

T6. Course Specification (CS) توصيف المقرر

Institution Najran University	Date : 27/8/1438
College/Department Nursing College/Nursing Department	

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

1. Course title and code : Biochemistry - 249 BIO-2			
2. Credit hours : 2 credit hours/week /semester			
3. Program(s) in which the course is offered./ Nursing Program (If general elective available in many programs indicate this rather than list programs) none			
4. Name of faculty member responsible for the course : Majdolin Mohammed Eltayeb			
5. Level/year at which this course is offered : 2nd year level 4			
6. Pre-requisites for this course (if any) : Chemistry (141CHT-2) & Anatomy & Physiology 1 & 2 (ANT 112 & ANT 213)			
7. Co-requisites for this course (if any) :None			
8. Location if not on main campus :Main Campus Female medical sciences			
9. Mode of Instruction (mark all that apply)			
a. Traditional classroom	<input checked="" type="checkbox"/>	What percentage ?	<input type="text" value="90"/>
b. Blended (traditional and online)	<input checked="" type="checkbox"/>	What percentage ?	<input type="text" value="10"/>
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: Self- learning and internet search for some topics , students active participation			

B. Objectives الأهداف

<p>1. What is the main purpose for this course</p> <p>This course will provide the student with knowledge about the meaning & importance of biochemistry and its impact & complementary for other health related sciences, and also provide them with the basic knowledge about the biomolecular : protein ,carbohydrate and lipid and their structure and function within body.</p> <p>The course help the student to understand the catalytic role of enzymes, their specific characters, and the different ways for enzyme nomenclature, and How they can be regulated mechanism of action,& their importance in clinical diagnosis, and provide knowledge about biochemical reaction inside the human body with regards to conditions in clinical situation</p>
<p>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> <ul style="list-style-type: none"> • Continuous updating of course content through available references, web, and latest researches. • Increased use of IT or web-based reference material. • Include e-books

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

<p>Course Description وصف المقرر :</p> <p>This course deals with the structures, function, and metabolic interactions of carbohydrates , lipids , nucleotides, nucleic acids, amino acids, and proteins. An emphasis will be placed on metabolic processes that have an impact on human diseases.</p>
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1. Topics to be Covered		
List of Topics	No. of Weeks	Contact Hours
Theory: Introduction Cell – prokaryote - Eukaryote Aqueous solutions and PH	1	2
Carbohydrates	2	4
Lipids	2	4
Amino acids and protein	2	4

Enzymes	2	4
Nucleic acids	1	2
Some Metabolic Pathways	4	8
Glycolysis process		
Kreb's cycle		
Glycogen metabolism		
Fatty acid metabolism, β -oxidation		
Amino acid metabolism, Urea cycle		
Nucleotides catabolism		
Hormones	1	2

2. Course components (total contact hours and credits per semester):						
	Lecture	Tutorial	Laboratory	Practical	Other:	Total
Contact Hours	30					30
Credit	2					2

3. Additional private study/learning hours expected for students per week.	4ho
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4. Course Learning Outcomes in NQF Domains of Learning and Alignment with Assessment Methods and Teaching Strategy
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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	Knowledge		
1.1	Describe the structure and classes of the different biomolecules ,recognize their function and important derivatives.	Lecture Research activities Presentation Tutorials sessions written assignments	Short written exam (Quiz) Midterm exam (Written) Final written exam
1.2	Remember the main points of important metabolic pathways and the role of enzymes in it ,and hormones as a regulatory proteins	Lecture Research activities Presentation Tutorials sessions written assignments	Short written exam (Quiz) Midterm exam (Written) Final written exam
2.0	Cognitive Skills		
2.1	Ability to distinguish the different basic units and bonds of the main molecules with their derivatives and compare the function and importance of these body molecules.	Lecture Research activities Presentation Tutorials sessions written assignments	Short written exam (Quiz) Midterm exam (Written) Final written exam
2.2	Discuss the hormonal regulation of metabolic pathways, and interpret the disorders biochemical causes	Lecture Research activities Presentation Tutorials sessions written assignments	Short written exam (Quiz) Midterm exam (Written) Final written exam

3.0	Interpersonal Skills & Responsibility		
3.1	- Apply self-direct active learning..	Self –learning ,Cooperative learning.	Observations (presentation, class participation)
3.2	Behave in an ethical and respectable manner towards the staff, colleagues, and show respect towards others.	Small group work Group discussion	Individual assessment Observations
4.0	Communication, Information Technology, Numerical		
4.1	Utilize efficiently the different knowledge resources including the library resources and websites.	Research activities Homework written assignments	Participation (presentation, class participation)
4.2	Communicate effectively with colleagues and staff members	Small group work Group discussion	Participation (presentation, class participation)
5.0	Psychomotor :not applicable (no practical class)		
5.1			
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	Short written exam (Quiz)	5th	10%
2	Midterm exam (Written)	9th	20%
4	Participation (presentation, class participation, documentation)	Weekly	10%
6	Final written exam	16	60%

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)

- Office hours arranged to the time table
- Student encourage to communicate on e-mail or at office
- Teacher's web page.
- Exam error analysis in class
- Feedback for each student

E. Learning Resources مصادر التعلم

- List Required Textbooks:
 - Harvey, Champe and Ferrier; Biochemistry. Lippincott.
 - Muray, Granner, Myes and Rodwell; Harper's Biochemistry. Stanford.

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

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

- Harvey, Champe and Ferrier; Biochemistry. Lippincott.
- Muray, Granner, Myes and Rodwell; Harper's Biochemistry. Stanford.
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4. List Electronic Materials (eg. Web Sites, Social Media, Blackboard, etc.)

- *Resources on the Web:*

- WWW. Pubmed.gov

- Google search; www.google.com
- Yahoo search; www.yahoo.com
- www.ncbi.nlm.nih.gov

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

Multi media associated with the text books and the relevant websites

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.)

Facilities Required for Teaching and Learning.

- Adequate infrastructure includes teaching places (teaching class ,teaching halls, teaching laboratory) comfortable desks, good source of aeration, bathrooms, good illumination and safety and security tools.
- Teaching tools: includes screens, computers CD (r-w) data shows ,projectors, flip charts, white boards, video players, digital video scanners, copier, colored and laser printers
- Internet

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

- Video recording apparatus and facility
- Conviction mirror
- Magmatic teaching board
- PowerPoint/ transparency projector

3. Other resources (specify, e.g. if specific laboratory equipment is required, list requirements or attach list)

Library references and services

G Course Evaluation and Improvement Processes

1 Strategies for Obtaining Student Feedback on Effectiveness of Teaching

- Student evaluation (questionnaire for the achievement of ILOS of the subject)
- Meeting with student to take their notes on the teaching strategies and difficulties they faced during study
- University questionnaire evaluation of the course.
- Evaluation by group discussions .

2 Other Strategies for Evaluation of Teaching by the Program/Department Instructor

- Peer observing teaching
- Questionnaire
- Reciprocal classroom visits
- Assessment by other faculty member in the same or related specialty
- Departmental assessment
- Individual assessment

6. Processes for Improvement of Teaching

- Keeping a Teaching portfolio
- Integrating the remarks of the peer observer in the process of teaching
- Workshops
- Update the references books
- Maintenance of the accessory equipment
- Considering the recommendations of department committee of subject

- 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)
- Annual course review- report
- 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 department.
- Periodic review and evaluation- external personal involved
- Pear teaching observation
- Visiting examiner report
- Accreditation report.

5. Describe the planning arrangements for periodically reviewing course effectiveness and planning for improvement

- Studying of the questioners and staff remarks and student marks to obtain improvement plan.
- Collecting all reports and evaluations at the end of the year for a reviewing purpose.
- Conducting a workshop to presents finding of reports and evaluation to share knowledge.

- Reviewing results of reports and evaluations with outside reviewers.
- Periodic review and updating the syllabus

Name of instructor :Majdolin Mohammed Eltayeb

Signature : *Majdolin Mohammed Eltayeb*

Date Specification Completed:27/8/1438

Name of field experience teaching staff

Program coordinator : Dr. Nahid Elfaki

Signature: _____ Date received: _____