

modelUnit Description Subject Description FormY

Faculty of Engineering / Department of



Unit information

Subject information

Subject information						
Unit Title	1	:	Unit delivery			
Unit Type		Support		⊠theory		
unity symbol		BME-12-04	☑present ☑The laboratory			
ECTS Credits	8			□Educational		
SWL (hour/SEM)	30			☐ □practical □The seminar		
Unit level		1	Semester fo	for delivery		2
Administration Department		Biomedicine	The college	College of Engineering		
Unit Commander	Saad Mahmoud		e-mail	Saed.mahmud@uowa.edu.iq		edu.iq
Unit Commander	Commander Title Assist		Unit Comm	Unit Commander Qualifications		PhD
Unit teacher			e-mail			
Peer Reviewer Name		name	e-mail	e-mail		
Scientific Committee Approval Date		26/9/2024	issue number 1.0			

Relationship with other units Relationship with other subjects					
Prerequisites Unit nothing Semester					
Common Requirements Unit	nothing	Semester			

Unit	Unit objectives, learning outcomes and guiding content					
Cour	Course objectives, learning outcomes and guiding content					
Unit objectives Subject objectives	English language study aims to improve global communication skills and enhance career and academic opportunities. Teaching strategies include blended learning, interactive learning, and learning using technology. Academic outcomes include language proficiency, the ability to read scientific research, and interact in multicultural environments.					
Unit learning outcomes Learning outcomes for the subject	 Master basic skills: such as reading, writing, listening, and speaking. Critical and creative thinking: Develop the ability to analyze information and make logical decisions. Social Interaction: The ability to interact effectively in diverse social and professional settings. Specialized knowledge: the acquisition of knowledge in a particular field of study or specialization. Independence and self-learning: the ability to continuously learn and achieve goals independently 					
Guidance Contents Guidance Contents	 Educational information: Provides basic concepts and principles to support the learning and thinking process. Procedures and steps: Clear instructions on how to do certain tasks or activities. Tips and tricks: Guidance to help improve performance or achieve better results. Tools and Resources: A list of helpful resources such as books, websites, or apps. Cultural and behavioral guidelines: Tips on how to handle social or professional situations appropriately. 					

Learning and teaching strategies					
	Learning and teaching strategies				
	 Interactive learning: Encouraging students to participate in classroom activities such as discussions, presentations, and problem solving 				
	 Blended learning: merging traditional education with technological tools such as online platforms to stimulate self-learning 				
Strategies	 Project-based learning: Students learn by working on real-world projects, helping to reinforce practical skills 				
	 Collaborative Learning: Encouraging teamwork among students to improve collaboration and knowledge sharing 				
	 Performance-oriented instruction: Guiding students to improve their academic performance through continuous assessments and clear goals 				

Student workload(SWL) The student's academic load is calculated for 15 weeks.					
SWL Regulator (h/sem) Regular student load during the semester	78	SWL Regulator (H/W) Regular weekly student load	5		
SWL unregulated (h/sem) Irregular student load during the semester	72	SWL unregulated (h/w) Irregular student load per week	5		
totalSWL (h/sem) The student's total academic load during the semester 30					

Unit Evaluation Course material evaluation							
like	time/number Weight (in marks) Due week Related learning outcomes						
Formative assessment	Competitions	2	10% (10)	5, 10	LO#1, 2, 10, 11		
	Appointments	2	10% (10)	2, 12	LO #3, 4, 6, 7		
	Projects/The laboratory.	1	10% (10)	continuous	all		
a report		1	10% (10)	13	LO #5, 8, and 10		
Final	Midterm Exam	2 s	10% (10)	7	LO #1-7		
evaluation	Final Exam	2 hours	50% (50)	16	all		
Overall Rating	_		100%(100 degrees)				

	Delivery Plan (Weekly Syllabus) Theoretical weekly curriculum				
week	Covered Materials				
Week 1	Introduction to Chemistry: Preparation of solutions, molarity, molality, reagents, acids				
Week 2	alkaline, buffer solution, concentration, titration				
Week 3	Proteins, protein metabolism, protein synthesis, protein catalysis, protein anabolism, protein fate, amino acids				
Week 4	Amino acid interaction, relationship of amino acids to other molecules Protein synthesis, translation, transcription, globulin, albumin				
Week 5	Liver function tests, bilirubin,GOT and AST, ALP, renal function tests, urea, creatinine and uric acid				
Week 6	Lipid metabolism, lipid synthesis, lipid synthesis, alternative pathway, lipid degradation, fatty acids				
Week 7	Midterm Exam				

The week8	Cholesterol, triglycerides, HDL, LDL, ketone bodies, bile salt, lipase		
The week9	Carbohydrates, glucose metabolism, glucose synthesis, glycolysis, glycogenolysis cycles, glycogen synthesis, gluconeogenesis		
week10	diabetes, high blood sugar, HbA1C, Fasting Glucose, Fructose, Sucrose, Lactose		
Week 11	Enzymes, enzyme metabolism, types of enzymes, enzyme function, enzyme structure		
Week 12	Liver enzymes, kidney enzyme, digestive enzyme, coenzyme, glycolytic enzymes		
Week 13	Hormones, hormone composition, types of hormones, function of hormones, hormone receptors, pituitary gland hormones		
Week 14	Thyroid hormones, adrenal hormones, sex hormones, digestive hormones, penile hormones		
Week 15	DNADNA, RNA, guanine, thiamine, cytosine, adenine, uracil		
Week 16	Preparatory week before the final exam		

Learning and teaching resources Learning and teaching resources				
text Available in the library?				
Required texts	Clinical Biochemistry,(8 editions), by Leipencotts	Yes		
Recommended Texts		Yes		
Websites				

Grading chart						
Grading chart						
group	degree	Appreciation	Tags(%)	identification		
	A -excellent	privilege	90 - 100	Outstanding performance		
6	for-very good	very good	80 - 89	Above average with some errors		
Success Group (50 - 100)	G -good	good	70 - 79	Good work with noticeable errors.		
	D- Satisfactory	middle	60 - 69	Fair but with major shortcomings		
	h- Enough	acceptable	50 - 59	The work meets minimum standards.		
Group failure (0 – 49)	FX -to fail	Failed(Under Processing)	(45-49)	More work needed but credit given		
	F -to fail	Failed	(0-44)	A lot of work required.		

note:Marks that are 0.5 decimal places above or below the highest or lowest full mark will be rounded off (e.g. a mark of 54.5 will be rounded off to 55, while a mark of 54.4 will be rounded off to 54. The University has a policy of not condoning 'imminent pass failure', so the only adjustment to marks awarded by the original mark(s) will be the automatic rounding described above.