

T6. Course Specification (CS) توصيف المقرر

Institution المؤسسة	Najran University	Date التاريخ
College/Department القسم / الكلية	College of Nursing, Department of Supportive courses	

A. Course Identification and General Information: التعريف بالمقرر الدراسي ومعلومات عامة عنه:

1. Course title and code اسم ورمز المقرر الدراسي Chemistry for nursing 141-CHT--2
2. Credit hours عدد الساعات المعتمدة 1 + 2
3. Program(s) in which the course is offered. Nursing Program, Bachelor degree (If general elective available in many programs indicate this rather than list programs) البرنامج أو البرامج التي يقدم ضمنها المقرر الدراسي. (إذا كان المقرر يقدم كمقرر اختياري عام في عدة برامج، بين ذلك بدلاً من إعداد قائمة بهذه البرامج)
4. Name of faculty member responsible for the course اسم عضو هيئة التدريس المسؤول عن المقرر الدراسي TUBIA ALMAS MOHAMMED
5. Level/year at which this course is offered المستوى أو السنة التي يقدم فيها المقرر الدراسي 2 ND LEVEL NURSING 1437-1438
6. Pre-requisites for this course (if any) المتطلبات السابقة لهذا المقرر (إن وجدت) BIOCHEMISTRY AND PHARMACOLOGY
7. Co-requisites for this course (if any) المتطلبات المصاحبة لهذا المقرر (إن وجدت) BIOCHEMISTRY
8. Location if not on main campus موقع تقديم المقرر إن لم يكن داخل المقر الرئيس للجامعة NAJRAN UNIVERSITY CAMPUS
9. Mode of Instruction (mark all that apply) نمط التدريس (ضع علامة على كل ما ينطبق)
a. Traditional classroom الفصل الدراسي التقليدي <input checked="" type="checkbox"/> What percentage النسبة المئوية ؟ <input type="checkbox"/>
b. Blended (traditional and online) التعليم المدمج (التقليدي + عبر الإنترنت) <input type="checkbox"/> What percentage النسبة المئوية ؟ <input type="checkbox"/>
c. e-learning التعليم الإلكتروني <input type="checkbox"/> What percentage النسبة المئوية ؟ <input type="checkbox"/>
d. Correspondence التعليم بالمراسلة (عن بعد) <input type="checkbox"/> What percentage النسبة المئوية ؟ <input type="checkbox"/>
f. Other طرق أخرى <input type="checkbox"/> What percentage النسبة المئوية ؟ <input type="checkbox"/>

التعليق Comments:

B. Objectives الأهداف

1. What is the main purpose for this course ما هو الهدف الأساسي من هذا المقرر

1-Recognize the principles of chemistry and integration of other applied sciences and therefore its impact on nursing.

2-understand biochemistry, pharmaceutical science, nutrition well as the chemistry is the base of these subject and the base should be strong for further studies.

3-Identified the atomic theory of matter, learn different type of chemical bonding and reaction. Understand some chemical equation and application as they are the backbone of the biochemistry and pharmacology.

4-Aquire basic skills in safe handling of equipment and reagents and can understand the basic principles in chemical laboratory techniques as the deal with medicine in the hospital

5-chemistry is important to nursing student because its typically the nurses job to administer medication and the nurses are the final barrier between the patient and the medication error

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)

صف بإيجاز أية خطط يتم تنفيذها لتطوير وتحسين المقرر الدراسي . (مثل الاستخدام المتزايد لتقنية المعلومات أو مراجع الإنترنت، والتغييرات في المحتوى كنتيجة للأبحاث الجديدة في مجال الدراسة).

- Continuous updating of course content through available references, web, and latest researches.
- Results of students' course evaluations will be taken into account and necessary modifications are made to improve the course.
- Preparing a course portfolio to provide information about the course and its development and improvements
- Encourage students to communicate with the course instructor via email or office hours.
- Increasing the use of IT such as relevant web sites, e.books and other web based reference materials.
- Allow them to make posters of the given topics because posters are

sufficieiento to explain the the topic without too much read.

C. Course Description (Note: General description in the form used in the Bulletin or handbook should be attached). (وصف المقرر الدراسي (ملاحظة: ينبغي إرفاق وصف عام كما يظهر في النشرة التعريفية أو الدليل).

وصف المقرر Course Description :

1. Topics to be Covered : الموضوعات التي ينبغي تغطيتها

List of Topics قائمة الموضوعات	No. of Weeks عدد الأسابيع	Contact Hours الساعات الفعلية للتدريس
INTRODUCTION TO CHEMISTRY	1	1
1-Introduction	2	2
2-Matter and its properties	1	2
3-Element Compound and mixture	1	1
4-Nomenclature	1	1
PRACTICAL:		
1--Safe Handling	1	1
2-Balances: types of balances	1	1
3-Mixtures and Compound	1	1
4-First Aid in Lab	1	2
5-Transferring and Filtration	1	2
THEORY:		
1-Structure of Atom	2	3
2-Atomic number, atomic weight, molecular Weight	1	1
3-Periodic trends in elemental properties	2	4
II-PRACTICAL:		
1-Atomic number, Atomic weight, Molecular weight	1	1
2-Expression of Concentration :percentagemolarities , normalities	1	2
3-practice preparation of different conc. Solution	1	2
3- THEORITICAL		

1-Lewis Diagram	1	1
2-Bonding Type	1	1
3-Bond energies	1	2
1-Types of reactions	2	2
2-Acid Base reaction	2	2
3-Oxidation-Reduction reaction	2	2
PRACTICAL		
2-Titrametric method and indicators	2	4
3-Acid Base reaction : HCl and Na ₂ CO ₃	1	2
4-Oxidation reduction reaction:KMnO ₄ in acidic medium	1	2
5-I-THEORITICAL		
. PH AND BUFFER	1	2
2-Buffer System	1	2
PRACTICAL		
2-pH scale and measurement	1	1
3-Buffer system composition	1	1
6-I-THEORITICAL		
1-Hydrocarbons	1	2
2-Alcohol : synthesis ,structure, reaction	1	1
3-Carboxyllic acid	1	1
4-Aldehyde and Ketone	1	1
5-Aromatic Compound	1	2
II-PRACTICAL		
2-General Test	1	2
3-Identifications of Sugars	1	2

2.Course components (total contact hours and credits per semester): مكونات المقرر (اجمالي عدد الساعات الفعلية والوحدات المعتمدة لكل فصل دراسي):						
	Lecture المحاضرة	Tutorial مجموعات صغيرة	Laboratory or studio المعمل أو الاستديو	Practical التطبيقي	Other: أخرى	Total الاجمالي
Contact Hours الساعات الفعلية	Lecture	Tutorial	Laboratory	Practical	Other:	Total
Credit الوحدات المعتمدة	45 hours	None	None	None	None	45 hours
	3 hours	None	None	None	None	3 hours

3-Additional private study/learning hours expected for students per week ساعات الدراسة الخاصة /ساعات التعلم الإضافية المتوقعة من الطالب أسبوعياً	<input type="text"/>
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4. Course Learning Outcomes in NQF Domains of Learning and Alignment with Assessment Methods and Teaching Strategy. مخرجات تعلم المقرر وفقاً لمجالات التعلم بالاطار الوطني للمؤهلات واتساقها مع أساليب التقييم واستراتيجيات التدريس.

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

في الجدول الموضح أدناه يوجد خمس مجالات للتعلم مرقمة في العمود الأيسر.

First, insert the suitable and measurable course learning outcomes required in the appropriate learning domains (see suggestions below the table)

أولاً، يجب ان توضع مخرجات تعلم المقرر القابلة للقياس امام مجال التعلم المناسب (انظر المقترحات في الجدول أدناه).

Second, insert supporting teaching strategies that fit and align with the assessment methods and intended learning outcomes.

ثانياً، ادخل استراتيجيات التدريس التي تتماشى وتتسق مع اساليب التقييم ومخرجات التعلم المستهدفة

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).

ثالثاً، ضع اساليب التقييم المناسبة التي تقيس وتقيم بدقة مخرج التعلم . كل مخرج تعلم للمقرر واسلوب تقييمه واستراتيجية التدريس يجب ان تتسق مع بعضها كعملية متكاملة للتعلم والتعلم. (ليس من الضروري ان تحتوى المقررات على مخرجات تعلم من كل مجال من مجالات التعلم).

Code # مسلسل	NQF Learning Domains And Course Learning Outcomes مجالات التعلم وفق الإطار الوطني للمؤهلات ومخرجات تعلم المقرر	Course Teaching Strategies استراتيجيات التدريس	Course Assessment Methods أساليب التقييم
1.0	Knowledge المعرفة		

Code # مسلسل	NQF Learning Domains And Course Learning Outcomes مجالات التعلم وفق الإطار الوطني للمؤهلات ومخرجات تعلم المقرر	Course Teaching Strategies استراتيجيات التدريس	Course Assessment Methods أساليب التقييم
	<p><u>By the end of this course each student should be able to:</u></p> <p>1-Define chemistry science and familiarize with the different branches and understand each branch concern.matter , its properties and its states and its interconversion.</p> <p>2-understand the element ,compound and mixture and its properties chemical formula , structural formula which is important for studying pharmacology and biochemistry</p> <p>2- identify the atomic theory of matter, learn different types of bonding, formulas, as these are the backbone of biochemistry and pharmacology</p> <p>3-Understanding periodic table and its trend by this student know the actual place of element in table and how they varies according to their properties . knowledge of various type of chemical reaction</p> <p>4-Understand ph and buffer and its important to our body</p> <p>5-Recognize organic chemistry ,types, compound, structure, preparation and its reaction to other compound.aromatic compound its reaction and get the knowledge of its use because without chemistry(organic) we can ot imagine life.</p>	<ul style="list-style-type: none"> • Lectures. • Assignments . • Presentations. 	<ul style="list-style-type: none"> • Quizzes • Mid-term exam • Final exam
	<p>Cognitive Skills</p>		
<p>(use these verbs; estimate, explain, summarize, write, compare, contrast, diagram, subdivide, differentiate, criticize, calculate, analyze, compose, develop, create, prepare, reconstruct, reorganize, summarize, explain, predict, justify, rate, evaluate, plan, design, measure, judge, justify, interpret, appraise)</p>			

Code # مسلسل	NQF Learning Domains And Course Learning Outcomes مجالات التعلم وفق الإطار الوطني للمؤهلات ومخرجات تعلم المقرر	Course Teaching Strategies استراتيجيات التدريس	Course Assessment Methods أساليب التقييم
	<p>-The ability to reason critically, compare and analyse using the studied knowledge.</p> <p>2-Ability to differentiate between physical and chemical changes of matter, structural and chemical formula of molecules, balance and complete chemical equation</p> <p>3-Ability to find atomic and molecular weight of atom,spdf,electronic configuration ,lewis structure, and bond energies</p> <p>4-Ability to deal with ph of chemicals as well as human body ,water and its ionization properties</p> <p>5-ability to solve oxidation reduction reaction and acid base reaction</p>	<ul style="list-style-type: none"> • Interactive lectures. • Problem solving. • Self learning. • Group discussion 	<ul style="list-style-type: none"> • Quizzes • Mid-term written exam. • Final written exam
Interpersonal Skills & Responsibility			
(use these verbs; demonstrate, judge, choose, illustrate, modify, show, use, appraise, evaluate, justify, analyze, question, and write)			
	<p>Manage time and work to deadlines</p> <p>2- Develop team-working skills and Show responsibility toward class environment and assignment dates, Active participation in presentation and Apply self-directed learning in specific assignment and show attention and respect staff and colleagues</p> <p>3-Ability to interact with other people and to engage in team working</p> <p>4-Skills in presenting scientific material to an informed audience.</p> <p>5-Ability to participate inter and trans disciplinary team working on project related to chemistry</p> <p>1. .</p>	<ul style="list-style-type: none"> • Self learning. • Group discussions and seminars. • Assignments and home-works. 	<ul style="list-style-type: none"> • Active class participation. • The home-works. • Assessing attitude and attendance.
Communication, Information Technology, Numerical			
(use these verbs; demonstrate, calculate, illustrate, interpret, research, question, operate, appraise, evaluate, assess, and criticize)			

Code # مسلسل	NQF Learning Domains And Course Learning Outcomes مجالات التعلم وفق الإطار الوطني للمؤهلات ومخرجات تعلم المقرر	Course Teaching Strategies استراتيجيات التدريس	Course Assessment Methods أساليب التقييم
	<p>Find information using information technology way</p> <ul style="list-style-type: none"> - Competent in structure and communicate ideas orally and in writing. - Build up effective presentation - Ability to formulate the equations - Ability to calculate and determine the right equivalent for measurements - Ability to use density law and related mass to volume - Using different formulas to calculate and prepare different concentration solutions <p>1. - Using studied law to determine the unknown concentrations.</p>	<ul style="list-style-type: none"> • Presentations. • Assignments. • Self learning. 	<ul style="list-style-type: none"> • Observation check list for evaluation of seminar presentation.
	<p>Psychomotor</p> <p>Description of the psychomotor skills to be developed and the level of performance required</p> <p><u>By the end of this course students should be able to:</u></p> <ol style="list-style-type: none"> 1-Use lab equipments right and safely 2-Apply the lab precaution during practical work 3-Skilful using of balances 4-Using of pH meters and effectively determine the pH 5-Prepare different concentration solution from solid and liquid substances 6-Determine unknown molarity solution using titrimetric methods 	<p>-</p> <p>Demonstration and re-demonstration.</p> <p>2-Laboratory sessions.</p> <p>Discussion</p>	<p>Practical exams Mid term and final</p>

5. Schedule of Assessment Tasks for Students During the Semester

الجدول الزمني للمهام التي يقيم من خلالها الطلبة أثناء الفصل الدراسي

Assessment task (e.g. essay, test, Quizzes, group project, examination, speech, oral presentation, etc.)	Week Due أسبوع استحقاق	Proportion of Total Assessment
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	النسبة من التقييم الكلي	التقييم	مهام التقييم (مثل: كتابة مقال – اختبار – اختبارات قصيرة- مشروع جماعي – اختبار نهائي – خطبة، عرض تقديمي شفوي.....الخ)
1			
a.	5%	6	quiz(1)
b.	3%	11	Practical log book
c.	6%	10	Class participation, assignments, seminar presentations.
d.	10%	9	Midterm exam practical
e.	20%	10	Midterm exam theory
f.	2%	weekly	Attendance
g.	4%	weekly	Attitude
h.	20%	17	Final exam practical
i.	30%	18	Final exam theory

D. Student Academic Counseling and Support الإرشاد الأكاديمي والدعم الطلابي

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)

- ترتيبات ضمان إتاحة أعضاء هيئة التدريس للاستشارات والإرشاد الأكاديمي الفردي للطلبة (أذكر قدر الوقت الذي يتوقع أن يتواجد خلاله أعضاء هيئة التدريس لهذا الغرض في كل أسبوع).

- The e-mail of the course coordinator is given to the students.
- Office hours are allocated to the students for general and specific educational activities.
- The course coordinator is available any time and ready for consultation even outside the official office hours.
Academic advisors are available for all students within the program from the beginning of their learning experience till their graduation.

E. Learning Resources مصادر التعلم

<p>1. List Required Textbooks</p> <p>-- Brady. General Chemistry Principles and Structure. Willey -Dixit And Sharma Text Book for chemistry HM Publication.</p>
<p>2. List Essential References Materials (Journals, Reports, etc.)</p> <p>- Alfered& Garrett. Chemistry : A study of matter - Rusesell, Drago, Allan & Bacon. Priciple of chemistry - Science Direct journal</p>
<p>3- List Recommended Textbooks and Reference Material (Journals, Reports, etc)</p> <ul style="list-style-type: none"> -Dixit And Sharma Text Book for chemistry HM Publication. <p>. Lecture slides • Notes of teachers if required</p>
<p>4-. List Electronic Materials (eg. Web Sites, Social Media, Blackboard, etc.)</p> <p>WWW. General Chemistry.Com WWW. Wikipedia .Com WWW. Pubmed.Com <u>WWW.Science Direct.Com</u></p>
<p>5- Other learning material such as computer-based programs/CD, professional standards or regulations and software.</p> <p>None</p>

F. Facilities Required *المرافق اللازمة*

<p>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.) حدد متطلبات المقرر الدراسي بما في ذلك حجم فصول الدراسة والمختبرات (أي: عدد المقاعد داخل الفصول الدراسية والمختبرات، وعدد أجهزة الحاسب الآلي المطلوب توفيرها...إلخ).</p>
<p>1. Accommodation (Lecture rooms, laboratories, etc.)</p> <ul style="list-style-type: none"> - Lecture room suitable for 30 students - Suitable light and temperature condition

- Labs specific for chemistry well equipped for 25 student
2. Computing resources
<ul style="list-style-type: none"> • Computers, internet connection, projectors and smart board in lecture room
3. Other resources (specify --eg. If specific laboratory equipment is required, list requirements or attach list):
<ul style="list-style-type: none"> • Equipment and illustration tools relevant to the course material • CHEMISTRY laboratory equipment related to the following procedures: <ul style="list-style-type: none"> ❖ Preparation of different concentration of silution ❖ Expression of concentration molarity & normality, ❖ titration ❖ Element test ❖ Detection of sugar ❖ For determination of ph

G. Course Evaluation and Improvement Processes تقييم المقرر الدراسي وعمليات تحسينه

1.
1 Strategies for Obtaining Student Feedback on Effectiveness of Teaching
<ul style="list-style-type: none"> • Student questionnaire for achievement of course ILOs. • Electronic course evaluation available on the University website, each student has to fill before getting his final result
2 Other Strategies for Evaluation of Teaching by the Instructor or by the Department
<ul style="list-style-type: none"> • Peer reviewing of teaching • Verbal communication during the lectures • Personal interview with the students. • Evaluation by program coordinator.
3 Processes for Improvement of Teaching
<ul style="list-style-type: none"> • By the end of each semester teachers are evaluated via:

<ol style="list-style-type: none">1. Program coordinator.2. Teacher portfolio.3. Student evaluation of the course and performance of the teacher. <ul style="list-style-type: none">• The course coordinator is required to integrate the points mentioned in all these reports, in addition to his own interpretations, into the course improvement plan in the course report.• Course coordinator must keep a copy from all the evaluation reports and a copy from the course improvement plan, including improvement of teaching, in his own portfolio.• Course improvement plan must be executed during the next semester.• Program coordinator is responsible for monitoring the commitment of the course coordinator to the improvement plan.
<p>4. Processes for Verifying Standards of Student Achievement (e.g. check marking by an independent faculty member of a sample of student work, periodic exchange and remarking of a sample of assignments with a faculty member in another institution)</p> <ul style="list-style-type: none">• The students' answer sheets of the final exams are peer reviewed within 48 hours of the exam. The peer reviewers are independent faculty members.
<p>5. Describe the planning arrangements for periodically reviewing course effectiveness and planning for improvement.</p> <ul style="list-style-type: none">• Course effectiveness is reviewed by the end of each semester on the light of the following reports and documents:<ol style="list-style-type: none">1. Student evaluation for the course and teaching performance.2. Results and distribution of students' grades.3. Student evaluation for their own achievement to course ILOs.4. Report of the exam committee.5. Self evaluation by the course coordinator.6. All the new decisions of the program committee regarding teaching and learning.• Course report, including improvement plan, must be submitted to program coordinator by the end of each semester.• Any changes in the course specifications must be discussed at the level of the program committee and approved. effectiveness of the course

Faculty or Teaching Staff: Tubia Almas mohammed

Signature: ----- Date Report Completed: 25/ 5/ 2017

Received by:

Signature: -----*TUBIA ALMAS MOHAMMED*-----
/ / 1436

Date: