

**Ministry of Higher Education and Scientific Research
Scientific Supervision and Scientific Evaluation Apparatus
Directorate of Quality Assurance and Academic Accreditation
Accreditation Department**



Academic Program and Course Description Guide

2024

Introduction:

The educational program is a well-planned set of courses that include procedures and experiences arranged in the form of an academic syllabus. Its main goal is to improve and build graduates' skills so they are ready for the job market. The program is reviewed and evaluated every year through internal or external audit procedures and programs like the External Examiner Program.

The academic program description is a short summary of the main features of the program and its courses. It shows what skills students are working to develop based on the program's goals. This description is very important because it is the main part of getting the program accredited, and it is written by the teaching staff together under the supervision of scientific committees in the scientific departments.

This guide, in its second version, includes a description of the academic program after updating the subjects and paragraphs of the previous guide in light of the updates and developments of the educational system in Iraq, which included the description of the academic program in its traditional form (annual, quarterly), as well as the adoption of the academic program description circulated according to the letter of the Department of Studies T 3/2906 on 3/5/2023 regarding the programs that adopt the Bologna Process as the basis for their work.

In this regard, we can only emphasize the importance of writing an academic programs and course description to ensure the proper functioning of the educational process.

Concepts and terminology:

Academic Program Description: The academic program description provides a brief summary of its vision, mission and objectives, including an accurate description of the targeted learning outcomes according to specific learning strategies.

Course Description: Provides a brief summary of the most important characteristics of the course and the learning outcomes expected of the students to achieve, proving whether they have made the most of the available learning opportunities. It is derived from the program description.

Program Vision: An ambitious picture for the future of the academic program to be sophisticated, inspiring, stimulating, realistic and applicable.

Program Mission: Briefly outlines the objectives and activities necessary to achieve them and defines the program's development paths and directions.

Program Objectives: They are statements that describe what the academic program intends to achieve within a specific period of time and are measurable and observable.

Curriculum Structure: All courses / subjects included in the academic program according to the approved learning system (quarterly, annual, Bologna Process) whether it is a requirement (ministry, university, college and scientific department) with the number of credit hours.

Learning Outcomes: A compatible set of knowledge, skills and values acquired by students after the successful completion of the academic program and must determine the learning outcomes of each course in a way that achieves the objectives of the program.

Teaching and learning strategies: They are the strategies used by the faculty members to develop students' teaching and learning, and they are plans that are followed to reach the learning goals. They describe all classroom and extra-curricular activities to achieve the learning outcomes of the program.

Academic Program Description Form



University Name: Al-Furat Al-Awsat Technical University
Faculty/Institute: AL-Diwaniyah Technical Institute
Scientific Dep.: Technical of Prosthetics and Orthotics Department
Academic or Professional Program Name: Technical Diploma
Final Certificate Name: Technical Diploma in Prosthetics and Orthotics
Academic System: Semester
Description Preparation Date: 20 /10 /2024
File Completion Date: 1/12/2024

Signature:

Head of Department Name:

Assisst. Lec. Mohannad Aziz Kadhom

Date: 4/2/2025

Signature:

Scientific Associate Name:

Prof. Khudair Majeed Alawi

Date: 4/2/2025

The file is checked by:

Department of Quality Assurance and University Performance

Director of the Quality Assurance and University Performance

Department: assist. Prof. Dr. Afrah Raheem Edan

Date: 4/2/2025

Signature:

Approval of the Dean

4/2/25

1. Program Vision

Providing graduates with the knowledge and experience necessary to create positive change in the lives of people with special needs (amputees, limb deformities and accidents).

2. Program Mission

The Department of Prosthetics and Orthotics Manufacturing Technologies was established to meet the needs of health institutions for specialized service cadres with scientific specifications and standards that work in the field of prosthetics and orthotics manufacturing, as well as to prepare cadres to work in these institutions and support the private sector in this field to meet the need of hospitals for this specialization, and to develop the teaching and student cadres in the fields of scientific and cognitive research, which is the scientific asset of the department and other institutions and contributes to building a society free of disease and disability, as well as expanding the horizons of cooperation between the corresponding departments and related institutions in a way that achieves continuous and high-quality giving and interaction.

3. Program Objectives

The program aims to graduate a technical cadre qualified in terms of knowledge and skills to work in the field of manufacturing prosthetic limbs and orthotic supports of various types and levels. Also, to select and prepare all appropriate components used in manufacturing upper and lower limbs and orthotic supports.

In addition to graduating competent and creative specialists in the field of medical support and rehabilitation to fill part of the large shortage in the specialized technical staff in the prosthetic limbs and supports centers in order to design molds in line with the necessary measurements for manufacturing prosthetic and orthotic alternatives for the disabled and to operate and maintain the devices, equipment and machines used in the prosthetic limbs and supports manufacturing workshops and to train people with special needs to use the alternatives.

4. Program Accreditation

According to the standards of the National Council for the Accreditation of Medical Technology Colleges and Institutes - New Department

5. Other external influences

According to the market need, if the labor market opinion is taken into account regarding the curricula

6. Program Structure

Program Structure	Number of Courses	Credit hours	Percentage	Reviews*
University Requirements	7	16	24%	
Institute Requirements	-	-	-	
Department Requirements	22	115	76%	
Summer Training				
Other				

* This can include notes whether the course is basic or optional.

7. Program Description

Year/Level	Course Code	Course Name	Credit Hours	
			Theoretical	Practical
First \ First semester		Manufacture prosthesis below knee joint	2	15
		Biomechanical of prostheses (level 1,2,3)	2	1
		Musculoskeletal system diseases	2	
		Physiology & Anatomy	1	2
		Computer application (1)	1	2
		Human Rights and Democracy	1	
		English	2	
First \ Second semester		Manufacture prosthesis above knee joint	2	15
		Biomechanical of prostheses (level 4,5,6)	2	
		Bone and joint disease	2	
		Anatomy of lower limb	1	2
		Principles of clinical examination	1	
		Computer application (2)	1	2
		Arabic	2	
Second \ first semester		Manufacture orthosis below knee joint	2	15
		Biomechanical of prostheses (level 1,2,3)	2	1
		Limb diseases and deformities	2	
		Anatomy of the upper limbs	1	2
		Properties of materials	2	
		Prosthetic of upper limb	1	4
		Search procedure		2
Second \ second semester		Manufacture orthosis below knee joint	2	15
		Biomechanical of prostheses (level 3,4 and upper limb)	2	1
		Spine diseases and deformities	2	
		Anatomy of trunk and spine	1	2
		Professional ethics	2	
		Research project		2
		Engineering drawing		2

8. Expected learning outcomes of the program

Knowledge

- A1- Qualifying the student to know the diseases of the musculoskeletal system that affect the human body.
- A2- Enabling the student to know the names of diseases, the site of injury and treatment.
- A3- Enabling the student to determine the site of the damage, its cause and diagnosis to assist the doctor in diagnostic and therapeutic procedures during the implementation of diagnostic programs for the patient.
- A4- Enabling the student to learn and participate in examining the patient.

Skills

- B1 - Enabling the student to implement patient examination programs.
- B2 - Enabling the student to work in health care teams and know the diagnosis of the patient's condition.
- B3 - Enabling the student to participate with students in the examination and focus on the correct diagnosis.
- B3- Enable the student to design and manufacture above-knee and below-knee prostheses and orthoses.

Ethics

- C1- Analyzing the work of some health institutions by taking advantage of disease data.
- C2- Implementing initial diagnostic programs.
- C3- Qualifying to work within medical rehabilitation and physiotherapy teams.
- C4- Participating in awareness teams to preserve the anatomical parts of the human body from communicable diseases and preserve body parts.

9. Teaching and Learning Strategies

- 1- Theoretical lectures and the use of modern means in presenting lectures as well as interactive screens.
- 2- Direct application by the student under the supervision of the specialized technician and practical application of theoretical vocabulary.
- 3- Practical training in hospitals and specialized centers.

10. Evaluation methods

Theoretical and practical tests (semester and final), surprise exams, discussion groups and daily assessment.

Academic Rank	Specialization		Special Requirements/Skills (if applicable)		Number of the teaching staff	
	General	Special			Staff	Lecturer
Assistant Lecture	Mechanical Engineering	Automation & Robotics			1	
Assistant Lecture	Biology	Animal Physiology			1	
Assistant Lecture	Biology	Animal Physiology			1	
Assistant Lecture	Arabic Language	Arabic Literature			1	
Assistant Lecture	Vet. Medicine & Surgery	Vet. Medicine			1	
Assistant Lecture	Vet. Medicine & Surgery	Vet. Physiology			1	
Assistant Lecture	English Language	Teaching methods			1	
Assistant Lecture	Materials Engineering	General Materials Engineering			1	
Assistant Lecture	Physical Education	Sports Psychology			1	
Assistant Lecture	Materials Engineering	Polymer Engineering			1	
Assistant Lecture	Mechanical Engineering	Renewable Energy				1
Assistant Lecture	Law	Public Law				1
Assistant Lecture	Information Technology Engineering	Information Technology Systems Management				1
Assistant Prof.	Production & mineral engineering	Industrial Engineering				1
Lecture	General Medicine & Surgery	Assistant Prof. Orthopedic Surgery				1

Professional Development

Mentoring new faculty members

Urging new instructors to adhere to the rules of conduct for the profession and realize the importance of education in society and respect time and punctuality and good time management and optimal investment in what benefits students and knowing the nature of learners and their characteristics and conditions and taking into account individual differences between them.

Professional development of faculty members

Good preparation and full readiness for lectures coupled with extensive knowledge, familiarity and possession of information in the specialization as well as following up on developments in the field of specialization and keeping pace with global developments and benefiting from the information revolution and artificial intelligence in supporting School vocabulary.

11. Acceptance Criterion

Adopting the standards of the Central Admission Guide issued by the Ministry of Higher Education and Scientific Research for accepting students into the Department of Prosthetics and Orthotics Manufacturing Technologies (Scientific - Biological).

12. The most important sources of information about the program

- * List of references mentioned in the university's curriculum syllabus.
- * Central Library in Formation.
- * World Wide Web (Internet).

13. Program Development Plan

*** The program is developed through two main aspects:**

- 1- The human aspect: This is done by holding training and development courses for the teaching and technical staff in the department and participating in workshops and seminars inside and outside the formation.
- 2- The infrastructure aspect: This is done by establishing and developing specialized laboratories and workshops and using modern technologies in implementing experiments and training, taking into account the goals of sustainable development.

Program Skills Outline

				Required program Learning outcomes											
Year/ Level	Course Code	Course Name	Basic or optional	Knowledge				Skills				Ethics			
				A1	A2	A3	A4	B1	B2	B3	B4	C1	C2	C3	C4
First\ First semester		Manufacture prosthesis below knee joint	Specialized			✓	✓		✓	✓	✓	✓	✓	✓	✓
		Biomechanical of prostheses (level 1,2,3)	Specialized			✓	✓		✓	✓	✓	✓	✓	✓	✓
		Musculoskeletal system diseases	Specialized	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓
		Physiology & Anatomy	Help	✓		✓	✓	✓	✓	✓		✓	✓		✓
		Computer application (1)	General									✓			
		Human Rights and Democracy	General												
		English	General												
First\ second semester		Manufacture prosthesis above knee joint	Specialized			✓	✓	✓	✓	✓	✓		✓	✓	✓
		Biomechanical of prostheses (level 4,5,6)	Specialized			✓	✓		✓	✓	✓	✓	✓	✓	✓
		Bone and joint disease	Help	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓
		Anatomy of lower limb	Help	✓		✓	✓	✓	✓	✓		✓	✓		✓
		Principles of clinical examination	Help		✓	✓	✓	✓	✓	✓	✓		✓	✓	✓
		Crimes of the defunct Baath Party	General												
		Computer application (2)	General												
		Arabic	General												

Second\ first semester		Manufacture orthosis below knee joint	Specialized			✓	✓	✓	✓	✓	✓		✓	✓	✓
		Biomechanical of prostheses (level 1,2,3)	Specialized			✓	✓		✓	✓	✓	✓	✓	✓	✓
		Limb diseases and deformities	Specialized	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓
		Anatomy of the upper limbs	Help	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓
		Properties of materials	Help												
		Prosthetic of upper limb	Specialized			✓	✓	✓	✓	✓	✓		✓	✓	✓
		Search procedure	Help												
Second\second semester		Manufacture orthosis below knee joint	specialized			✓	✓		✓	✓	✓	✓	✓	✓	✓
		Biomechanical of prostheses (level 3,4 and upper limb)	specialized	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		Spine diseases and deformities	specialized	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓
		Anatomy of trunk and spine	Help	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		Professional ethics	Help												
		Research project	Help												
		Engineering drawing	Help												

- Please tick the boxes corresponding to the individual program learning outcomes under evaluation.

Course Description Form

1. Course Name:						
Manufacture prosthesis below knee joint						
2. Course Code:						
3. Semester / Year:						
First Semester / First						
4. Description Preparation Date:						
20/ 10/ 2024						
5. Available Attendance Forms:						
6. Number of Credit Hours (Total) / Number of Units (Total)						
17*15= 255 hours \ 17 Units						
7. Course administrator's name (mention all, if more than one name)						
Name: Safa Maseer Kmosh E-mail: safa.kamoush@atu.edu.iq						
8. Course Objectives						
1- After finishing the study, the graduate will be able to produce different types of prostheses 2- Able to Examine the patient and decide what are the findings, and amputee function 3- Cast the amputee to start producing the prosthesis designed for each amputee. 4- Identify different types of prosthesis available and could be manufactured of each amputation level 5- Align the prosthesis statically and dynamically with the regard of amputee condition. 6- Fit the amputee with his prosthesis 7- Correct the gait deviation of amputee using his prosthesis.						
9. Teaching and Learning Strategies						
Strategy		1- Theoretical lectures with the use of images, illustrations and Data show 2- Practical applications of theoretical lectures 3- Practical training in workshops specialized in manufacturing limbs				
10. Course Structure						
Week	Hours	Required Learning Outcomes		Unit or subject name	Learning method	Evaluation method
1	17	Concept handicap , T care of amputee Terminology prosthesis, Temporary prosthesis Conc of handicap , T	Concept of handicap , Total c of amputee , Terminology prosthesis, Temporary prosth Concept of handicap , Total c of amputee, Terminology prosthesis, Temporary prosth		Giving a lectu and usi visual aids	Questions and Exa Oral Questions Discussion Pract Exam Reports in Workshop

		care of amputee Terminology prosthesis, Temporary prosthesis			
2	17	TT introduction Assessment	TT introduction, Assessment	Giving a lecture and using visual aids	Questions and Exams Oral Questions & Discussion Pract Exam Reports in Workshop
3	17	TT Casting procedure, C Rectification	TT Casting procedure, C Rectification	Giving a lecture and using visual aids	Questions and Exams Oral Questions & Discussion Pract Exam Reports in Workshop
4	17	TT Prosthetic Materials, Components, prescription principles	TT Prosthetic Materi Components, prescrip	Giving a lecture and using visual aids	Questions and Exams Oral Questions & Discussion Pract Exam Reports in Workshop
5	17	TT Normal Gait Alignment	TT Normal Gait, Alignment	Giving a lecture and using visual aids	Questions and Exams Oral Questions & Discussion Pract Exam Reports in Workshop
6	17	TT Pressure Distribution, C Deviation	TT Pressure Distribution, C Deviation	Giving a lecture and using visual aids	Questions and Exams Oral Questions & Discussion Pract Exam Reports in Workshop
7	17	TT Checkout problems,	TT Checkout, problems,	Giving a lecture and using visual aids	Questions and Exams Oral Questions & Discussion Pract Exam Reports in Workshop
8	17	PF Introduction patient assessment	PF Introduction, pat	Giving a lecture and using visual aids	Questions and Exams Oral Questions & Discussion Pract Exam Reports in Workshop
9	17	PF solutions /socket designs	PF solutions /socket designs	Giving a lecture and using visual aids	Questions and Exams Oral Questions & Discussion Pract Exam Reports in Workshop
10	17	PF prosthetic designs fabrication	PF prosthetic designs fabrication	Giving a lecture and using visual aids	Questions and Exams Oral Questions & Discussion Pract Exam Reports in Workshop
11	17	PF Checkout Procedure, prosthetic problems Discussion	PF Checkout Proced prosthetic problems Discussio	Giving a lecture and using visual aids	Questions and Exams Oral Questions & Discussion Pract Exam Reports in Workshop

12	17	AD Introduction, Assessment and Casting procedure	AD Introduction, Assessment and Casting procedure	Giving a lecture and using visual aids	Questions and Exams Oral Questions Discussion Practical Exam Reports in Workshop
13	17	AD Rectification, Socket Variations and Materials	AD Cast Rectification, Socket Variations and Materials	Giving a lecture and using visual aids	Questions and Exams Oral Questions Discussion Practical Exam Reports in Workshop
14	17	AD Components Alignment	AD Components, Alignment	Giving a lecture and using visual aids	Questions and Exams Oral Questions Discussion Practical Exam Reports in Workshop
15	17	AD prosthetic problems, check	AD prosthetic problems, checkout	Giving a lecture and using visual aids	Questions and Exams Oral Questions Discussion Practical Exam Reports in Workshop

11.Course Evaluation

Distributing the score out of 100 according to the tasks assigned to the student such as daily preparation, daily oral, monthly, or written exams, reports etc

12.Learning and Teaching Resources

Required textbooks (curricular books any)	تصنيع الاطراف ما تحت الركبة
Main references (sources)	1-education for orthopedic technician (part 1 , prosthetics for B.K prosthesis, part 2 , prosthetics for A.K prosthesis 2- Staff prosthetics and orthosis (1982) ,Prosthetics for B.K . foot , kells medical Inc 3-Vilali . M and Etal , amputation and prosthesis Bailliers Tindall London , 1978
Recommended books and references (scientific journals, reports...)	
Electronic References, Websites	

Course Description Form

13. Course Name:					
Biomechanical of prostheses (level 1,2,3)					
14. Course Code:					
15. Semester / Year:					
First Semester / First					
16. Description Preparation Date:					
20/ 10/ 2024					
17. Available Attendance Forms:					
18. Number of Credit Hours (Total) / Number of Units (Total)					
3*15=45 hours \ 3 Units					
19. Course administrator's name (mention all, if more than one name)					
Name: Zahraa Kareem Mashi E-mail: zahraa.kareem.idi8@atu.edu.iq					
20. Course Objectives					
<ol style="list-style-type: none"> 1- Able to know and apply the main principle of Bio-mechanics in his work. 2- Align the prosthesis statically and dynamically with the patient. 3- Analysis the forces and stresses applied in different prosthesis used. 4- Analysis the gait of the patient. 5- Identify the gait deviation. 6- How correct the gait deviation. 					
21. Teaching and Learning Strategies					
Strategy		<ol style="list-style-type: none"> 1- Theoretical lectures with the use of images, illustrations and Data show 2- Practical applications of theoretical lectures 3- Practical training in workshops specialized in manufacturing limbs 			
22. Course Structure					
Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	3	Introduction biomechanics	Introduction biomechanics	Giving a lecture using visual aids	Questions and Exams (C) Questions and Discuss Practical Exam Reports in Workshop
2	3	Analysis components force	Analysis components force	Giving a lecture using visual aids	Questions and Exams (C) Questions and Discuss Practical Exam Reports in Workshop
3	3	Study effect moment on body	Study effect moment on body	Giving a lecture using visual aids	Questions and Exams (C) Questions and Discuss

					Practical Exam Reports in Workshop
4	3	The normal Gait	The normal Gait	Giving a lecture using visual aids	Questions and Exams Questions and Discuss Practical Exam Reports in Workshop
5	3	Analysis effect of forces between stump and Trans-Tibial socket forces	Analysis effect of forces between stump and Trans-Tibial socket forces	Giving a lecture using visual aids	Questions and Exams Questions and Discuss Practical Exam Reports in Workshop
6	3	Stump length related to pressure on stump	Stump length related to pressure on stump	Giving a lecture using visual aids	Questions and Exams Questions and Discuss Practical Exam Reports in Workshop
7	3	Effect of force during bearing alignment Trans-Tibial socket	Effect of force during bearing alignment of Trans-Tibial socket	Giving a lecture using visual aids	Questions and Exams Questions and Discuss Practical Exam Reports in Workshop
8	3	Effect of forces during static alignment of Trans-Tibial prosthesis	Effect of forces during static alignment of Trans-Tibial prosthesis	Giving a lecture using visual aids	Questions and Exams Questions and Discuss Practical Exam Reports in Workshop
9	3	Effect of forces during dynamic alignment of Trans-Tibial prosthesis	Effect of forces during dynamic alignment of Trans-Tibial prosthesis	Giving a lecture using visual aids	Questions and Exams Questions and Discuss Practical Exam Reports in Workshop
10	3	The affect the biomechanics factors on ankle disarticulation prosthesis	The affect the biomechanics factors on ankle disarticulation prosthesis	Giving a lecture using visual aids	Questions and Exams Questions and Discuss Practical Exam Reports in Workshop
11	3	The effect of forces on the socket of ankle disarticulation prosthesis during gait	The effect of forces on the socket of ankle disarticulation prosthesis during gait	Giving a lecture using visual aids	Questions and Exams Questions and Discuss Practical Exam Reports in Workshop
12	3	Effect of forces during alignment of ankle	Effect of forces during alignment of ankle	Giving a lecture using visual aids	Questions and Exams Questions and Discuss Practical Exam Reports in Workshop

		disarticulation prosthesis	disarticulation prosthesis		
13	3	The biomechanics factors of Partial foot Prosthesis	The biomechanics factors of Partial foot Prosthesis	Giving a lecture using visual aids	Questions and Exams (Questions and Discuss Practical Exam Reports in Workshop
14	3	The biomechanics factors of Toe Amputation, Trans-metatarsal	The biomechanics factors of Toe Amputation, Tra metatarsal	Giving a lecture using visual aids	Questions and Exams (Questions and Discuss Practical Exam Reports in Workshop
15	3	The biomechanics factors of Lisfranc Level, Chopart	The biomechanics factors of Lisfranc Level, Chopart	Giving a lecture using visual aids	Questions and Exams (Questions and Discuss Practical Exam Reports in Workshop

23. Course Evaluation

Distributing the score out of 100 according to the tasks assigned to the student such as daily preparation, daily oral, monthly, or written exams, reports etc

24. Learning and Teaching Resources

Required textbooks (curricular books, if any)

Main references (sources)

1-biomechanics of human locomotion
2- education for orthopedic technician
part 1 , prosthetics for B.K prosthesis
part 2 , prosthetics for A.K prosthesis

Recommended books and references (scientific journals, reports...)

Electronic References, Websites

Course Description Form

25. Course Name:
Musculoskeletal system diseases
26. Course Code:
27. Semester / Year:
First Semester / First
28. Description Preparation Date:
20/ 10/ 2024
29. Available Attendance Forms:
30. Number of Credit Hours (Total) / Number of Units (Total)

2*15=30 hours \ 2 Units

31. Course administrator's name (mention all, if more than one name)

Name: Ali Sajid

E-mail: alisajid@gmail.com

32. Course Objectives

- 1- Able to identify the musculoskeletal diseases, its symptoms, diagnosis and treatment, also to know different deformities.
- 2- Able to Diagnoses the diseases related to human locomotion and activity.
- 3- Identify the amputation levels and abilities lost with each level.
- 4- Identify the different body deformities need to be correct or avoided.

33. Teaching and Learning Strategies

Strategy

- 1- Theoretical lectures with the use of images, illustrations and Data show
- 2- Practical applications of theoretical lectures
- 3- Practical training in workshops specialized in manufacturing limbs

34. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	2	Introduction in orthopedic	Introduction orthopedic	Giving a lecture using visual aids	Questions Exams Questions Discussion Prac Exam Reports
2	2	Glossary terminology	Glossary terminology	Giving a lecture using visual aids	Questions Exams Questions Discussion Prac Exam Reports
3	2	Clinical method, and approach (history, examination, & investigation)	Clinical method, and approach (history, examination, & investigation)	Giving a lecture using visual aids	Questions Exams Questions Discussion Prac Exam Reports
4	2	Septic arthritis(Acute Chronic)	Septic arthritis(Acute Chronic)	Giving a lecture using visual aids	Questions Exams Questions Discussion Prac Exam Reports
5	2	Osteomyelitis (acute vs Chronic)	Osteomyelitis (acute Chronic)	Giving a lecture using visual aids	Questions Exams Questions Discussion Prac Exam Reports
6	2	Osteoarthritis (Clinical features, Diagnosis ,treatment)	Osteoarthritis (Clinical features, Diagnosis ,treatment)	Giving a lecture using visual aids	Questions Exams Questions Discussion Prac Exam Reports
7	2	Rheumatoid arthritis (Clinical features, diagnosis, treatment)	Rheumatoid arthritis (Clinical features, diagnosis, treatment)	Giving a lecture using visual aids	Questions Exams Questions Discussion Prac Exam Reports

8	2	Gout & Pseudogout (Clinical features, diagnosis, treatment)	Gout & Pseudogout (Clinical features, diagnosis, treatment)	Giving a lecture using visual aids	Questions Exams Questions Discussion Prac Exam Reports
9	2	Bone disease, osteoporosis, osteopenia, types (Clinical features, diagnosis, treatment)	Bone disease, osteoporosis, osteopenia, types (Clinical features, diagnosis, treatment)	Giving a lecture using visual aids	Questions Exams Questions Discussion Prac Exam Reports
10	2	Bone tumors, types (Clinical features, diagnosis, treatment)	Bone tumors, types (Clinical features, diagnosis, treatment)	Giving a lecture using visual aids	Questions Exams Questions Discussion Prac Exam Reports
11	2	Metabolic bone disease (Ricket, osteomalacia),	Metabolic bone disease (Ricket, osteomalacia)	Giving a lecture using visual aids	Questions Exams Questions Discussion Prac Exam Reports
12	2	Metabolic bone disease (diabetic foot, scurvy)	Metabolic bone disease (diabetic foot, scurvy)	Giving a lecture using visual aids	Questions Exams Questions Discussion Prac Exam Reports
13	2	Cerebral palsy, pathogenesis	Cerebral palsy, pathogenesis	Giving a lecture using visual aids	Questions Exams Questions Discussion Prac Exam Reports
14	2	Types Cerebral palsy	Types Cerebral palsy	Giving a lecture using visual aids	Questions Exams Questions Discussion Prac Exam Reports
15	2	Cerebral palsy, brief clinical features	Cerebral palsy, brief clinical features	Giving a lecture using visual aids	Questions Exams Questions Discussion Prac Exam Reports

35. Course Evaluation

Distributing the score out of 100 according to the tasks assigned to the student such as daily preparation, daily oral, monthly, or written exams, reports etc

36. Learning and Teaching Resources

Required textbooks (curricular books, if any)	
Main references (sources)	Applay system of orthopedics and fracture
Recommended books and references (scientific journals, reports...)	
Electronic References, Websites	Nabiel Ebrahim orthopedic teaching educational program (on line)

Course Description Form

37. Course Name:

Physiology & Anatomy

38. Course Code:

39. Semester / Year:

First Semester / First

40. Description Preparation Date:

20/ 10/ 2024

41. Available Attendance Forms:

42. Number of Credit Hours (Total) / Number of Units (Total)

3*15=45 hours \ 3 Units

43. Course administrator's name (mention all, if more than one name)

Name: Wegdan Hanoun Atiya

E-mail: wegdan.atiya@atu.edu.iq

44. Course Objectives

- 1- General objective: After finishing of study, the graduate able to know the relationship between function bone, joint, nerve vessels and muscles of Lower limb.
- 2- Special objective: After finishing of study the graduate able to know the body organs one, joint, nerve ves and muscles of Lower limb.

45. Teaching and Learning Strategies

Strategy

- 1- Theoretical lectures with the use of images, illustrations and Data show
- 2- Practical applications of theoretical lectures
- 3- Practical training in workshops specialized in manufacturing limbs

46. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	3	Introduction in anatomy & physiology	Introduction in anat & physiology	Giving a lecture using visual aids	Questions and Exam Questions Oral and Discussion Reports Practical Exam
2	3	Classify of bone and kind of bone	Classify of bone and of bone	Giving a lecture using visual aids	Questions and Exam Questions Oral and Discussion Reports Practical Exam
3	3	Bone of Lower extremity- pelvic bone and Bone of Femur	Bone of Lower extrem pelvic bone and Bone Femur	Giving a lecture using visual aids	Questions and Exam Questions Oral and Discussion Reports

					Practical Exam
4	3	Neurophysiology Nervous Tissue Anatomy and Physiology of Neurons	Neurophysiology Nervous Tissue Anatomy and Physiology of Neurons	Giving a lecture using visual aids	Questions and Exam Questions Oral and Discussion Reports Practical Exam
5	3	The body's energy systems	The body's energy systems	Giving a lecture using visual aids	Questions and Exam Questions Oral and Discussion Reports Practical Exam
6	3	Bone of Tibia , Fibula	Bone of Tibia , Fibula	Giving a lecture using visual aids	Questions and Exam Questions Oral and Discussion Reports Practical Exam
7	3	Bones of Foot	Bones of Foot	Giving a lecture using visual aids	Questions and Exam Questions Oral and Discussion Reports Practical Exam
8	3	Introduction in Muscular system	Introduction Muscular system	Giving a lecture using visual aids	Questions and Exam Questions Oral and Discussion Reports Practical Exam
9	3	The kind of muscles	The kind of muscles	Giving a lecture using visual aids	Questions and Exam Questions Oral and Discussion Reports Practical Exam
10	3	The muscles of anterior border of pelvic region (origin, insertion and action)	The muscles of anterior border of pelvic region (origin, insertion action)	Giving a lecture using visual aids	Questions and Exam Questions Oral and Discussion Reports Practical Exam
11	3	The muscles of posterior border of pelvic region (origin, insertion and action)	The muscles of posterior border of pelvic region (origin, insertion and action)	Giving a lecture using visual aids	Questions and Exam Questions Oral and Discussion Reports Practical Exam
12	3	The muscles of Iliac border of pelvic region (origin, insertion and action)	The muscles of Iliac border of pelvic region (origin, insertion action)	Giving a lecture using visual aids	Questions and Exam Questions Oral and Discussion Reports Practical Exam
13	3	The muscles of the anterior border of Thigh region (origin, insertion and action)	The muscles of the anterior border of Thigh region (origin, insertion and action)	Giving a lecture using visual aids	Questions and Exam Questions Oral and Discussion Reports Practical Exam
14	3	The muscles of posterior border of	The muscles of posterior border of Thigh region	Giving a lecture using visual aids	Questions and Exam Questions Oral and Discussion

		Thigh reign (origin, insertion and action)	(origin, insertion action)		Reports Practical Exam
15	3	The muscles of medial & lateral border of Thigh reign (origin, insertion and action)	The muscles of medial lateral border of Thigh reign (origin, insertion and action)	Giving a lecture using visual aids	Questions and Exams Questions Oral and Discussion Reports Practical Exam

47. Course Evaluation

Distributing the score out of 100 according to the tasks assigned to the student such as daily preparation, daily oral, monthly, or written exams, reports etc

48. Learning and Teaching Resources

Required textbooks (curricular books, if any)

Main references (sources)

Recommended books and references (scientific journals, reports...)

Electronic References, Websites

Course Description Form

49. Course Name:					
Computer Application (1)					
50. Course Code:					
51. Semester / Year:					
First Semester / First					
52. Description Preparation Date:					
20/ 10/ 2024					
53. Available Attendance Forms:					
54. Number of Credit Hours (Total) / Number of Units (Total)					
3*15=45 hours \ 3 Units					
55. Course administrator's name (mention all, if more than one name)					
Name: Nejood Abid Yassir Abadi E-mail: nejood.abadi.idi@atu.edu.iq					
56. Course Objectives					
1- General objective: Providing the student with skills in dealing with basic office applications and creating office files and documents, using the operating system as well as the basics of working within the digital environment. 2- Specific objective: Providing the student with knowledge in managing and using various computer applications					
57. Teaching and Learning Strategies					
Strategy		1- Theoretical lectures with the use of images, illustrations and Data show 2- Practical applications of theoretical lectures 3- Practical training in workshops specialized in manufacturing limbs			
58. Course Structure					
Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	3	Computer Fundament Computer Concept, Comp Life Cycles, Comp Generations Development	Computer Fundament Computer Conc Computer Life Cyc Computer Generati Development	Giving a lecture using visual aids	Questions and Exams Oral Questions and Discussion Reports Practical Exam
2	3	Advantages of the comp and its areas of Classification of the comp in terms of purpose, size data type	Advantages of computer and its areas use Classification of computer in terms purpose, size and data t	Giving a lecture using visual aids	Questions and Exams Oral Questions and Discussion Reports Practical Exam
3	3	Computer Components physical parts of the comp and the software entities	Computer Compon The physical parts of computer and the softw entities	Giving a lecture using visual aids	Questions and Exams Oral Questions and Discussion

					Reports Practical Exam
4	3	Your Personal Computer Security Concepts and Software Licenses	Your Personal Computer Security Concept and Software Licenses	Giving a lecture using visual aids	Questions and Exams Oral Questions and Discussion Reports Practical Exam
5	3	Computer Safety & Software Licences	Computer Safety Software Licences	Giving a lecture using visual aids	Questions and Exams Oral Questions and Discussion Reports Practical Exam
6	3	Ethics of electronic pain, forms of abuse, computer security, computer privacy	Ethics of electronic pain forms of abuse, computer security, computer privacy	Giving a lecture using visual aids	Questions and Exams Oral Questions and Discussion Reports Practical Exam
7	3	Computer software licenses and types, intellectual property, computer hacking, malware	Computer software licenses and types intellectual property computer hacking malware	Giving a lecture using visual aids	Questions and Exams Oral Questions and Discussion Reports Practical Exam
8	3	Operating Systems Definition of operating system, functions objectives and classification examples of some operating systems	Operating System Definition of operating system, functions objectives classification of examples of some operating systems	Giving a lecture using visual aids	Questions and Exams Oral Questions and Discussion Reports Practical Exam
9	3	Operating System, Windows	Operating System Windows 7	Giving a lecture using visual aids	Questions and Exams Oral Questions and Discussion Reports Practical Exam
10	3	Desktop components, start menu, taskbar	Desktop components, start menu, taskbar	Giving a lecture using visual aids	Questions and Exams Oral Questions and Discussion Reports Practical Exam
11	3	Folders and files, icons	Folders and files, icons	Giving a lecture using visual aids	Questions and Exams Oral Questions and Discussion Reports Practical Exam
12	3	Perform operations on windows desktop background	Perform operations on windows desktop backgrounds	Giving a lecture using visual aids	Questions and Exams Oral Questions and Discussion Reports Practical Exam

13	3	Control panel Windows Groups Category	Control panel Window Groups Category	Giving a lecture using visual aids	Questions and Exams Oral Questions and Discussion Reports Practical Exam
14	3	From the Defragment control panel, organize files inside computer, install and delete programs.	From the Defragment control panel, organize files inside the computer, install and delete programs.	Giving a lecture using visual aids	Questions and Exams Oral Questions and Discussion Reports Practical Exam
15	3	Some common computer settings and conditions, printer management, setting time and date, and primary disk maintenance.		Giving a lecture using visual aids	Questions and Exams Oral Questions and Discussion Reports Practical Exam

59. Course Evaluation

Distributing the score out of 100 according to the tasks assigned to the student such as daily preparation, daily oral, monthly, or written exams, reports etc

60. Learning and Teaching Resources

Required textbooks (curricular books, if any)	Computer Basics and Office Applications (Part One)
Main references (sources)	
Recommended books and references (scientific journals, reports...)	
Electronic References, Websites	

Course Description Form

61. Course Name:					
Democracy and human rights					
62. Course Code:					
63. Semester / Year:					
First Semester / First					
64. Description Preparation Date:					
20/ 10/ 2024					
65. Available Attendance Forms:					
66. Number of Credit Hours (Total) / Number of Units (Total)					
1*15=15 hours \ 1 Units					
67. Course administrator's name (mention all, if more than one name)					
Name: Nedaa Ajeel Duhan E-mail: nedaa.duhan.idi17@atu.edu.iq					
68. Course Objectives					
<ol style="list-style-type: none"> 1- Human rights aim to advance cultural awareness among the people 2- To achieve social welfare and to protect the basic freedom of the individual by respecting his basic rights, justice and equality 3- It aims to ensure cooperation and harmony between the existing political system, the government and the people 4- To achieve a great deal of harmonious relations between the people and it, otherwise it will fail to achieve its aspirations 					
69. Teaching and Learning Strategies					
Strategy		<ol style="list-style-type: none"> 1- Theoretical lectures with the use of images, illustrations and Data show 2- Practical applications of theoretical lectures 3- Practical training in workshops specialized in manufacturing limbs 			
70. Course Structure					
Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	1	Human rights, their definition, their objectives, the roots of human rights and their development in human history, human rights in ancient and medieval times	Human rights, their definition, their objectives, the roots of human rights and their development in human history, human rights in ancient and medieval times	Giving a lecture using visual aids	Exams Questions and Discussion Oral
2	1	Human rights in ancient times, especially Mesopotamia	Human rights in ancient times, especially Mesopotamia	Giving a lecture using visual aids	Exams Questions and Discussion

					Oral
3	1	Human rights in the Middle Ages in doctrines, schools and political theories	Human rights in Middle Ages in doctrines, schools and political theories	Giving a lecture using visual aids	Exams Questions and Discussion Oral
4	1	Regional recognition human rights and European Convention Human Rights 1950 and American Convention Human Rights 1969	Regional recognition human rights and European Convention Human Rights 1950 the American Convention Human Rights 1969	Giving a lecture using visual aids	Exams Questions and Discussion Oral
5	1	National human rights organizations, human rights in Iraqi constitutions between theory and reality	National human rights organizations, human rights in Iraqi constitutions between theory and reality	Giving a lecture using visual aids	Exams Questions and Discussion Oral
6	1	The relationship between human rights and public freedoms	The relationship between human rights and public freedoms	Giving a lecture using visual aids	Exams Questions and Discussion Oral
7	1	Necessary human rights collective human rights	Necessary human rights and collective human rights	Giving a lecture using visual aids	Exams Questions and Discussion Oral
8	1	Modern human rights and facts of development and right to a clean environment, the right to solidarity, and right to religion	Modern human rights and the facts of development and the right to a clean environment, the right to solidarity, and the right to religion	Giving a lecture using visual aids	Exams Questions and Discussion Oral
9	1	Guarantees of constitutional oversight and guarantees freedom of the press public opinion, and the role non-governmental organizations in respecting human rights	Guarantees constitutional oversight and guarantees of freedom of the press and public opinion, and the role non-governmental organizations respecting human rights	Giving a lecture using visual aids	Exams Questions and Discussion Oral
10	1	The role of regional organizations (Arab League, European Union, African Union, Organization of American States, ASEAN)	The role of regional organizations (Arab League, European Union, African Union, Organization of American States, ASEAN)	Giving a lecture using visual aids	Exams Questions and Discussion Oral
11	1	The functional nature of concept of public freedoms and the philosophical structural considerations positive and functional rights	The functional nature of the concept of public freedoms and philosophical structural considerations of positive and functional rights	Giving a lecture using visual aids	Exams Questions and Discussion Oral
12	1	Regulation of public freedoms by public authorities Litigation and non-judicial system	Regulation of public freedoms by public authorities Litigation and the non-judicial system	Giving a lecture using visual aids	Exams Questions and Discussion Oral

13	1	Judicial appeal, determining the state's responsibility for its legitimate actions, impact of the duality of judiciary on public freedoms	Judicial appeal determining the state's responsibility for legitimate actions, impact of the duality of the judiciary on public freedoms	Giving a lecture using visual aids	Exams Questions and Discussion Oral
14	1	Historical development of concept of equality, modern development of the idea of equality	Historical development of the concept of equality, modern development of the idea of equality	Giving a lecture using visual aids	Exams Questions and Discussion Oral
15	1	Gender equality Equality between individuals according to their beliefs and race	Gender equality Equality between individuals according to their beliefs and race	Giving a lecture using visual aids	Exams Questions and Discussion Oral

71. Course Evaluation

Distributing the score out of 100 according to the tasks assigned to the student such as daily preparation, daily oral, monthly, or written exams, reports etc

72. Learning and Teaching Resources

Required textbooks (curricular books, if any)	
Main references (sources)	
Recommended books and references (scientific journals, reports...)	
Electronic References, Websites	

Course Description Form

73. Course Name:

English Language

74. Course Code:

75. Semester / Year:

First Semester / First

76. Description Preparation Date:

20/ 10/ 2024

77. Available Attendance Forms:

78. Number of Credit Hours (Total) / Number of Units (Total)

2*15=30 hours \ 2 Units

79. Course administrator's name (mention all, if more than one name)

Name: Raneen Muafaq Fadel

E-mail: raneen.fadel@atu.edu.iq

80. Course Objectives

- 1- The student is able to develop his/her intellectual, personal and professional abilities
- 2- Acquire basic language skills (listening, speaking, reading and writing) in order to communicate with English speakers
- 3- The student acquires the linguistic proficiency required for different life situations
- 4- Develop their awareness of the importance of the English language as a means of linguistic communication

81. Teaching and Learning Strategies

Strategy

- 1- Theoretical lectures with the use of images, illustrations and Data show
- 2- Practical applications of theoretical lectures
- 3- Practical training in workshops specialized in manufacturing limbs

82. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	2	Grammar (There is/are, preposition). Pronunciation. Translation. Everyday English (Directions)	Grammar (There is/are, preposition). Pronunciation. Translation. Everyday English (Directions)	Giving a lecture using visual aids	Exams Questions and Discussion Oral
2	2	Years Grammar (was/ were, past tense, irregular verbs). Writing (Famous people). Vocabulary (Words groups)	Years Grammar (was/ were, past tense, irregular verbs). Writing (Famous people). Vocabulary (Words groups)	Giving a lecture using visual aids	Exams Questions and Discussion Oral

3	2	Past tense (We had a good time). Grammar (past simple, regular verbs, irregular verbs). Listening (Mike's diary). Writing (Last Saturday).	Past tense (We had a good time). Grammar (past simple, regular verbs, irregular verbs). Listening (Mike's diary). Writing (Last Saturday).	Giving a lecture using visual aids	Exams Questions and Discussion Oral
4	2	Questions (Where, What, Who, etc.). Everyday English (Fill forms) Exercises .	Questions (Where, What, Who, etc.). Everyday English (Fill forms) Exercises .	Giving a lecture using visual aids	Exams Questions and Discussion Oral
5	2	Activities (We can do it). Listening (Can I be in your Pop group ?). Pronunciation (can / can't). Requests and offers	Activities (We can do it). Listening (Can I be in your Pop group?). Pronunciation (can / can't). Requests and offers	Giving a lecture using visual aids	Exams Questions and Discussion Oral
6	2	Asking politely (I want, would like). Speaking in the restaurant (food and drink)	Asking politely (I want, would like). Speaking in the restaurant (food and drink)	Giving a lecture using visual aids	Exams Questions and Discussion Oral
7	2	Everyday English (Going shopping). Grammar (present continuous). Translation .	Everyday English (Going shopping). Grammar (present continuous). Translation .	Giving a lecture using visual aids	Exams Questions and Discussion Oral
8	2	Vocabulary (Cloths) Everyday English (What is the material). Exercises .	Vocabulary (Cloths) Everyday English (What is the material). Exercises .	Giving a lecture using visual aids	Exams Questions and Discussion Oral
9	2	Holidays (Time to go) Grammar (present continuous for the future). Listening (Hannah's diary)	Holidays (Time to go) Grammar (present continuous for the future). Listening (Hannah's diary)	Giving a lecture using visual aids	Exams Questions and Discussion Oral
10	2	Reading and Speaking Everyday English (going Sightseeing)	Reading and Speaking Everyday English (going Sightseeing)	Giving a lecture using visual aids	Exams Questions and Discussion Oral
11	2	Pronunciation (Shifting sentence stress). Translation. Vocabulary (Transport and travel).	Pronunciation (Shifting sentence stress). Translation. Vocabulary (Transport and travel).	Giving a lecture using visual aids	Exams Questions and Discussion Oral
12	2	Rooms and Furniture Speaking (How to have good time in Sydney). Exercises	Rooms and Furniture Speaking (How to have good time in Sydney). Exercises	Giving a lecture using visual aids	Exams Questions and Discussion Oral
13	2	Traveling Vocabulary (Months, sports). Pronunciation (Who were they).	Traveling Vocabulary (Months, sports). Pronunciation (Who were they).	Giving a lecture using visual aids	Exams Questions and Discussion Oral
14	2	Traveling Vocabulary (Months, sports). Pronunciation (Who were they?).	Traveling Vocabulary (Months, sports). Pronunciation (Who were they?).	Giving a lecture using visual aids	Exams Questions and Discussion Oral

15	2	Question Words Translation Vocabulary (Adverbs) Everyday English (May I?) Exercises	Question Words Translation Vocabulary (Adve Everyday English (May Exercises	Giving a lecture using visual aids	Exams Questions and Discussion Oral
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83. Course Evaluation

Distributing the score out of 100 according to the tasks assigned to the student such as daily preparation, daily oral, monthly, or written exams, reports etc

84. Learning and Teaching Resources

Required textbooks (curricular books, if any)	
Main references (sources)	
Recommended books and references (scientific journals, reports...)	
Electronic References, Websites	

Course Description Form

1. Course Name:

Production of prosthesis above knee joint

2. Course Code:

3. Semester / Year:

Second Semester / First

4. Description Preparation Date:

20/ 10/ 2024

5. Available Attendance Forms:

6. Number of Credit Hours (Total) / Number of Units (Total)

17*15=255 hours \ 17 Units

7. Course administrator's name (mention all, if more than one name)

Name: Safa Maseer Kmosh

E-mail: safa.kamosh@atu.edu.iq

8. Course Objectives

- 1- After finishing the study, the graduate will be able to produce different types of prostheses.
- 2- Examine the patient and decide what are the findings, and amputee function
- 3- Cast the amputee to start producing the prosthesis designed for each amputee.
- 4- Identify different types of prosthesis available and could be manufactured of each amputation level
- 5- Align the prosthesis statically and dynamically with the regard of amputee condition.
- 6- Fit the amputee with his prosthesis
- 7- Correct the gait deviation of amputee using his prosthesis.

9. Teaching and Learning Strategies

Strategy

- 1- Theoretical lectures with the use of images, illustrations and Data show
- 2- Practical applications of theoretical lectures
- 3- Practical training in workshops specialized in manufacturing limbs

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	17	Introduction TF	Introduction TF	Giving a lecture using visual aids	Questions and Exams Oral Questions Discussion Practical Exam Reports
2	17	Quadrilateral Socket	Quadrilateral Socket	Giving a lecture using visual aids	Questions and Exams Oral Questions Discussion Practical Exam Reports
3	17	TF patient assessment Casting procedure	TF patient assessment Casting procedure	Giving a lecture using visual aids	Questions and Exams Oral Questions Discussion Practical Exam Reports

4	17	TF Alternative Cast procedures, Rectification	TF Alternative Cast procedures, Rectification	Giving a lecture using visual aids	Questions and Exams Oral Questions Discussion Practice Exam Reports
5	17	TF Component prescription principles	TF Component prescription principles	Giving a lecture using visual aids	Questions and Exams Oral Questions Discussion Practice Exam Reports
6	17	TF Socket Test Alignment procedures	TF Socket Test Alignment procedures	Giving a lecture using visual aids	Questions and Exams Oral Questions Discussion Practice Exam Reports
7	17	TF Gait Analysis, socket problem	TF Gait Analysis, socket problem	Giving a lecture using visual aids	Questions and Exams Oral Questions Discussion Practice Exam Reports
8	17	KD Introduction, Assessment, Cast Procedure	KD Introduction, Assessment, Cast Procedure	Giving a lecture using visual aids	Questions and Exams Oral Questions Discussion Practice Exam Reports
9	17	KD , Cast Rectification Variations and Material Components	KD , Cast Rectification Variations and Material Components	Giving a lecture using visual aids	Questions and Exams Oral Questions Discussion Practice Exam Reports
10	17	KD prescription principles Alignment, Check Socket problems	KD prescription principles Alignment, Check Socket problems	Giving a lecture using visual aids	Questions and Exams Oral Questions Discussion Practice Exam Reports
11	17	Exam	Exam	Giving a lecture using visual aids	Questions and Exams Oral Questions Discussion Practice Exam Reports
12	17	HD Introduction, patient assessment , cast procedure, cast rectification	HD Introduction, patient assessment , cast procedure, cast rectification	Giving a lecture using visual aids	Questions and Exams Oral Questions Discussion Practice Exam Reports
13	17	HD Socket variations ,fabrication, component Alignment	HD Socket variations ,fabrication, component Alignment	Giving a lecture using visual aids	Questions and Exams Oral Questions Discussion Practice Exam Reports
14	17	HD and Hemipelvic Checkout procedure,	HD and Hemipelvic Checkout procedure,	Giving a lecture using visual aids	Questions and Exams Oral Questions Discussion Practice Exam Reports
15	17	HD prosthetic problems Socket Changes	HD prosthetic problems Socket Changes	Giving a lecture using visual aids	Questions and Exams Oral Questions Discussion Practice Exam Reports

11. Course Evaluation

Distributing the score out of 100 according to the tasks assigned to the student such as daily preparation, daily oral, monthly, or written exams, reports etc

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	1- education for orthopedic technician (part 1 , prosthetics B.K prosthesis, part 2 , prosthetics for A.K prosthesis
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Main references (sources)	Vilali . M and Etal , amputation and prosthesis , Bailliers Tinc , London , 1978
Recommended books and references (scientific journals, reports...)	
Electronic References, Websites	Staff prosthetics and orthosis (1982), Prosthetics for B.K . f , kells medical Inc

Course Description Form

1. Course Name:

Biomechanical of prostheses (level 4,5,6)

2. Course Code:

3. Semester / Year:

Second Semester / First

4. Description Preparation Date:

20/ 10/ 2024

5. Available Attendance Forms:

6. Number of Credit Hours (Total) / Number of Units (Total)

3*15=45 hours \ 3 Units

7. Course administrator's name (mention all, if more than one name)

Name: Zahraa Kareem Mashi

E-mail: zahraa.kareem.idi8@atu.edu.iq

8. Course Objectives

- 1- Able to know and apply the main principle of Bio-mechanics in his work.
- 2- Align the prosthesis statically and dynamically with the patient.
- 3- Analysis the forces and stresses applied in different prosthesis used.
- 4- Analysis the gait of the patient.
- 5- Identify the gait deviation.
- 6- How correct the gait deviation.

9. Teaching and Learning Strategies

Strategy

- 1- Theoretical lectures with the use of images, illustrations and Data show
- 2- Practical applications of theoretical lectures
- 3- Practical training in workshops specialized in manufacturing limbs

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	3	The biomechanics factors through knee prosthesis	The biomechanical factors of through knee prosthesis	Giving a lecture using visual aids	Questions and Exams Oral Questions Discussion Practical Exam Reports
2	3	Effect of forces during bench Alignment of through knee socket	Effect of forces during bench Alignment through knee socket	Giving a lecture using visual aids	Questions and Exams Oral Questions Discussion Practical Exam Reports
3	3	Effect of forces during static alignment of through knee prosthesis	Effect of forces during static alignment through knee prosthesis	Giving a lecture using visual aids	Questions and Exams Oral Questions Discussion Practical Exam Reports

4	3	Effect of forces during dynamic alignment of knee through knee prosthesis	Effect of forces during dynamic alignment through knee prosthesis	Giving a lecture using visual aids	Questions and Exams Oral Questions Discussion Practice Exam Reports
5	3	The biomechanics factors of Trans-femoral prosthesis	The biomechanics factors of Trans-femoral prosthesis	Giving a lecture using visual aids	Questions and Exams Oral Questions Discussion Practice Exam Reports
6	3	Effect of forces during bench alignment of Trans-femoral socket	Effect of forces during bench alignment of Trans-femoral socket	Giving a lecture using visual aids	Questions and Exams Oral Questions Discussion Practice Exam Reports
7	3	Effect of forces during static alignment of Trans-femoral prosthesis	Effect of forces during static alignment of Trans-femoral prosthesis	Giving a lecture using visual aids	Questions and Exams Oral Questions Discussion Practice Exam Reports
8	3	Effect of forces during dynamic alignment of Trans-femoral prosthesis	Effect of forces during dynamic alignment of Trans-femoral prosthesis	Giving a lecture using visual aids	Questions and Exams Oral Questions Discussion Practice Exam Reports
9	3	The biomechanics factors of Hip disarticulation prosthesis	The biomechanics factors of Hip disarticulation prosthesis	Giving a lecture using visual aids	Questions and Exams Oral Questions Discussion Practice Exam Reports
10	3	Effect of forces during bench alignment of Hip disarticulation socket	Effect of forces during bench alignment of Hip disarticulation socket	Giving a lecture using visual aids	Questions and Exams Oral Questions Discussion Practice Exam Reports
11	3	Effect of forces during static alignment of Hip disarticulation prosthesis	Effect of forces during static alignment of Hip disarticulation prosthesis	Giving a lecture using visual aids	Questions and Exams Oral Questions Discussion Practice Exam Reports
12	3	Effect of forces during dynamic alignment of Hip disarticulation prosthesis	Effect of forces during dynamic alignment of Hip disarticulation prosthesis	Giving a lecture using visual aids	Questions and Exams Oral Questions Discussion Practice Exam Reports
13	3	The biomechanics factors of Hemi pelvic prosthesis	The biomechanics factors of Hemi pelvic prosthesis	Giving a lecture using visual aids	Questions and Exams Oral Questions Discussion Practice Exam Reports
14	3	Effect of forces during alignment of Hemi pelvic prosthesis	Effect of forces during alignment of Hemi pelvic prosthesis	Giving a lecture using visual aids	Questions and Exams Oral Questions Discussion Practice Exam Reports
15	3	The biomechanics factors of Upper limb prosthesis	The biomechanics factors of Upper limb prosthesis	Giving a lecture using visual aids	Questions and Exams Oral Questions Discussion Practice Exam Reports
11. Course Evaluation					
Distributing the score out of 100 according to the tasks assigned to the student such as daily preparation, daily oral, monthly, or written exams, reports etc					
12. Learning and Teaching Resources					
Required textbooks (curricular books, if any)		1- education for orthopedic technician			

	part 2-prosthetics for B.K prosthesis part 2-prosthetics for A.K prosthesis
Main references (sources)	1- biomechanics of human locomotion
Recommended books and references (scientific journals, reports...)	
Electronic References, Websites	

Course Description Form

1. Course Name:					
Bone and joint diseases					
2. Course Code:					
3. Semester / Year:					
Second Semester / First					
4. Description Preparation Date:					
20/ 10/ 2024					
5. Available Attendance Forms:					
6. Number of Credit Hours (Total) / Number of Units (Total)					
2*15=30 hours \ 2 Units					
7. Course administrator's name (mention all, if more than one name)					
Name: Ali Sajid E-mail: alisajid@gmail.com					
8. Course Objectives					
1- Able to identify the musculoskeletal diseases, its symptoms, diagnosis and treatment, also to know the different deformities. 1- Diagnoses the diseases related to human locomotion and activity. 2- Identify the amputation levels and abilities lost with each level. 3- Identify the different body deformities need to be correct or avoided.					
9. Teaching and Learning Strategies					
Strategy		1- Theoretical lectures with the use of images, illustrations and Data show 2- Practical applications of theoretical lectures 3- Practical training in workshops specialized in manufacturing limbs			
10. Course Structure					
Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	2	Peripheral nerve lesion Radial, median, ulnar, peroneal nerve	Peripheral nerve lesion Radial, median, ulnar, peroneal nerve	Giving a lecture using visual aids	Questions Exams Questions Discussion Practical Exam Reports
2	2	Amputation, causes, levels,	Amputation, causes, levels,	Giving a lecture using visual aids	Questions Exams Questions Discussion Practical Exam Reports
3	2	Amputation, post-operative care, physiotherapy	Amputation, post-operative	Giving a lecture using visual aids	Questions Exams

			care, physiotherapy		Questions Discussion Pract Exam Reports
4	2	Amputation ,adaptation prosthesis	Amputation ,adaptation prosthesis	Giving a lecture using visual aids	Questions Exams Questions Discussion Pract Exam Reports
5	2	Prolapsed disc , (cervical)	Prolapsed disc (cervicalDP)	Giving a lecture using visual aids	Questions Exams Questions Discussion Pract Exam Reports
6	2	Prolapsed disc , (lumbar I	Prolapsed disc , (lum DP)	Giving a lecture using visual aids	Questions Exams Questions Discussion Pract Exam Reports
7	2	Orthopedic surg management ,general view	Orthopedic surg management ,gene view.	Giving a lecture using visual aids	Questions Exams Questions Discussion Pract Exam Reports
8	2	Orthopedic physiotherapy	Orthopedic physiothera	Giving a lecture using visual aids	Questions Exams Questions Discussion Pract Exam Reports
9	2	Orthopedic manipulat treatment.	Orthopedic manipulat treatment.	Giving a lecture using visual aids	Questions Exams Questions Discussion Pract Exam Reports
10	2	Orthopedic rehabilitati (rules)	Orthopedic rehabilitati (rules)	Giving a lecture using visual aids	Questions Exams Questions Discussion Pract Exam Reports
11	2	Orthopedic Prosthesis, upper Limb	Orthopedic Prosthesis, upper Limb	Giving a lecture using visual aids	Questions Exams Questions Discussion Pract Exam Reports
12	2	Orthopedic Prosthesis, lo limb	Orthopedic Prosthe lower limb	Giving a lecture using visual aids	Questions Exams Questions Discussion Pract Exam Reports
13	2	Orthopedic consent	Orthopedic consent	Giving a lecture using visual aids	Questions Exams Questions Discussion Pract Exam Reports
14	2	Trauma,(bone fracture)	Trauma,(bone fracture)	Giving a lecture using visual aids	Questions Exams

					Questions Discussion Pract Exam Reports
15	2	Trauma ,(soft tissue)	Trauma ,(soft tissue)	Giving a lecture using visual aids	Questions Exams Questions Discussion Pract Exam Reports
11. Course Evaluation					
Distributing the score out of 100 according to the tasks assigned to the student such as daily preparation, daily oral, monthly, or written exams, reports etc					
12. Learning and Teaching Resources					
Required textbooks (curricular books, if any)					
Main references (sources)			Aplay system of orthopedics and fracture		
Recommended books and references (scientific journals, reports...)					
Electronic References, Websites			Nabiel Ebrahim orthopedic teaching education program (on line)		

Course Description Form

1. Course Name:					
Anatomy of lower limb					
2. Course Code:					
3. Semester / Year:					
Second Semester / First					
4. Description Preparation Date:					
20/ 10/ 2024					
5. Available Attendance Forms:					
6. Number of Credit Hours (Total) / Number of Units (Total)					
3*15=45 hours \ 3 Units					
7. Course administrator's name (mention all, if more than one name)					
Name: Wegdan Hanoun Atiya E-mail: wegdan.atiya@atu.edu.iq					
8. Course Objectives					
1-After finishing of study, the graduate able to know the relationship between function of bone, joint, nerve vessels and muscle Lower limb. 2-After finishing of study the graduate able to know the body organs one, joint, nerve vessels and muscles of Lower limb.					
9. Teaching and Learning Strategies					
Strategy		1- Theoretical lectures with the use of images, illustrations and Data show 2- Practical applications of theoretical lectures 3- Practical training in workshops specialized in manufacturing limbs			
10. Course Structure					
Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	3	The muscle of anterior border of Leg reign (origin, insertion and action)	The muscle of anterior border of Leg reign (origin, insertion and action)	Giving a lecture using visual aids	Questions and Exams Oral Questions Discussion Pract Exam Reports
2	3	The muscle of posterior Leg reign (origin, insertion and action)	The muscle of posterior Leg reign (origin, insertion and action)	Giving a lecture using visual aids	Questions and Exams Oral Questions Discussion Pract Exam Reports
3	3	The superficial muscles of Foot reign (origin, insertion and action)	The superficial muscles of Foot reign (origin, insertion and action)	Giving a lecture using visual aids	Questions and Exams Oral Questions Discussion Pract Exam Reports
4	3	The deep muscles of Foot reign (origin, insertion and action)	The deep muscles of Foot reign (origin, insertion and action)	Giving a lecture using visual aids	Questions and Exams Oral Questions

					Discussion Pract Exam Reports
5	3	Neurophysiology Syna Communication Neuromusc Junctions	Neurophysiology Syna Communication Neuromusc Junctions	Giving a lecture using visual aids	Questions and Exa Oral Questions Discussion Pract Exam Reports
6	3	The kind of Joints ,The Hip joi	The kind of Joints ,The joint	Giving a lecture using visual aids	Questions and Exa Oral Questions Discussion Pract Exam Reports
7	3	The Knee joint	The Knee joint	Giving a lecture using visual aids	Questions and Exa Oral Questions Discussion Pract Exam Reports
8	3	The Ankle joint	The Ankle joint	Giving a lecture using visual aids	Questions and Exa Oral Questions Discussion Pract Exam Reports
9	3	The Foot joints	The Foot joints	Giving a lecture using visual aids	Questions and Exa Oral Questions Discussion Pract Exam Reports
10	3	Interlocution of Nervous system	Interlocution of Nerv system	Giving a lecture using visual aids	Questions and Exa Oral Questions Discussion Pract Exam Reports
11-12	3	Nervous System Pathways Processing Sensory Pathw Motor Pathways	Nervous System Pathw and Processing Sens Pathways: Motor Pathw	Giving a lecture using visual aids	Questions and Exa Oral Questions Discussion Pract Exam Reports
13	3	The Nerve supply of the Lo limb	The Nerve supply of Lower limb	Giving a lecture using visual aids	Questions and Exa Oral Questions Discussion Pract Exam Reports
14	3	The Sciatic nerve	The Sciatic nerve	Giving a lecture using visual aids	Questions and Exa Oral Questions Discussion Pract Exam Reports
15	3	The blood supply (Arterial Venous) of Lower limb	The blood supply (Arte and Venous) of Lower l	Giving a lecture using visual aids	Questions and Exa Oral Questions Discussion Pract Exam Reports

11. Course Evaluation

Distributing the score out of 100 according to the tasks assigned to the student such as daily preparation, daily oral, monthly, or written exams, reports etc

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)

Atlas of human body
The human body.

Main references (sources)

Principles of anatomy and physiology.

Recommended books and references (scientific journals, reports...)

Electronic References, Websites

Course Description Form

1. Course Name:

Principles of Clinical Examination

2. Course Code:

3. Semester / Year:

Second Semester / First

4. Description Preparation Date:

20/ 10/ 2024

5. Available Attendance Forms:

6. Number of Credit Hours (Total) / Number of Units (Total)

2*15=30 hours \ 2 Units

7. Course administrator's name (mention all, if more than one name)

Name: Doaa Yousif Mohammed

E-mail: doaa.mohammed@atu.edu.iq

8. Course Objectives

1- General objective:

the graduate will be able to systematically assessing a patient's physical and mental status to diagnose and manage medical conditions.

2-Special objective:

skills, and ethical understanding necessary to perform thorough and effective clinical examinations and contribute to high-quality patient care.

9. Teaching and Learning Strategies

Strategy

- 1- Theoretical lectures with the use of images, illustrations and Data show
- 2- Practical applications of theoretical lectures
- 3- Practical training in workshops specialized in manufacturing limbs

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1,2	2	Introduction Overview to Health Assessment	Introduction Overview to Health Assessment	Giving a lecture using visual aids	Questions Exams Questions Discussion Pract Exam Reports
3	2	General Assessment	General Assessment	Giving a lecture using visual aids	Questions Exams Questions Discussion Pract Exam Reports

4,5	2	Physical Examination Techniques	Physical Examination Techniques	Giving a lecture using visual aids	Questions Exams Questions Discussion Practical Exam Reports
6	2	Specific System Assessment :cardiovascular	Specific System Assessment :cardiovascular	Giving a lecture using visual aids	Questions Exams Questions Discussion Practical Exam Reports
7	2	Respiratory assessment	Respiratory assessment	Giving a lecture using visual aids	Questions Exams Questions Discussion Practical Exam Reports
8	2	Peripheral Assessment	Peripheral Assessment	Giving a lecture using visual aids	Questions Exams Questions Discussion Practical Exam Reports
9,10	2	Neurological System	Neurological System	Giving a lecture using visual aids	Questions Exams Questions Discussion Practical Exam Reports
11,12	2	Musculoskeletal System	Musculoskeletal System	Giving a lecture using visual aids	Questions Exams Questions Discussion Practical Exam Reports
13	2	Abdominal Assessment	Abdominal Assessment	Giving a lecture using visual aids	Questions Exams Questions Discussion Practical Exam Reports
14	2	Integumentary System Assessment	Integumentary System Assessment	Giving a lecture using visual aids	Questions Exams Questions Discussion Practical Exam Reports
15	2	Final Test	Final Test	Giving a lecture using visual aids	Questions Exams Questions Discussion Practical Exam Reports

11. Course Evaluation

Distributing the score out of 100 according to the tasks assigned to the student such as daily preparation, daily oral, monthly, or written exams, reports etc

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)

Main references (sources)

Health Assessment

Recommended books and references (scientific journals, reports...)

Electronic References, Websites

Course Description Form

1. Course Name:					
Computer Application (2)					
2. Course Code:					
3. Semester / Year:					
Second Semester / First					
4. Description Preparation Date:					
20/ 10/ 2024					
5. Available Attendance Forms:					
6. Number of Credit Hours (Total) / Number of Units (Total)					
3*15=45 hours \ 3 Units					
7. Course administrator's name (mention all, if more than one name)					
Name: Nejood Abid Yassir Abadi					
E-mail: nedaa.duhan.idi17@atu.edu.iq					
8. Course Objectives					
<p>1- - General objective:</p> <p>- Providing the student with skills in dealing with basic office applications and creating office files and documents, using the operating system as well as the basics of working within the digital environment.</p> <p>1- Specific objective</p> <p>- Providing the student with knowledge in managing and using various computer applications</p>					
9. Teaching and Learning Strategies					
Strategy		<p>1- Theoretical lectures with the use of images, illustrations and Data show</p> <p>2- Practical applications of theoretical lectures</p> <p>3- Practical training in workshops specialized in manufacturing limbs</p>			
10. Course Structure					
Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	3	Microsoft Word 2010 Run Microsoft Word 20	Microsoft Word 2010 Run Microsoft Word 2	Giving a lecture using visual aids	Exams questions oral discussion
2	3	Microsoft Word 2 Interface	Microsoft Word 2 Interface	Giving a lecture using visual aids	Exams questions oral discussion
3	3	File Tab, Home Tab	File Tab, Home Tab	Giving a lecture using visual aids	Exams questions oral discussion
4	3	Page Layout Tab, View Tab	Page Layout Tab, View Tab	Giving a lecture using visual aids	Exams questions oral discussion
5	3	Insert objects in Microsoft Word 2010	Insert objects in Microsoft Word 2010	Giving a lecture using visual aids	Exams questions oral discussion
6	3	Insert tab and Pages gro	Insert tab and Pages gr	Giving a lecture using visual aids	Exams questions oral discussion

7	3	Tables group	Tables group	Giving a lecture using visual aids	Exams questions oral discussion
8	3	Tables group	Tables group	Giving a lecture using visual aids	Exams questions oral discussion
9	3	Illustrations group	Illustrations group	Giving a lecture using visual aids	Exams questions oral discussion
10	3	Links group, Header Footer group	Links group, Header Footer group	Giving a lecture using visual aids	Exams questions oral discussion
11	3	Text group, Symbols Group	Text group, Symbols Group	Giving a lecture using visual aids	Exams questions oral discussion
12	3	Additional tasks for Microsoft Word 2010	Additional tasks for Microsoft Word 2010	Giving a lecture using visual aids	Exams questions oral discussion
13	3	Open a new folder and save it on the desktop - Add and edit slides (s and title, title with cont two contents, sub content with comment, blank slide, image with comment)	Open a new folder and save it on the desktop - Add and edit slides (s and title, title with cont two contents, sub content with comment, blank slide, image with comment)	Giving a lecture using visual aids	Exams questions oral discussion
14	3	Add theme -Main presentation group -Add animations, set t and repeat the entire slide differently for each slide	Add theme -Main presentation group -Add animations, set t and repeat the entire slide differently for each slide	Giving a lecture using visual aids	Exams questions oral discussion
15	3	Add animations to slides	Add animations to slides	Giving a lecture using visual aids	Exams questions oral discussion

11. Course Evaluation

Distributing the score out of 100 according to the tasks assigned to the student such as daily preparation, daily oral, monthly, or written exams, reports etc

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	
Main references (sources)	
Recommended books and references (scientific journals, reports...)	Computer Basics and Office Applications (Part Two)
Electronic References, Websites	

Course Description Form

1. Course Name:					
Arabic Language					
2. Course Code:					
3. Semester / Year:					
Second Semester / First					
4. Description Preparation Date:					
20/ 10/ 2024					
5. Available Attendance Forms:					
6. Number of Credit Hours (Total) / Number of Units (Total)					
2*15=30 hours \ 2 Units					
7. Course administrator's name (mention all, if more than one name)					
Name: Hayder Ealan Abbas E-mail: hayder.ealan.idi@atu.edu.iq					
8. Course Objectives					
1- General objective The student acquires skills in dealing with Arabic vocabulary and common linguistic errors Specific objective The student acquires knowledge in managing administrative correspondence and what is the language administrative discourse					
9. Teaching and Learning Strategies					
Strategy		1- Theoretical lectures with the use of images, illustrations and Data show 2- Practical applications of theoretical lectures 3- Practical training in workshops specialized in manufacturing limbs			
10. Course Structure					
Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	2	Introduction to linguistic errors - the tied and long taa and the open ta	Introduction linguistic errors - tied and long taa and the o taa	Giving a lecture using visual aids	Exams questions oral discussion
2	2	Rules for writing the short and extended alif - the solar and lunar letters	Rules for writing short and extended alif the solar and lunar letters	Giving a lecture using visual aids	Exams questions oral discussion
3	2	Dhad and Dhad	Dhad and Dhad	Giving a lecture using visual aids	Exams questions oral discussion
4	2	Writing the Hamza	Writing the Hamza	Giving a lecture using visual aids	Exams questions oral discussion

5	2	Punctuation marks	Punctuation marks	Giving a lecture using visual aids	Exams questions oral discussion
6	2	Noun and verb and difference between them	Noun and verb and difference between them	Giving a lecture using visual aids	Exams questions oral discussion
7	2	Objects	Objects	Giving a lecture using visual aids	Exams questions oral discussion
8	2	Number	Number	Giving a lecture using visual aids	Exams questions oral discussion
9-10	2	Applications of common linguistic errors	Applications common linguistic errors	Giving a lecture using visual aids	Exams questions oral discussion
11	2	Nun and Tanween -Meanings of prepositions	Nun and Tanween -Meanings prepositions	Giving a lecture using visual aids	Exams questions oral discussion
12	2	Formal aspects administrative discourse	Formal aspects administrative discourse	Giving a lecture using visual aids	Exams questions oral discussion
13-14	2	Administrative Discourse Language	Administrative Discourse Language	Giving a lecture using visual aids	Exams questions oral discussion
15	2	Samples of Administrative Correspondence	Samples Administrative Correspondence	Giving a lecture using visual aids	Exams questions oral discussion

11. Course Evaluation

Distributing the score out of 100 according to the tasks assigned to the student such as daily preparation, daily oral, monthly, or written exams, reports etc

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	
Main references (sources)	
Recommended books and references (scientific journals, reports...)	
Electronic References, Websites	

Course Description Form

1. Course Name:					
Manufacture orthosis below knee joint					
2. Course Code:					
3. Semester / Year:					
Second Semester / First					
4. Description Preparation Date:					
20/ 10/ 2024					
5. Available Attendance Forms:					
6. Number of Credit Hours (Total) / Number of Units (Total)					
17*15=255 hours \ 17 Units					
7. Course administrator's name (mention all, if more than one name)					
Name: Ahmed Hassan Beawi E-mail: ahmed.beaioy@atu.edu.iq					
8. Course Objectives					
1- General objective: After finishing of study, the graduate will be able to know the steps of Orthosis manufacture 2- Special objective: After finishing of study, the graduate able to: <ol style="list-style-type: none"> 1- How to check the non-amputee 2- How to manufacture the Orthosis 3- Know the types of Orthosis 					
9. Teaching and Learning Strategies					
Strategy		1- Theoretical lectures with the use of images, illustrations and Data show 2- Practical applications of theoretical lectures 3- Practical training in workshops specialized in manufacturing limbs			
10. Course Structure					
Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	17	History of Ortho Introduction	History of Ortho Introduction	Giving a lecture using visual aids	Questions and Exams Questions and Discussions Reports Practical Exam
2	17	Pathology of the foot Insensate foot(FO)	Pathology of the foot Insensate foot(FO)	Giving a lecture using visual aids	Questions and Exams Questions and Discussions Reports Practical Exam
3	17	FO Design prescription	FO Design prescription	Giving a lecture using visual aids	Questions and Exams Questions and Discussions Reports Practical Exam
4	17	Casting for FO	Casting for FO	Giving a lecture using visual aids	Questions and Exams Questions and Discussions Reports Practical Exam
5	17	Rectification for FO, Footwear ,Modification	Rectification for FO, Footwear ,Modification	Giving a lecture using visual aids	Questions and Exams Questions and Discussions Reports Practical Exam

6	17	Fitting a FO	Fitting a FO	Giving a lecture using visual aids	Questions and Exams Questions and Discussions Reports Practical Exam
7	17	Checkout of a FO	Checkout of a FO	Giving a lecture using visual aids	Questions and Exams Questions and Discussions Reports Practical Exam
8	17	(AFO) Introduction,	(AFO) Introduction	Giving a lecture using visual aids	Questions and Exams Questions and Discussions Reports Practical Exam
9	17	(AFO) Design components,	(AFO) Design components,	Giving a lecture using visual aids	Questions and Exams Questions and Discussions Reports Practical Exam
10	17	(AFO) Prescription Criteria	(AFO) Prescription Criteria	Giving a lecture using visual aids	Questions and Exams Questions and Discussions Reports Practical Exam
11	17	Review of pathol AFO	Review of pathol AFO	Giving a lecture using visual aids	Questions and Exams Questions and Discussions Reports Practical Exam
12	17	Casting technique Modification procedures AFO	Casting technique Modification procedures AFO	Giving a lecture using visual aids	Questions and Exams Questions and Discussions Reports Practical Exam
13	17	Fabrication of devices, Pathological Gait AFO, Orthotic Checkout AFO	Fabrication of devices, Pathological AFO, Orthotic Checkout AFO	Giving a lecture using visual aids	Questions and Exams Questions and Discussions Reports Practical Exam
14	17	KO Introduction	KO Introduction	Giving a lecture using visual aids	Questions and Exams Questions and Discussions Reports Practical Exam
15	17	KO design, component Function	KO design, components, Function	Giving a lecture using visual aids	Questions and Exams Questions and Discussions Reports Practical Exam

11. Course Evaluation

Distributing the score out of 100 according to the tasks assigned to the student such as daily preparation, daily oral, monthly, or written exams, reports etc

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	- كتاب تشريح جسم الانسان (منهجي) - علم التشريح لطلاب كلية التربية الرياضية د. قيس ابراهيم الدوري ، 1980 3- Atlas of human body 4- Principles of anatomy and physiology
Main references (sources)	
Recommended books and references (scientific journals, reports...)	
Electronic References, Websites	

Course Description Form

1. Course Name:					
Biomechanical of orthosis (Level 1.2 and trunk)					
2. Course Code:					
3. Semester / Year:					
First Semester / Second					
4. Description Preparation Date:					
20/ 10/ 2024					
5. Available Attendance Forms:					
6. Number of Credit Hours (Total) / Number of Units (Total)					
3*15=45 hours \ 3 Units					
7. Course administrator's name (mention all, if more than one name)					
Name: Farah Kamil Abid Muslim E-mail: dw.frh@atu.edu.iq					
8. Course Objectives					
<p>1- General objective: After finishing of study, the graduate will be able to:</p> <p>1- How to distribute the ideal forces for deformities treatment. 2- How to alignment in good way.</p> <p>Special objective: After finishing of study, the graduate able to know the principle of biomechanics and the fundamental for applied</p>					
9. Teaching and Learning Strategies					
Strategy		<p>1- Theoretical lectures with the use of images, illustrations and Data show 2- Practical applications of theoretical lectures 3- Practical training in workshops specialized in manufacturing limbs</p>			
10. Course Structure					
Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	3	Introduction in biomechanics of Orthosis View and apply biomechanics principles in Orthosis	Introduction in biomechanics of Orthosis View and apply biomechanics principles Orthosis	Giving a lecture using visual aids	Questions and Exams Questions and Discussions Reports Practical Exam
2	3	The effect of forces moment on the body Application for effect of forces moment on the body	The effect of forces moment on the body Application for the effect forces and moment on body	Giving a lecture using visual aids	Questions and Exams Questions and Discussions Reports Practical Exam
3	3	Study the difference between pressure, stress and strain	Study the difference between pressure, stress and strain	Giving a lecture using visual aids	Questions and Exams Questions and Discussions Reports Practical Exam

		View the difference between pressure, stress and strain	View the difference between pressure, stress and strain		
4	3	The types of loading structure and the distribution of load distortions of plantar vault Application of distribution of load & distortions of plantar vault	The types of loading structure and the distribution of load distortions of plantar vault Application of the distribution of load & distortions of plantar vault	Giving a lecture using visual aids	Questions and Exams Questions and Discussions Reports Practical Exam
5	3	Determination of posture indices View the right method to determine the foot posture indices	Determination of foot posture indices View the right method to determine the foot posture indices	Giving a lecture using visual aids	Questions and Exams Questions and Discussions Reports Practical Exam
6	3	The effect of Wind Mechanism in the normal gait Application of Windlass Mechanism	The effect of Wind Mechanism in the normal gait Application of the Wind Mechanism	Giving a lecture using visual aids	Questions and Exams Questions and Discussions Reports Practical Exam
7	3	The distribution of forces in the foot orthosis Application of distribution of forces in the foot orthosis	The distribution of the forces in the foot orthosis Application of the distribution of the forces in the foot orthosis	Giving a lecture using visual aids	Questions and Exams Questions and Discussions Reports Practical Exam
8	3	The biomechanics of Foot deformities and its correction Application of the biomechanics of Foot deformities and its Correction	The biomechanics of Foot deformities and its correction Application of the biomechanics of Foot deformities and its Correction	Giving a lecture using visual aids	Questions and Exams Questions and Discussions Reports Practical Exam
9	3	The structure and motion axis of the subtalar and ankle joint View structure of subtalar and ankle joint and its motion	The structure and the motion axis of the subtalar and ankle joint View structure of subtalar and ankle joint and its motion	Giving a lecture using visual aids	Questions and Exams Questions and Discussions Reports Practical Exam
10	3	The types of Foot Deformities & its compensate and effect in the distribution of weight line View Foot Deformities & its compensate and effect in the distribution of weight line	The types of Foot Deformities & its compensate and effect in the distribution of weight line View Foot Deformities & its compensate and effect in the distribution of weight line	Giving a lecture using visual aids	Questions and Exams Questions and Discussions Reports Practical Exam
11	3	Anatomical & Biomechanical axis of ankle joint principles of ankle foot orthosis	Anatomical & Biomechanical axis of ankle joint principles of ankle foot orthosis	Giving a lecture using visual aids	Questions and Exams Questions and Discussions Reports Practical Exam
12	3	The biomechanical functions of the	The biomechanical functions of the	Giving a lecture using visual aids	Questions and Exams Questions and Discussions Reports Practical Exam

		Ankle Foot Orthosis, The corrective Control Systems	Ankle Foot Orthosis, The corrective Control Systems		
13	3	The types of hind foot deformity and its effect in the distribution of weight line	The types of hind foot deformity and its effect in the distribution of weight line	Giving a lecture using visual aids	Questions and Exams Questions and Discussions Reports Practical Exam
14	3	The structure and the range of motion for Spinal	The structure and the range of motion for Spinal	Giving a lecture using visual aids	Questions and Exams Questions and Discussions Reports Practical Exam
15	3	The types of spinal deformities, and how we can distribute corrections forces	The types of spinal deformities, and how we can distribute corrections forces	Giving a lecture using visual aids	Questions and Exams Questions and Discussions Reports Practical Exam

11. Course Evaluation

Distributing the score out of 100 according to the tasks assigned to the student such as daily preparation, daily oral, monthly, or written exams, reports etc

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	1-Education for orthopedic technician part 3,4,5 and 6
Main references (sources)	
Recommended books and references (scientific journals, reports...)	
Electronic References, Websites	

Course Description Form

1. Course Name:					
Limbs diseases and deformities					
2. Course Code:					
3. Semester / Year:					
First Semester / Second					
4. Description Preparation Date:					
20/ 10/ 2024					
5. Available Attendance Forms:					
6. Number of Credit Hours (Total) / Number of Units (Total)					
2*15=30 hours \ 2 Units					
7. Course administrator's name (mention all, if more than one name)					
Name: Ali Sajid E-mail: alisajed@gmail.com					
8. Course Objectives					
<p>General objective: After finishing of study, the graduate will able to identify the limbs diseases, its consequences on the human body and deformities could be happened, diagnosis and treatment, also to know the different deformities.</p> <p>Special objective: After finishing of study, the graduate will able to:</p> <p>1- Know the different diseases which could affect the limbs. 2- Identify the different body deformities and the causes of them</p>					
9. Teaching and Learning Strategies					
Strategy		1- Theoretical lectures with the use of images, illustrations and Data show 2- Practical applications of theoretical lectures 3- Practical training in workshops specialized in manufacturing limbs			
10. Course Structure					
Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	2	Orthopedic clin method.	Orthopedic clin method.	Giving a lecture using visual aids	Questions and Exams Questions and Discus Reports Practical Exam
2	2	Foot and ar deformities	Foot and ar deformities	Giving a lecture using visual aids	Questions and Exams Questions and Discus Reports Practical Exam
3	2	Club foot deformity	Club foot deformity	Giving a lecture using visual aids	Questions and Exams Questions and Discus Reports Practical Exam
4	2	Knee deformi (valgus, Varus, valgus, va hyperextension.)	Knee deformi (valgus, Varus, valgus, va hyperextension.)	Giving a lecture using visual aids	Questions and Exams Questions and Discus Reports Practical Exam

5	2	Hip deformities(DI Perthes, SCFE)	Hip deformities(DI Perthes, SCFE)	Giving a lecture using visual aids	Questions and Exams Questions and Discus Reports Practical Exam
6	2	Osteoarthritis disease deformities,	Osteoarthritis dise and deformities,	Giving a lecture using visual aids	Questions and Exams Questions and Discus Reports Practical Exam
7	2	Rheumatoid arth disease and deformities.	Rheumatoid arth disease and deformities.	Giving a lecture using visual aids	Questions and Exams Questions and Discus Reports Practical Exam
8	2	Short limb, cau management in gener	Short limb, cau management in gener	Giving a lecture using visual aids	Questions and Exams Questions and Discus Reports Practical Exam
9	2	Osteoarthritis disease deformities,	Osteoarthritis dise and deformities,	Giving a lecture using visual aids	Questions and Exams Questions and Discus Reports Practical Exam
10	2	Poliomyelitis	Poliomyelitis	Giving a lecture using visual aids	Questions and Exams Questions and Discus Reports Practical Exam
11	2	Fractures, introduc ,types, causes heal complications	Fractures, introduc ,types, causes heal complications	Giving a lecture using visual aids	Questions and Exams Questions and Discus Reports Practical Exam
12	2	Fracture, physiotherap use of orthosis	Fracture, physiotherap use of orthosis	Giving a lecture using visual aids	Questions and Exams Questions and Discus Reports Practical Exam
13	2	Diabetic foot, ulcer, types ,orthosis uses	Diabetic foot, ulcer, types ,orthosis uses	Giving a lecture using visual aids	Questions and Exams Questions and Discus Reports Practical Exam
14	2	Diabetic charcotneuropathic disease and use orthosis	Diabetic charcotneuropathic disease and use orthosis	Giving a lecture using visual aids	Questions and Exams Questions and Discus Reports Practical Exam
15	2	Locomotore dise charcotemarie tooth disease	Locomotore dise charcotemarie tooth disease	Giving a lecture using visual aids	Questions and Exams Questions and Discus Reports Practical Exam

11. Course Evaluation

Distributing the score out of 100 according to the tasks assigned to the student such as daily preparation, daily oral, monthly, or written exams, reports etc

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	1- Aplay system of orthopedics and fracture 2- Nabel Ebrahim orthopedic teaching educat program (on line)
Main references (sources)	
Recommended books and references (scientific journals, reports...)	
Electronic References, Websites	

Course Description Form

1. Course Name:

Anatomy of the upper limbs

2. Course Code:

3. Semester / Year:

First Semester / Second

4. Description Preparation Date:

20/ 10/ 2024

5. Available Attendance Forms:

6. Number of Credit Hours (Total) / Number of Units (Total)

3*15=45 hours \ 3 Units

7. Course administrator's name (mention all, if more than one name)

Name: Lubba Abed Alraheem Stiwey

E-mail: lubna.shtiwey@atu.edu.iq

8. Course Objectives

General objective:

After finishing of study, the graduate able to know the relationship between function of bone, joint, nerve vessels and muscles of Upper limbs.

Special objective:

After finishing of study, the graduate able to know the body organs one, joint, nerve vessels and muscles of upper limbs.

9. Teaching and Learning Strategies

Strategy

- 1- Theoretical lectures with the use of images, illustrations and Data show
- 2- Practical applications of theoretical lectures
- 3- Practical training in workshops specialized in manufacturing limbs

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	3	Basic anatomy: Introduction to anatomy, definition, subdivisions, Body Cavities, Body Regions, anatomical position, terms related to movement and planes.	Basic anatomy: Introduction to anatomy, definition, subdivisions, Body Cavities, Body Regions, anatomical position, terms related to movement, planes.	Giving a lecture and using visual aids	Questions and Ex Oral Questions Discussion Rep Practical Exam
2	3	Skeletal system, Cartilage and types, Bone, classification, development Ossification. the axial skeleton, appendicular skeleton	Skeletal system, Cartilage, and types, Bone, classification, development Ossification. the axial skeleton, appendicular skeleton	Giving a lecture and using visual aids	Questions and Ex Oral Questions Discussion Rep Practical Exam
3	3	Bone of Upper extremity- Clavicle bones, Bone of Scapula	Bone of Upper extremity- Clavicle bones, Bone of Scapula	Giving a lecture and using visual aids	Questions and Ex Oral Questions

					Discussion Practical Exam	Rep
4	3	Bone of Humerus	Bone of Humerus	Giving a lec and using vis aids	Questions and Ex Oral Questions Discussion Practical Exam	Rep
5	3	Bone of Ulna	Bone of Ulna	Giving a lec and using vis aids	Questions and Ex Oral Questions Discussion Practical Exam	Rep
6	3	Bone of Radius, Bones of Hand	Bone of Radius, Bones of Hand	Giving a lec and using vis aids	Questions and Ex Oral Questions Discussion Practical Exam	Rep
7	3	Shoulder (Pectoral) Girdle bones, muscles, movement, Musculoskeletal of the (Thoracic Wall)	Shoulder (Pectoral) Girdle bones, muscles, movement, Musculoskeletal of the (Thoracic Wall)	Giving a lec and using vis aids	Questions and Ex Oral Questions Discussion Practical Exam	Rep
8	3	The shoulder joint, movements, Muscles of the Shoulder Joint, Common Shoulder Pathologies	The shoulder joint, movements, Muscles of the Shoulder Joint, Common Shoulder Pathologies	Giving a lec and using vis aids	Questions and Ex Oral Questions Discussion Practical Exam	Rep
9	3	The muscles of ante border of Arm reign (ori insertion and action)	The muscles of anterior bor of Arm reign (origin, inser and action)	Giving a lec and using vis aids	Questions and Ex Oral Questions Discussion Practical Exam	Rep
10	3	The muscles of poste border of Arm reign (ori insertion and action)	The muscles of poste border of Arm reign (ori insertion and action)	Giving a lec and using vis aids	Questions and Ex Oral Questions Discussion Practical Exam	Rep
11	3	Elbow complex, Structure and Motions, Bones and muscles of forearm	Elbow complex, Structure and Motions, Bones and muscles of forearm	Giving a lec and using vis aids	Questions and Ex Oral Questions Discussion Practical Exam	Rep
12	3	Wrist Joint, bones, muscle Motions, hand, bones , muscles, Joints Motions (2)	Wrist Joint, bones, muscle Motions, hand, bones , muscles, Joints Motions (2)	Giving a lec and using vis aids	Questions and Ex Oral Questions Discussion Practical Exam	Rep
13	3	The superficial muscles of Hand reign (origin, insertion and actio	The superficial muscles of Hand reign (origin, insertion and actio	Giving a lec and using vis aids	Questions and Ex Oral Questions Discussion Practical Exam	Rep
14	3	The deep muscles of Hand reign (origin, insertion and action)	The deep muscles of Hand reign (origin, insertion and action)	Giving a lec and using vis aids	Questions and Ex Oral Questions Discussion Practical Exam	Rep
15	3	The Nerve supply of Upper limb	The Nerve supply of Upper limb	Giving a lec and using vis aids	Questions and Ex Oral Questions Discussion Practical Exam	Rep

11. Course Evaluation

Distributing the score out of 100 according to the tasks assigned to the student such as daily preparation, daily oral, monthly, or written exams, reports etc

12. Learning and Teaching Resources

Required textbooks (curricular books, if any) | 1- Atlas of human body

- | | |
|--|--|
| | 2- Principles of anatomy and physiology)1
3- كتاب تشريح جسم الانسان (منهجي)
2- علم التشريح لطلاب كلية التربية الرياضية د. قيس ابراهيم الدوري ، 1980 |
| Main references (sources) | |
| Recommended books and references (scientific journals, reports...) | |
| Electronic References, Websites | |

Course Description Form

1. Course Name:					
Properties of material					
2. Course Code:					
3. Semester / Year:					
First Semester / Second					
4. Description Preparation Date:					
20/ 10/ 2024					
5. Available Attendance Forms:					
6. Number of Credit Hours (Total) / Number of Units (Total)					
2*15=30 hours \ 2 Units					
7. Course administrator's name (mention all, if more than one name)					
Name: Mohannad Aziz Kadhom					
E-mail: mohannad_a_kadhom@atu.du.iq					
8. Course Objectives					
<p>General objective: After finishing of study, the graduate will be able to</p> <ol style="list-style-type: none"> 1- Know the principle of strength material that use for prosthesis and orthosis. 2- The characteristic of the material that use in prosthetic manufacturing <p>Special objective: After finishing of study, the graduate able to select the material for prosthesis and orthosis manufacturing.</p>					
9. Teaching and Learning Strategies					
Strategy		1- Theoretical lectures with the use of images, illustrations and Data show 2- Practical applications of theoretical lectures 3- Practical training in workshops specialized in manufacturing limbs			
10. Course Structure					
Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	2	Introduction of mater Properties	Introduction materials Propertie	Giving a lecture using visual aids	Questions and Exams Questions and Discus Reports Practical Exam
2	2	Static and Dyna parameter	Static and Dyna parameter	Giving a lecture using visual aids	Questions and Exams Questions and Discus Reports Practical Exam
3	2	Hook law, young modu	Hook law, yo modules	Giving a lecture using visual aids	Questions and Exams Questions and Discus Reports Practical Exam
4	2	Ductility, Brittlenn Impact	Ductility, Brittlenn Impact	Giving a lecture using visual aids	Questions and Exams Questions and Discus Reports Practical Exam

5	2	Mechanical behavior of solid material	Mechanical behavior of solid material	Giving a lecture using visual aids	Questions and Exams Questions and Discussions Reports Practical Exam
6	2	Proportional limit, yield point	Proportional limit yield point	Giving a lecture using visual aids	Questions and Exams Questions and Discussions Reports Practical Exam
7	2	(U.T.S) point	(U.T.S) point	Giving a lecture using visual aids	Questions and Exams Questions and Discussions Reports Practical Exam
8	2	Fracture and its kinds	Fracture and its kinds	Giving a lecture using visual aids	Questions and Exams Questions and Discussions Reports Practical Exam
9	2	Fatigue and Creep	Fatigue and Creep	Giving a lecture using visual aids	Questions and Exams Questions and Discussions Reports Practical Exam
10	2	Hardness and measurements Methods	Hardness and measurements Methods	Giving a lecture using visual aids	Questions and Exams Questions and Discussions Reports Practical Exam
11	2	Iron alloy's and steel alloy's	Iron alloy's and steel alloy's	Giving a lecture using visual aids	Questions and Exams Questions and Discussions Reports Practical Exam
12	2	Aluminum, Titanium and magnesium	Aluminum, Titanium and magnesium	Giving a lecture using visual aids	Questions and Exams Questions and Discussions Reports Practical Exam
13	2	Rubber and Leather and its properties	Rubber and Leather and its properties	Giving a lecture using visual aids	Questions and Exams Questions and Discussions Reports Practical Exam
14	2	Thermoplastic, H.T plastic pp.rt . pvc. Acp.	Thermoplastic, plastic pp.rt . pvc. Acp.	Giving a lecture using visual aids	Questions and Exams Questions and Discussions Reports Practical Exam
15	2	Thermosetting, L.T plastic and its application	Thermosetting, L.T plastic and its application	Giving a lecture using visual aids	Questions and Exams Questions and Discussions Reports Practical Exam

11. Course Evaluation

Distributing the score out of 100 according to the tasks assigned to the student such as daily preparation, daily oral, monthly, or written exams, reports etc

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	Strength of material , by Singer Pytd
Main references (sources)	
Recommended books and references (scientific journals, reports...)	
Electronic References, Websites	

Course Description Form

1. Course Name:

Prosthetic of upper limb

2. Course Code:

3. Semester / Year:

First Semester / Second

4. Description Preparation Date:

20/ 10/ 2024

5. Available Attendance Forms:

6. Number of Credit Hours (Total) / Number of Units (Total)

5*15 = 75 hours \ 5 Units

7. Course administrator's name (mention all, if more than one name)

Name: Doaa Yousif Mohammed

E-mail: doaa.mohammed@atu.edu.iq

8. Course Objectives

General objective:

After finishing of study, the graduate will be able to produce different types of upper limb prosthesis.

Special objective:

After finishing of study, the graduate able to:

- 1- Know the different types of upper limb prosthesis
- 2- Identify the suitability of each type with the amputee condition
- 3- Perform all steps needed in manufacturing any types of the upper limb prostheses
- 4- Align the prosthesis with the Amputee condition

9. Teaching and Learning Strategies

Strategy

- 1- Theoretical lectures with the use of images, illustrations and Data show
- 2- Practical applications of theoretical lectures
- 3- Practical training in workshops specialized in manufacturing limbs

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	5	Amputations of upper limbs	Amputations of upper limbs	Giving a lecture using visual aids	Questions and Exams Questions and Discussions Reports Practical Exam
2	5	Upper limb prosthetic Components	Upper limb prosthetic Components	Giving a lecture using visual aids	Questions and Exams Questions and Discussions Reports Practical Exam
3	5	Cosmetic prostheses Partial hand prostheses	Cosmetic prostheses for Partial hand prostheses	Giving a lecture using visual aids	Questions and Exams Questions and Discussions Reports Practical Exam

4	5	Cosmetic prostheses for Partial hand prostheses	Cosmetic prostheses for Partial hand prostheses	Giving a lecture using visual aids	Questions and Exams Questions and Discussions Reports Practical Exam
5	5	Cosmetic prostheses for wrist disarticulation	Cosmetic prostheses for wrist disarticulation	Giving a lecture using visual aids	Questions and Exams Questions and Discussions Reports Practical Exam
6	5	Cosmetic prostheses for wrist disarticulation	Cosmetic prostheses for wrist disarticulation	Giving a lecture using visual aids	Questions and Exams Questions and Discussions Reports Practical Exam
7	5	Cosmetic prostheses for wrist disarticulation	Cosmetic prostheses for wrist disarticulation	Giving a lecture using visual aids	Questions and Exams Questions and Discussions Reports Practical Exam
8	5	Cosmetic prostheses Below-Elbow amputation	Cosmetic prostheses Below-Elbow amputation	Giving a lecture using visual aids	Questions and Exams Questions and Discussions Reports Practical Exam
9	5	Cosmetic prostheses Above-Elbow amputation	Cosmetic prostheses Above-Elbow amputation	Giving a lecture using visual aids	Questions and Exams Questions and Discussions Reports Practical Exam
10	5	Cosmetic prostheses Above-Elbow amputation	Cosmetic prostheses Above-Elbow amputation	Giving a lecture using visual aids	Questions and Exams Questions and Discussions Reports Practical Exam
11	5	Cosmetic prostheses Above-Elbow amputation	Cosmetic prostheses Above-Elbow amputation	Giving a lecture using visual aids	Questions and Exams Questions and Discussions Reports Practical Exam
12	5	Mechanical prostheses	Mechanical prostheses	Giving a lecture using visual aids	Questions and Exams Questions and Discussions Reports Practical Exam
13	5	Mechanical prostheses	Mechanical prostheses	Giving a lecture using visual aids	Questions and Exams Questions and Discussions Reports Practical Exam
14	5	Myo-electric prosthesis below elbow	Myo-electric prosthesis below elbow	Giving a lecture using visual aids	Questions and Exams Questions and Discussions Reports Practical Exam
15	5	Myo-electric prosthesis below elbow	Myo-electric prosthesis below elbow	Giving a lecture using visual aids	Questions and Exams Questions and Discussions Reports Practical Exam

11. Course Evaluation

Distributing the score out of 100 according to the tasks assigned to the student such as daily preparation, daily oral, monthly, or written exams, reports etc

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	Education for orthopedic technician part 4
Main references (sources)	
Recommended books and references (scientific journals, reports...)	
Electronic References, Websites	

Course Description Form

1. Course Name:

Manufacture orthosis above knee joint

2. Course Code:

3. Semester / Year:

Second Semester / Second

4. Description Preparation Date:

20/ 10/ 2024

5. Available Attendance Forms:

6. Number of Credit Hours (Total) / Number of Units (Total)

17*15=255 hours \ 17 Units

7. Course administrator's name (mention all, if more than one name)

Name: Ahmed Hassan Beawi

E-mail: ahmed.beaioy@atu.edu.iq

8. Course Objectives

General objective:

After finishing of study, the graduate will be able to know the steps of Orthosis manufacture

Special objective:

After finishing of study, the graduate able to:

- 1- How to check the non-amputee
- 2- How to manufacture the Orthosis
- 3- Know the types of Orthosis

9. Teaching and Learning Strategies

Strategy

- 1- Theoretical lectures with the use of images, illustrations and Data show
- 2- Practical applications of theoretical lectures
- 3- Practical training in workshops specialized in manufacturing limbs

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	17	KAFO design, compon, function	KAFO des components ,function	Giving a lecture using visual aids	Questions and Exams Questions and Discussion Rep Practical Exam
2	17	Casting and rectific procedure for plastic KAFO,	Casting rectification proced for plastic KAFO,	Giving a lecture using visual aids	Questions and Exams Questions and Discussion Rep Practical Exam
3	17	Fabrication of Custom pla KAFO	Fabrication of Cus plastic KAFO	Giving a lecture using visual aids	Questions and Exams Questions and Discussion Rep Practical Exam
4	17	Measurement and Tra for a Conventional KAFO	Measurement Tracing for a Conventional KAFO	Giving a lecture using visual aids	Questions and Exams Questions and Discussion Rep Practical Exam

5	17	Fabrication of conventional KAFO, Hybrid KAFO	Fabrication conventional KAFO, Hybrid KAFO	Giving a lecture using visual aids	Questions and Exams Questions and Discussion Rep Practical Exam
6	17	Ischial Weight Beas KAFO	Ischial Weight Beas KAFO	Giving a lecture using visual aids	Questions and Exams Questions and Discussion Rep Practical Exam
7	17	HKAFO Introduction of pelvic girdle	HKAFO Introduction of the pelvic girdle	Giving a lecture using visual aids	Questions and Exams Questions and Discussion Rep Practical Exam
8	17	Pathology HKAFO	Pathology HKAFO	Giving a lecture using visual aids	Questions and Exams Questions and Discussion Rep Practical Exam
9	17	Introduction to spinal orthotic	Introduction to spinal orthotic	Giving a lecture using visual aids	Questions and Exams Questions and Discussion Rep Practical Exam
10	17	Introduction to spinal orthotic	Introduction to spinal orthotic	Giving a lecture using visual aids	Questions and Exams Questions and Discussion Rep Practical Exam
11	17	Pathology of the spinal orthotic	Pathology of the spinal orthotic	Giving a lecture using visual aids	Questions and Exams Questions and Discussion Rep Practical Exam
12	17	Variations of design in spinal Orthotic	Variations of design in spinal Orthotic	Giving a lecture using visual aids	Questions and Exams Questions and Discussion Rep Practical Exam
13	17	Patient Assessment and Clinical Team Spinal orthosis	Patient Assessment and the Clinical Team Spinal orthosis	Giving a lecture using visual aids	Questions and Exams Questions and Discussion Rep Practical Exam
14	17	Cast techniques for spinal orthosis,	Cast techniques for spinal orthosis,	Giving a lecture using visual aids	Questions and Exams Questions and Discussion Rep Practical Exam
15	17	Rectification, projects	Rectification, projects	Giving a lecture using visual aids	Questions and Exams Questions and Discussion Rep Practical Exam

11. Course Evaluation

Distributing the score out of 100 according to the tasks assigned to the student such as daily preparation, daily oral, monthly, or written exams, reports etc

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	Education for orthopedic technician part 3,4,5 and 6
Main references (sources)	
Recommended books and references (scientific journals, reports...)	
Electronic References, Websites	

Course Description Form

1. Course Name:

Biomechanical of orthosis (Level 3.4 and upper limb)

2. Course Code:

3. Semester / Year:

Second Semester / Second

4. Description Preparation Date:

20/ 10/ 2024

5. Available Attendance Forms:

6. Number of Credit Hours (Total) / Number of Units (Total)

3*15=45 hours \ 3 Units

7. Course administrator's name (mention all, if more than one name)

Name: Farah Kamil Abid Muslim

E-mail: dw.frh@atu.edu.iq

8. Course Objectives

General objective:

After finishing of study, the graduate will be able to:

- 1- How to distribute the ideal forces for deformities treatment.
- 2- How to alignment in good way.

Special objective:

After finishing of study, the graduate able to know the principle of biomechanics and the fundamental for applied

9. Teaching and Learning Strategies

Strategy

- 1- Theoretical lectures with the use of images, illustrations and Data show
- 2- Practical applications of theoretical lectures
- 3- Practical training in workshops specialized in manufacturing limbs

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	3	Introduction in biomechanics of Orthosis	Introduction in biomechanics of Orthosis	Giving a lecture using visual aids	Questions and Exams Questions and Discus Reports Practical Exam
2	3	The normal gait	The normal gait	Giving a lecture using visual aids	Questions and Exams Questions and Discus Reports Practical Exam
3	3	The pathological gait and its effect in the distribute of weight line	The pathological gait and its effect in the distribute weight line	Giving a lecture using visual aids	Questions and Exams Questions and Discus Reports Practical Exam
4	3	The structure and the range of motion for Knee joint	The structure and the range of motion for Knee joint	Giving a lecture using visual aids	Questions and Exams Questions and Discus Reports Practical Exam

5	3	Biomechanical considerations that effect on knee joint	Biomechanical considerations that effect on knee joint	Giving a lecture using visual aids	Questions and Exams Questions and Discussions Reports Practical Exam
6	3	Knee joint axis location and the effect of knee joint misalignment	Knee joint axis location and the effect of knee joint misalignment	Giving a lecture using visual aids	Questions and Exams Questions and Discussions Reports Practical Exam
7	3	Angular deform involving the knee joint its effect in the distribute weight line	Angular deform involving the knee joint and its effect in distribute of weight li	Giving a lecture using visual aids	Questions and Exams Questions and Discussions Reports Practical Exam
8	3	The mechanical effect of KO on knee joint	The mechanical effect of KO on knee joint	Giving a lecture using visual aids	Questions and Exams Questions and Discussions Reports Practical Exam
9	3	The effect of Wind Mechanism on the knee joint during normal gait	The effect of Wind Mechanism on the knee joint during normal gait	Giving a lecture using visual aids	Questions and Exams Questions and Discussions Reports Practical Exam
10	3	The structure and the range of motion for hip joint	The structure and the range of motion for hip joint	Giving a lecture using visual aids	Questions and Exams Questions and Discussions Reports Practical Exam
11	3	The pathological angulations of femur	The pathological angulations of femur	Giving a lecture using visual aids	Questions and Exams Questions and Discussions Reports Practical Exam
12	3	The distributing weight on hip joint	The distributing weight on hip joint	Giving a lecture using visual aids	Questions and Exams Questions and Discussions Reports Practical Exam
13	3	The mechanical effect of HKAFO on hip joint	The mechanical effect of HKAFO on hip joint	Giving a lecture using visual aids	Questions and Exams Questions and Discussions Reports Practical Exam
14	3	The biomechanics of upper limb and its range of motion	The biomechanics of upper limb and its range of motion	Giving a lecture using visual aids	Questions and Exams Questions and Discussions Reports Practical Exam
15	3	The types of upper limb orthosis, and how we can distribute the corrections	The types of upper limb orthosis, and how we can distribute the corrections	Giving a lecture using visual aids	Questions and Exams Questions and Discussions Reports Practical Exam

11. Course Evaluation

Distributing the score out of 100 according to the tasks assigned to the student such as daily preparation, daily oral, monthly, or written exams, reports etc

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	1-Education for orthopedic technician part 3,4,5 and 6
Main references (sources)	
Recommended books and references (scientific journals, reports...)	
Electronic References, Websites	

Course Description Form

1. Course Name:

Spine diseases and deformities

2. Course Code:

3. Semester / Year:

Second Semester / Second

4. Description Preparation Date:

20/ 10/ 2024

5. Available Attendance Forms:

6. Number of Credit Hours (Total) / Number of Units (Total)

2*15= 30 hours \ 2 Units

7. Course administrator's name (mention all, if more than one name)

Name: Ali Sajid

E-mail: alisajid@gmail.com

8. Course Objectives

General objective:

After finishing of study, the graduate will able to identify the spinal diseases, its consequences on the human body and deformities could be happened, diagnosis and treatment, also to know the different deformities.

Special objective:

After finishing of study, the graduate will able to:

- 1- Know the different diseases which could affect the spinal.
- 2- Identify the different body deformities and the causes of them

9. Teaching and Learning Strategies

Strategy

- 1- Theoretical lectures with the use of images, illustrations and Data show
- 2- Practical applications of theoretical lectures
- 3- Practical training in workshops specialized in manufacturing limbs

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	2	Orthopedic clinical meth	Orthopedic clinical meth	Giving a lecture using visual aids	Questions and Exams Questions and Discus Reports Practical Exam
2	2	Spinal deformities(torticollis)	Spinal deformities(torticollis)	Giving a lecture using visual aids	Questions and Exams Questions and Discus Reports Practical Exam
3	2	Spinal deformities(Kyphosis).	Spinal deformities(Kyphosis).	Giving a lecture using visual aids	Questions and Exams Questions and Discus Reports Practical Exam
4	2	Spinal deform (scoliosis).	Spinal deform (scoliosis).	Giving a lecture using visual aids	Questions and Exams Questions and Discus Reports Practical Exam

5	2	Spinal deform (lordosis).	Spinal deform (lordosis).	Giving a lecture using visual aids	Questions and Exams Questions and Discussions Reports Practical Exam
6	2	Spinal cord disease	Spinal cord disease	Giving a lecture using visual aids	Questions and Exams Questions and Discussions Reports Practical Exam
7	2	spina bifida	spina bifida	Giving a lecture using visual aids	Questions and Exams Questions and Discussions Reports Practical Exam
8	2	Neurological diseases, C	Neurological diseases, C	Giving a lecture using visual aids	Questions and Exams Questions and Discussions Reports Practical Exam
9	2	Neurological diseases, spinal cord injuries	Neurological diseases, spinal cord injuries	Giving a lecture using visual aids	Questions and Exams Questions and Discussions Reports Practical Exam
10	2	Spinal fracture introduction, types, causes ,healing	Spinal fracture introduction, types, causes ,healing	Giving a lecture using visual aids	Questions and Exams Questions and Discussions Reports Practical Exam
11	2	Spinal fracture complications	Spinal fracture complications	Giving a lecture using visual aids	Questions and Exams Questions and Discussions Reports Practical Exam
12	2	Fracture, physiotherapy, use of orthosis	Fracture, physiotherapy, use of orthosis	Giving a lecture using visual aids	Questions and Exams Questions and Discussions Reports Practical Exam
13	2	Sport injuries (spinal sport injuries &use orthosis)	Sport injuries (spinal sport injuries &use orthosis)	Giving a lecture using visual aids	Questions and Exams Questions and Discussions Reports Practical Exam
14	2	Revision	Revision	Giving a lecture using visual aids	Questions and Exams Questions and Discussions Reports Practical Exam
15	2	Examination	Examination	Giving a lecture using visual aids	Questions and Exams Questions and Discussions Reports Practical Exam

11. Course Evaluation

Distributing the score out of 100 according to the tasks assigned to the student such as daily preparation, daily oral, monthly, or written exams, reports etc

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	1-Aplay system of orthopedics and fracture 2-Nabiel Ebrahim orthopedic teaching education program (on line)
Main references (sources)	
Recommended books and references (scientific journals, reports...)	
Electronic References, Websites	

Course Description Form

1. Course Name:

Anatomy of trunk and spine

2. Course Code:

3. Semester / Year:

Second Semester / Second

4. Description Preparation Date:

20/ 10/ 2024

5. Available Attendance Forms:

6. Number of Credit Hours (Total) / Number of Units (Total)

3*15=45 hours \ 3 Units

7. Course administrator's name (mention all, if more than one name)

Name: Lubna Abed Alraheem Stiwey

E-mail: lubna.shtiwey@atu.edu.iq

8. Course Objectives

General objective:

After finishing of study, the graduate able to know the relationship between function of bone, joint, nerve vessels and muscles of trunk and spine.

Special objective:

After finishing of study, the graduate able to know the body organs one, joint, nerve vessels and muscles of trunk and spine.

9. Teaching and Learning Strategies

Strategy

- 1- Theoretical lectures with the use of images, illustrations and Data show
- 2- Practical applications of theoretical lectures
- 3- Practical training in workshops specialized in manufacturing limbs

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	3	The reign of Vertebral column- reign	The reign of Verteb column- reign	Giving a lecture using visual aids	Questions and Exams Questions and Discus Reports Practical Exam
2	3	The curve of Vertel column and development	The curve Vertebral colu and its developm	Giving a lecture using visual aids	Questions and Exams Questions and Discus Reports Practical Exam
3	3	The structure of the verte body	The structure of vertebra body	Giving a lecture using visual aids	Questions and Exams Questions and Discus Reports Practical Exam
4	3	The pelvic girdle	The pelvic girdle	Giving a lecture using visual aids	Questions and Exams Questions and Discus Reports Practical Exam

5	3	The limber Spine	The limber Spine	Giving a lecture using visual aids	Questions and Exams Questions and Discus Reports Practical Exam
6	3	The thoracic Spine	The thoracic Spine	Giving a lecture using visual aids	Questions and Exams Questions and Discus Reports Practical Exam
7	3	The cervical Spine	The cervical Spine	Giving a lecture using visual aids	Questions and Exams Questions and Discus Reports Practical Exam
8	3	The movement that we can do in our spinal	The movement that can do in our spinal	Giving a lecture using visual aids	Questions and Exams Questions and Discus Reports Practical Exam
9	3	Bone of the Thorax	Bone of the Thorax	Giving a lecture using visual aids	Questions and Exams Questions and Discus Reports Practical Exam
10	3	The anterior muscles Trunk	The anterior muscle Trunk	Giving a lecture using visual aids	Questions and Exams Questions and Discus Reports Practical Exam
11	3	The posterior muscles Trunk	The posterior muscle in Trunk	Giving a lecture using visual aids	Questions and Exams Questions and Discus Reports Practical Exam
12	3	The lateral muscles in Tr	The lateral muscle Trunk	Giving a lecture using visual aids	Questions and Exams Questions and Discus Reports Practical Exam
13	3	The general Nerve suppl Trunk	The general N supply in Trunk	Giving a lecture using visual aids	Questions and Exams Questions and Discus Reports Practical Exam
14	3	The blood supply (Arter and Venous)	The blood supply (Arterial and Venous)	Giving a lecture using visual aids	Questions and Exams Questions and Discus Reports Practical Exam
15	3	Review	Review	Giving a lecture using visual aids	Questions and Exams Questions and Discus Reports Practical Exam

11. Course Evaluation

Distributing the score out of 100 according to the tasks assigned to the student such as daily preparation, daily oral, monthly, or written exams, reports etc

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)

- كتاب تشيخ جسم الانسان (منهجي)
2- علم التشريح لطلاب كلية التربية الرياضية د. قيس ابراهيم الدوري ، 1980
3- Atlas of human body
4- Principles of anatomy and physiology

Main references (sources)

Recommended books and references (scientific journals, reports...)

Electronic References, Websites

Course Description Form

1. Course Name:					
Professional ethics					
2. Course Code:					
3. Semester / Year:					
Second Semester / Second					
4. Description Preparation Date:					
20/ 10/ 2024					
5. Available Attendance Forms:					
6. Number of Credit Hours (Total) / Number of Units (Total)					
2*15=30 hours \ 2 Units					
7. Course administrator's name (mention all, if more than one name)					
Name: Hayder Ealan Abbas E-mail: hayder.ealan.idi@atu.edu.iq					
8. Course Objectives					
<p>1- General Objective</p> <p>The course aims to introduce technical institute students to professional ethics according to their technical specialization and to provide them with professional ethical rules that enhance their commitment to them in their expected field of work after graduation.</p> <p>2- Specific Objective</p> <p>Set by the course teachers (as behavioral objectives) within the framework of the lesson plan at the level of a single lecture</p>					
9. Teaching and Learning Strategies					
Strategy		1- Theoretical lectures with the use of images, illustrations and Data show 2- Practical applications of theoretical lectures 3- Practical training in workshops specialized in manufacturing limbs			
10. Course Structure					
Week	Hou rs	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1-2	2	Ethics - The concept and origin of ethics General rules of ethics Sources of ethics- Moral values The importance of ethics for the individual and society	Ethics - The concept and origin of ethics General rules of ethics Sources of ethics- Moral values The importance of ethics for the individual and society	Giving a lecture using visual aids	Exams quest and oral discussi
3	2	Work and its importance - Work behaviors The concept of profession - Definition of profession	Work and its importance - Work behaviors The concept of profession - Definition of profession	Giving a lecture using visual aids	Exams quest and oral discussi

		The difference between the concept of work, profession and craft The standards on which profession should be based	The difference between the concept of work, profession and craft The standards on which profession should be based		
4	2	What is professional ethics? Positive returns of commitment to professional ethics Characteristics of work ethics Characteristics of professional ethics Steps to the acceptable level of professional ethics	What is professional ethics? Positive returns of commitment to professional ethics Characteristics of work ethics Characteristics of professional ethics Steps to the acceptable level of professional ethics	Giving a lecture using visual aids	Exams, questions and oral discussions
5-6	2	Trustworthiness - Honesty - Advice - Justice-Good treatment - Perfection of work	Trustworthiness - Honesty - Advice - Justice-Good treatment - Perfection of work	Giving a lecture using visual aids	Exams, questions and oral discussions
7-8	2	• Administrative corruption Unethical administrative behavior Definition of administrative corruption Types of administrative corruption • Bribery Concept of bribery Types of bribery Difference between a gift and a bribe Reasons and motives behind bribery • Cheating Concept of cheating Nature of cheating at work Manifestations of cheating on job performance	• Administrative corruption Unethical administrative behavior Definition of administrative corruption Types of administrative corruption • Bribery Concept of bribery Types of bribery Difference between a gift and a bribe Reasons and motives behind bribery • Cheating Concept of cheating Nature of cheating at work Manifestations of cheating on job performance	Giving a lecture using visual aids	Exams, questions and oral discussions
9-10	2	Means and methods of establishing professional ethics Method of establishing professional ethics Levels of building and establishing professional ethics Things that must be taken into account in formulating the ethical charter of the profession How ethical behavior is promoted at work according to (Kreitner and Kinnicki)	Means and methods of establishing professional ethics Method of establishing professional ethics Levels of building and establishing professional ethics Things that must be taken into account in formulating the ethical charter of the profession How ethical behavior is promoted at work according to (Kreitner and Kinnicki)	Giving a lecture using visual aids	Exams, questions and oral discussions
11	2	Qualities that a medical technician must possess Duties of the medical technician towards his profession	Qualities that a medical technician must possess Duties of the medical technician towards his profession	Giving a lecture using visual aids	Exams, questions and oral discussions

		Duties of the medical technician towards the patient Duties of the medical technician towards society	Duties of the medical technician towards the patient Duties of the medical technician towards society		
12	2	The concept of patient rights The importance of respecting patient rights The most important patient rights How to obtain informed consent	The concept of patient rights The importance of respecting patient rights The most important patient rights How to obtain informed consent	Giving a lecture using visual aids	Exams, questions and oral discussions
13	2	The importance of the role of the medical technician in society Areas in which the medical technician can play an effective role in society The term health promotion The role of the medical technician in health promotion	The importance of the role of the medical technician in society Areas in which the medical technician can play an effective role in society The term health promotion The role of the medical technician in health promotion	Giving a lecture using visual aids	Exams, questions and oral discussions
14	2	The importance of professional relationships The most important pillars of sound professional relationships	The importance of professional relationships The most important pillars of sound professional relationships	Giving a lecture using visual aids	Exams, questions and oral discussions
15	2	Key principles of patient education ethics How to balance the training process with providing the necessary care and treatment for patients Ways to preserve the dignity of the trainee in front of patients	Key principles of patient education ethics How to balance the training process with providing the necessary care and treatment for patients Ways to preserve the dignity of the trainee in front of patients	Giving a lecture using visual aids	Exams, questions and oral discussions

11. Course Evaluation

Distributing the score out of 100 according to the tasks assigned to the student such as daily preparation, daily oral, monthly, or written exams, reports etc

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	
Main references (sources)	
Recommended books and references (scientific journals, reports...)	
Electronic References, Websites	