

	Ministry of Higher Education and Scientific Research - Iraq Al-Mustaqlal University College of Engineering Department of Prosthetics and Orthotics Engineering	
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MODULE DESCRIPTOR FORM

نموذج وصف المادة الدراسية

Module Information			
معلومات المادة الدراسية			
Module Title	إعادة تأهيل I		Module Delivery
Module Type	CORE		<input checked="" type="checkbox"/> Theory <input type="checkbox"/> Lecture <input checked="" type="checkbox"/> Lab <input type="checkbox"/> Tutorial <input type="checkbox"/> Practical <input type="checkbox"/> Seminar
Module Code	UOMU0103055		
ECTS Credits	4		
SWL (hr/sem)	100		
Module Level	3	Semester of Delivery	
Administering Department	UOMU0103	College	UOMU01
Module Leader	Ameen M. Al Juboori		e-mail ameen.al-juboori@uomus.edu.iq
Module Leader's Acad. Title	Lect. Dr.	Module Leader's Qualification	PhD
Module Tutor			
Peer Reviewer Name		e-mail	
Review Committee Approval	21/08/2025	Version Number	1.1

<h3 style="text-align: center;">Relation With Other Modules</h3> <p style="text-align: center;">العلاقة مع المواد الدراسية الأخرى</p>			
Prerequisite module			
Co-requisites module			
<h3 style="text-align: center;">Module Aims, Learning Outcomes and Indicative Contents</h3> <p style="text-align: center;">أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية</p>			
Module Aims أهداف المادة الدراسية	Study of Rehabilitation Characteristic & Function		
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	<ol style="list-style-type: none"> 1. The program is started with the presentation of the design procedure of the foot including the choice of a material with a high ratio of strength to weight. Different examples of the artificial feet are presented together with the stress analysis using the equilibrium equations and predict the life of the suggested foot compared to the SACH foot. The fatigue limits were also included in the analysis. 2. The Syme's amputation is one of the main topics in the program. The types of openings require as an access for the patient. According to the mathematical expressions to calculate the stresses and strains were, the type of optimum cut out may be chosen to avoid the failure in the cutout region. An example is also presented to aid the student follows the design procedure of the Symes prosthesis. 3. The adapter between the foot and the stump is also analyzed and the design procedure of the bolt against buckling, compression and bending is presented. The material of the bolt may be chosen according to the induced stresses in the bolt. A case study is also given for the student, 4. The problem of contact pressure between the stump and the prosthesis is so important in the design analysis of the below knee prosthesis. The theoretical background are presented and the mathematical modelling is applied for a case study to calculate the contact pressure for the determination of stresses in the socket. The experimental investigation using –Socket is explained for the students. The suggested materials are chosen which satisfy the durability of the socket requirements and depending on the ground reaction force measurements and the gait cycle scenario. Simplifications of the socket shapes are presented with the mathematical expressions which are required to find the developed stresses. 5. Pylon design is one of the important structural elements to be given in this course and the design includes the choice of material and the thickness is defined according to the developed stresses. 		

Indicative Contents المحتويات الإرشادية	<p>Indicative content includes the following.</p> <p>Identify the functions of each body system. Describe how each body system is similar or different between various species. Identify organs in each body system based on their function. Describe how variations in organ systems increase an organism's ability to survive.</p>
Learning and Teaching Strategies استراتيجيات التعلم والتعليم	
Strategies	<p>Type something like: The main strategy that will be adopted in delivering this module is to encourage students' participation in the exercises, while at the same time refining and expanding their critical thinking skills. This will be achieved through classes, interactive tutorials and by considering type of simple experiments involving some sampling activities that are interesting to the students.</p>

Student Workload (SWL) الحمل الدراسي للطالب			
Structured SWL (h/sem) الحمل الدراسي المنتظم للطالب خلال الفصل	63	Structured SWL (h/w) الحمل الدراسي المنتظم للطالب أسبوعيا	4
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطالب خلال الفصل	37	Unstructured SWL (h/w) الحمل الدراسي غير المنتظم للطالب أسبوعيا	2
Total SWL (h/sem) الحمل الدراسي الكلي للطالب خلال الفصل	100		

Module Evaluation تقييم المادة الدراسية					
		Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
Formative assessment	Quizzes	2	10% (10)		
	Assignments	2	10% (10)		
	Projects / Lab.	1	10% (10)		
	Report	1	10% (10)		
Summative assessment	Midterm Exam	2 hr.	10% (10)		
	Final Exam	3 hr.	50% (50)		
Total assessment			100% (100 Marks)		

Delivery Plan (Weekly Syllabus)
المنهاج الاسبوعي النظري

	Material Covered
Week 1	Introduction to Rehabilitation
Week 2	Consideration in Rehabilitation
Week 3	Consideration in Rehabilitation
Week 4	Gait Cycle
Week 5	Gait Cycle
Week 6	Walking Aids
Week 7	Walking Aids
Week 8	Walking Aids
Week 9	Walking Aids
Week 10	Half Semester Exam
Week 11	Case Study
Week 12	Case Study
Week 13	Case Study
Week 14	Case Study
Week 15	Exam

Delivery Plan (Weekly Lab. Syllabus)
المنهاج الاسبوعي للمختبر

	Material Covered
Week 1	Introduction to Rehabilitation
Week 2	Musculoskeletal Examination
Week 3	Musculoskeletal Examination
Week 4	Posture (Laboratory)
Week 5	Posture (Laboratory)
Week 6	Joints Examination (Laboratory)
Week 7	Joints Examination (Laboratory)
Week 8	Visit to Rehabilitation Hospital
Week 9	Gait Analysis (Laboratory)
Week 10	Gait Analysis (Laboratory)

Week 11	Visit to Rehabilitation Hospital
Week 12	Visit to Rehabilitation Hospital
Week 13	Visit to Rehabilitation Hospital
Week 14	Gait Analysis (Laboratory)
Week 15	Gait Analysis (Laboratory)

Learning and Teaching Resources

مصادر التعلم والتدریس

	Text	Available in the Library?
Required Texts	1- Musculoskeletal Assessment (Hazel M).	No
Recommended Texts		No
Websites	All net sources	

APPENDIX:

GRADING SCHEME مخطط الدرجات				
Group	Grade	التقدير	Marks (%)	Definition
Success Group (50 - 100)	A - Excellent	امتیاز	90 – 100	Outstanding Performance
	B - Very Good	جيد جدا	80 – 89	Above average with some errors
	C - Good	جيد	70 – 79	Sound work with notable errors
	D - Satisfactory	متوسط	60 – 69	Fair but with major shortcomings
	E - Sufficient	مقبول	50 – 59	Work meets minimum criteria
Fail Group (0 – 49)	FX – Fail	مقبول بقرار	(45-49)	More work required but credit awarded
	F – Fail	راسب	(0-44)	Considerable amount of work required

Note:

Note: Marks Decimal places above or below 0.5 will be rounded to the higher or lower full mark (for example a mark of 54.5 will be rounded to 55, whereas a mark of 54.4 will be rounded to 54. The University has a policy NOT to condone "near-pass fails" so the only adjustment to marks awarded by the original marker(s) will be the automatic rounding outlined above.



ملاحظة: هذا النموذج تم وضعه وتقديمه من قبل مديرية ضمان الجودة في وزارة التعليم العالي والبحث العلمي