.)
<p>1. Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)</p> <p>- Providing a laboratory equipped with all chemicals and devices to teach the practical part</p> <p>-The capacity of the laboratory is not more than 30 students -</p> <p>- Providing security and safety rules in the laboratory -</p>
<p>2. Computing resources (AV, data show, Smart Board, software, etc.)</p> <p>The provision of computer equipment in the lecture halls connected to the Internet and display screens</p>
<p>3. Other resources (specify, e.g. if specific laboratory equipment is required, list requirements or attach list).</p> <p>- Provide chemicals for laboratories.</p> <p>- Providing equipment and equipment for laboratories.</p> <p>-Provide glass for laboratory training</p>

G. Course Evaluation and Improvement Processes:

<p>1. Strategies for Obtaining Student Feedback on Effectiveness of Teaching</p> <p>Evaluation of the results of students assessment of students for the performance of members of the teaching and teaching process through questionnaires</p>
<p>2. Other Strategies for Evaluation of Teaching by the Instructor or by the department.</p> <p>- Observation and assistance by colleagues</p> <p>- Self-assessment of the faculty member</p> <p>- Course file</p>
<p>3. Processes for Improvement of Teaching:</p> <p>- Provide periodic maintenance of equipment and laboratories</p> <p>- Provide workshops to improve the educational process</p> <p>- Training courses for faculty members</p> <p>- Provide all the requirements of the educational process to create a suitable atmosphere for study.</p>
<p>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)</p> <p>-Correcting the test papers by the course instructor.</p>

<p>-Review the test papers and grades by the faculty members of the review committees</p> <p>-Assessment of duties and report-</p>	-
<p>5. Describe the planning arrangements for periodically reviewing course effectiveness and planning for improvement :</p> <p>- Periodic review of the decision by faculty members to find a suitable solution to the problems of repetition</p> <p>- Development and improvement of scientific material in line with developments and scientific research</p> <p>- Completion of the report of the course by the end of each semester based on the feedback provided by the students questionnaires (Evaluation of students for the course after the completion of tests on the university site)</p>	

Name of instructor: Prof. Abou-El-Hamd H. Mohamed_____

Signature : hassan_____ Date Report Completed _____

Name of field experience teaching staff: _____

Program coordinator: Dr. El-Sayed R. Hassan_____

Signature : __sayed rashad_____ Date received: _____