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

2025

Academic Program Description Form

University Name: Al-Furat Al-Awsat Technical University
College/Institute: Al-Kufa Technical Institute
Scientific Department: Management Technologies
Academic Program Name: Professional Diploma in Academic Description
Final Certificate Title: Professional Diploma in Business Administration
Academic Degree: Diploma
Date of Description Preparation: 2025
Date of File Completion: / /2025

Signature
Department Head Name:Assist Prof. Dr. Mohanad Hamazah Hussein
Date: 1 / 2 /2025

Signature
Scientific Rapporteur Name: Asst. Prof. Dr Eyad Muslim Hamza
Date: 1 / 2 /2025

File Audited By:
Division of Quality Assurance and University Performance
Director Name: Kholoud Mudhaffar Abdul Ali
Date: 1 / 2 /2025
Signature:

Approval
Dean

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.

1. **Program Vision**
Professional in the limb manufacturing techniques department and supports local and regional leadership in the field of limb and support manufacturing, diversity in education, scientific knowledge, and meeting community requirements to learn about the latest scientific and technical innovations in this field and their applications in a way that allows for an improvement to educational quality in all fields. The team devotes its efforts to facilitating the mechanism to help provide opportunities for learning and prosperity, and to graduate them to work with knowledge of the smallest details in prosthetic limbs and how the beneficiaries live, which qualifies them to become medical doctors and not be high.

2. **Program Mission**
The Department of Limb and Support Manufacturing Technologies established the health need area for specialized service cadres with scientific specifications and standards working in the field of limbs and supports, in addition to preparing the workforce in those fields, supporting the private lawyer in this field to fill a need in that specialty, and developing the teaching and student staff in the fields of research. Scientific and Cognitive, which is the scientific association of the department and other institutions, which contributes to building societies free of diseases and problems, as well as the prospects for cooperation between the central departments and related institutions in a manner consistent with quality, giving, interaction, and high standards.
3. **Program Objectives**
The center aims to graduate advanced technical personnel to determine the knowledge and skills to carry out the manufacture of all types of combat devices and medical

supports in limb centers affiliated with government hospitals and the private sector, as well as providing technical consultations and scientific support to diagnose it and contain the relevant specialties, then scientific in the fields of manufacturing limbs, supports and obstacles of all kinds.

4. Program Accreditation

Does the program have program accreditation? And from which agency?

5. Other external influences

- Ministry of Higher Education and Scientific Research
- Ministry of Health
- ICRC
- Summer training, scientific field coordination with other universities, ministries, departments, and the private sector.

6. Program Structure

Program Structure	Number of Courses	Credit hours	Percentage	Reviews*
Institution Requirements	**7**	30		
College Requirements				
Department Requirements	**7 for each cours**	**30 units**		
Summer Training	**1**	**Satisfied**		
Other				

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

1. Program Description

Year/Level	Course Code	Course Name	Credit Hours	
			theoretical	practical
First/ first semester		Production of 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	2	
		English for Medicine and Health sciences	2	
First/ second semester		Production of prosthesis above knee joint	2	15
		Biomechanical of prostheses (level 4.5.6)	2	1
		Bone and joint diseases	2	
		Anatomy of lower limb	1	2
		Principles of clinical examination	1	1
Second/ first semester		Manufacture orthosis below knee joint	2	15
		Biomechanical of orthosis (Level 1.2	2	1

		and trunk)		
		Limbs diseases and deformities	2	
		Anatomy of the upper limbs	1	2
		Properties of materials	2	
		prosthetic of upper limb	1	4
		The crimes of the defunct Baath party	2	
		Search procedures		2
Second/ second semester		Manufacture orthosis above knee joint	2	15
		Biomechanical of orthosis (Level 3.4 and upper limb)	2	1
		Spine diseases and deformities	2	
		Anatomy of trunk and spine	1	2
		Professional ethics	2	
		Computer application (2)	1	2
		Engineering drawing		2
		Research project		2

1. Expected learning outcomes of the program

Knowledge	
A1. To identify the amputation types in upper and lower limbs A2. To identify the kinds of deformation that affect the body A3. Identify ways of alignment for different kinds of artificial limb A4. Identify the type of prosthesis and orthotic that appropriate for each case A5. Identify the anatomical aspects and physiology of the human body and the deviations that occur during walking A6. Identify ways of receiving the patient and how to deal with it	Learning Outcomes Statement 1
Skills	
B1. Acquire skill in manufacturing and assembly the lower limb prosthetic B2. Acquire skill in manufacturing and assembly the orthotic for different levels B3. Has the ability to perform the rehabilitation for the patient after wearing the prosthetic or orthotic	Learning Outcomes Statement 2
Learning Outcomes 3	Learning Outcomes Statement 3
Ethics	
Good dealing with the patient	Learning Outcomes Statement 4
Learning Outcomes 5	Learning Outcomes Statement 5

7. Teaching and Learning Strategies

Theoretical lectures

• Practical application within the branch's educational clinic workshops

• Graduation research

• Computer laboratories

1. Evaluation methods

1. Theoretical and practical exams
2. The daily assessment for student work within the workshops
3. Graduation research

1. Faculty

Faculty Members

Academic Rank	Specialization		Special Requirements/Skills (if applicable)		Number of the teaching staff	
	General	Special			Staff	Lecturer
Assist. Prof. Sahira Ayyed Al-musawi	Biology	Midica Parasitology			√	
Prof.	nursing	Maternal and newborn health			√	
Assist. Prof.	General Medicine	Bone and joint diseases				√
Assist. Prof.	engineering	Mechanical			√	
Lec.	Sciences	physiological			√	

Lec.	History	History			√	
Lec.	Community health	Community health				
Assist.lec.	Physical Education	Biomechanics			√	
Assist.lec.	Biology	anatomy			√	
Assist.lec.	physical therapy	physical therapy				√
Assist.lec.	engineering	properties material				√

Professional Development
Mentoring new faculty members
Encouraging commitment and perseverance and involving them in courses on modern teaching methods.
Professional development of faculty members
Continuous evaluation and encouragement of publishing scientific research

8. Acceptance Criterion

- **Centralized acceptance**
- **Relatives of martyrs**

- **Special admission**

9. **The most important sources of information about the program**
• International educational curricula • The Internet

10. Program Development Plan
• Continuous updating of the curriculum • Developing the teaching staff • Institutional dependency

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 stage First semester		Production of prosthesis below knee joint	Basic	*					*				*		
		Biomechanical of prostheses (level 1.2.3)	Basic		*			*				*			
		Musculoskeletal system diseases	Basic	*					*				*		
		Physiology & Anatomy	Basic		*			*				*			
		Computer	Basic	*			*							*	
		application (1)													
		Human Rights and Democracy	Basic		*			*						*	
		English for Medicine and Health sciences	Basic				*				*		*		

First stage second semester		**Production of prosthesis above knee joint**	**Basic**	*					*						*
		Biomechanical of prostheses (level 4.5.6)	**Basic**		*				*				*		
		Bone and joint diseases	**Basic**	*				*					*		
		Anatomy of lower limb	**Basic**		*				*						*
		Principles of clinical examination	**Basic**			*					*			*	
		Arabic language	**Basic**		*				*				*		
Second stage First semester		**Manufacture orthosis below knee joint**	**Basic**		*					*			*		
		Biomechanical of orthosis (Level 1.2 and trunk)	**Basic**			*			*					*	
		Limbs diseases and deformities	**Basic**	*				*				*			
		Anatomy of the upper limbs	**Basic**		*						*				*
		Properties of materials	**Basic**		*				*				*		
		prosthetic of upper limb	**Basic**	*						*					*

		The crimes of the defunct baath party	**Basic**	*				*							*
		Search procedures	**Basic**	*					*					*	
Second stage **Second semester**		**Manufacture orthosis above knee joint**	**Basic**		*				*						*
		Biomechanical of orthosis (Level 3.4 and upper limb)	**Basic**		*						*		*		
		Spine diseases and deformitie	**Basic**	*				*							*
		Anatomy of trunk and spine	**Basic**		*					*				*	
		Professional ethics	**Basic**	*				*					*		
		Computer application (2)	**Basic**		*					*					*
		Engineering drawing	**Basic**		*						*				*
		Research project	**Basic**	*							*				*

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

Course Description Form

1. Course Name:
Production of prosthesis below knee joint
2. Course Code:
3. Semester / Year:
1ST Semester - first stage
4. Description Preparation Date:
2024
5. Available Attendance Forms:
Practical & Theory
6. Number of Credit Hours (Total) / Number of Units (Total)
17 Units Total – 255
7. Course administrator's name (mention all, if more than one name)
Name: Hussein Dahmer Email:
8. Course Objectives

Course Objectives After finishing the study, the graduate will be able to produce different types of prostheses.	- Examine the patient and decide what are the findings, and amputee function - Cast the amputee to start producing the prosthesis designed for each amputee. - Fit the amputee with his prosthesis - Correct the gait deviation of amputee using his prosthesis.
9. Teaching and Learning Strategies	
Strategy	Theoretical study through various teaching methods, such as the computer display screen, live examples, etc., and its practical application in the workshop and under the supervision of specialized technics.

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	17	Concept of handicap, Total care of amputee, Terminology of prosthesis, Temporary prosthesis	Workshop orientation	Theory assignments And Experiment assignments	Homework, Reports, Simple test. Activities
2		TTintroduction, Assessment	Casting workshop		
3		TT Casting procedure, Cast Rectification	Casting training		
4		TT Prosthetic Materials, Compone prescription principles	Stump bandaging exercise		
5		TT Normal Gait, Alignment	Steps of casting exercis		
6		TT Pressure Distribution, Deviation	Casting on amputee		
7		TT Checkout, problems,	Modification steps		
8		PF Introduction, patient assessment	Negative cast, positive cast		
9		PF solutions /socket designs	Soft socket design		
10		PF prosthetic designs and fabrication	Assembling component		
11		PF Checkout Procedure, prosthetic problems Discussion	Cosmetic steps		
12		AD Introduction, Assessm and Casting procedure	Syme's cast		
13		AD Cast Rectification,	Soft socket design		

		Socket Variations and Material			
14		AD Components, Alignment	Assembling components		
15		AD prosthetic problems, checkout	Cosmetic of pr		

11. Course Evaluation

Daily preparation, daily oral, monthly, written exams and reports

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	Prosthetics and Orthotics
Main references (sources)	Cambodian guideline of prosthetics and orthotics
Recommended books and references (scientific journals, reports...)	ISPO journals, Orthotics and Prosthetics in Rehabilitation, Prosthetics & Orthotics in Clinical Practice
Electronic References, Websites	https://shop.elsevier.com/books/orthoti and-prosthetics-in-rehabilitation/chui/978-0-323-60913-5

Course Description Form

1. Course Name:
Biomechanical of prostheses (level 1.2.3)
2. Course Code:
3. Semester / Year:
First stage. First semester 2023-2024
4. Description Preparation Date:
2024
5. Available Attendance Forms:
Technical diploma in Prosthesis &Orthoesis
6. Number of Credit Hours (Total) / Number of Units (Total)
45/3
7. Course administrator's name (mention all, if more than one name)
Name: assist lec. Hwaida Abbas Email:
8. Course Objectives

Course Objectives	The aim of this programme is to graduation a qualif technical staff have a good knowledge and skill able to w in the field of prosthetics and orthotic industry and doin in various kind and levels

9. Teaching and Learning Strategies

Strategy	Knowledge and Understanding A1. To identify the amputation types in upper and lower limbs A2. To identify the kinds of deformation that affect the body A3. Identify ways of alignment for different kinds of artificial limb A4. Identify the type of prosthesis and orthotic that appropriate for each case A5. Identify the anatomical aspects and physiology of the human body and the deviations that occur during walking A6. Identify ways of receiving the patient and how to deal with it

10. Course Structure					
Week	**Hours**	**Unit or subject name theory**	**Unit or subject name practical**	**Learning method**	**Evaluation method**
1	Th. (1) Prac.(2) Total (3	Introduction of biomechanics	View and apply for biomechanics branches	1-Mmethod lecture 2. Discuss 3Questioning. 4Presentation learn sk 5. The use educational au visual as a sh movies in addi to system training practical he Facilities	Assessment Majadharh directing questions direc 2. editorial test 3-step re-le the skill by student 4. feedback And reporting 5-chapter ex after the first weeks
2	Th. (1) Prac.(2) Total (3	Analysis the components of force	Application and analysis the components of force		
3	**Th. (1) Prac.(2) Total (3)**	Study effect of moment on the body	Application for the effect of moment on the body		
4	Th. (1) Prac.(2) Total (3	The normal Gait	Analysis normal Gait		
5	**Th. (1) Prac.(2) Total (3)**	Analysis effect of forces between stump and Trans-Tibial socket forces	Application and analysis the forces between stump and Trans-Tibial socket forces		
6	**Th. (1) Prac.(2) Total (3)**	Stump length related to pressure on stump	Show effect of stump length related to pressure on stump		
7	**Th. (1) Prac.(2) Total (3)**	Effect of forces during bench alignment of Trans-Tibial socket	Application the forces during bench alignment of Trans-Tibial socket		
8	**Th. (1) Prac.(2) Total (3)**	The shoulder joint, moveme Muscles of the Shoulder J Common ShoulderPathologies	Revision		
9	**Th. (1) Prac.(2) Total (3)**	The affect the biomechanics factors on ankle disarticulation prosthesis	View the affect the biomechanics factors on ankle disarticulation prosthesis		
10	**Th. (1) Prac.(2) Total (3)**	The effect of forces on the socket of ankle disarticulation prosthesis during gait	View the effect of forces on the socket of ankle disarticulation prosthesis during gait		
11	**Th. (1) Prac.(2) Total (3)**	Effect of forces during alignment of ankle disarticulation prosthesis	Application the forces effect during alignment of ankle disarticulation prosthesis		
12	**Th. (1) Prac.(2) Total (3)**	The biomechanics factors of Partial foot prosthesis	Application the biomechanics factors of Partial		

			foot prosthesis		
13	**Th. (1) Prac.(2) Total (3)**	The biomechanics factors of Toe Amputation, Trans-metatarsal	Application the biomechanics factors of Toe Amputation, Trans-metatarsal		
14	**Th. (1) Prac.(2) Total (3)**	The affect the biomechanics factors on ankle disarticulation prosthesis	View the affect the biomechanics factors on ankle disarticulation prosthesis		
15	**Th. (1) Prac.(2) Total (3)**	The biomechanics factors of Lisfranc Level, Chopart	Application the biomechanics factors of Lisfranc Level, Chopart		

11. Course Evaluation

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

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	**3- Biomechanics of human locomotion** **4- Education for orthopedic technician part 3,4,5 and 6**
Main references (sources)	
Recommended books and references (scientific journals, reports...)	**International journal prosthesis and orthosis**
Electronic References, Websites	Net

Course Description Form

1. Course Name:
Musculoskeletal system diseases
2. Course Code:
3. Semester / Year:
First 1 2023-2024
4. Description Preparation Date:
15/2/2024
5. Available Attendance Forms:
Technical diploma in Prosthesis & Orthoesis
6. Number of Credit Hours (Total) / Number of Units (Total)
30/2
7. Course administrator's name (mention all, if more than one name)
Name: Dr. Yacub Abdul-Zahraa **Email:** auop6315@gmail.com
8. Course Objectives

Course Objectives	**-Knowledge and Understanding** **–A1.Rehabilitation of the student to kn Musculoskeletal system diseases that in the human body** • **.....** • **.....** • **.....**
9. Teaching and Learning Strategies	
Strategy	A1. To identify the amputation types in upper and lower limbs A2. To identify the kinds of deformation that affect the body A3. Identify ways of alignment for different kinds of artificial limb A4. Identify the type of prosthesis and orthotic that appropriate each case

	A5. Identify the anatomical aspects and physiology of the hum body and the deviations that occur during walking A6. Identify ways of receiving the patient and how to deal with it

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	2 theory	Introduction in orthopedic	Introduction in orthoped	1-Mmethod lecture 2. Discuss 3Questioning. 4Presentation learn sk 5. The use educational au visual as a sh movies in addi to system training practical he Facilities	Assessment Majadharh directing questions direc 2. editorial test 3-step re-le the skill by student 4. feedback And reporting 5-chapter ex after the first weeks
2	2 theory	Glossary terminology	Glossary terminology		
3	2 theory	Clinical method approach(history,examination,& estigation)	Clinical method approach(history,exami on,&investigation)		
4	2 theory	Septic arthritis(Acute vs Chronic	Septic arthritis(Acute Chronic)		
5	2 theory	Osteomylitis(acute vs Chronic)	Osteomylitis(acute Chronic)		
6	2 theory	Ostoarthritis(Clinical features,diagnosis,treatment)	Ostoarthritis(Clinical features,diagnosis,treat t)		
7	2 theory	Rheumatoid arthritis(Clin features,diagnosis,treatment)	Rheumatoid arthritis(Clinical features,diagnosis,treat t)		
8	2 theory	Gout &Pseudogout(Clin features,diagnosis,treatment)	Gout &Pseudogout(Clin features,diagnosis,treat t)		
9	2 theory	Bone disease,osteoporosis,osteopenia,t s(Clinical features,diagnosis,treatment)	Bone disease,osteoporosis,ost enia,types(Clinical features,diagnosis,treat t)		
10	2 theory	Bone tumors ,types (Clin features,diagnosis,treatment)	Bone tumors ,t (Clinical features,diagnosis,treat t)		
11	2 theory	Metabolic b disease(Ricket,osteomalacia),	Metabolic b disease(Ricket,osteomal a),		
12	2 theory	Metabolic bone disease(,diab foot,scurvey)	Metabolic b disease(,diabetic		

			foot,scurvey)		
13	2 theory	Cerebral palsy,pathogenesis	Cerebral palsy,pathogenesis		
14	2 theory	Types Cerebral palsy	Types Cerebral palsy		
15	2 theory	Cerebral palsy, ,brief clin features	Cerebral palsy, ,b clinical features		

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)	**2- orthopedic of nurses** **2-A plays system of orthope and fractures**
Recommended books and references (scientific journals, reports...)	**International journal prosthesis and orthosis**
Electronic References, Websites	

Course Description Form

1. Course Name:
Physiology & Anatomy
2. Course Code:
3. Semester / Year:
First 1 2023-2024
4. Description Preparation Date:
15/2/2024
5. Available Attendance Forms:
Technical diploma in Prosthesis &Orthoesis
6. Number of Credit Hours (Total) / Number of Units (Total)
45/3
7. Course administrator's name (mention all, if more than one name)
Name: Lec. Fatima Kadhim Rafif Email:

8. Course Objectives	
Course Objectives	The aim of this programme is to graduation a qualified technical staff have a good knowledge and skill able to work in the field of prosthetics and orthotic industry and doing it in various kind and levels

9. Teaching and Learning Strategies	
Strategy	. To identify the amputation types in upper and lower limbs A2. To identify the kinds of deformation that affect the body A3. Identify ways of alignment for different kinds of artificial limb A4. Identify the type of prosthesis and orthotic that appropriate f each case A5. Identify the anatomical aspects and physiology of the human body and the deviations that occur during walking A6. Identify ways of receiving the patient and how to deal w itbody and the deviations that occur during walking A6. Identify ways of receiving the patient and how to deal with it

10. Course Structure

Week	Hours	Unit or subject name theory	Unit or subject name practical	Learning method	Evaluation method
1	Th. (1) Prac.(2) Total (3	Introduction in anatomy &physiology	Application in anatomical terms and physiology	1-Mmethod lecture 2. Discuss 3Questioning. 4Presentation learn sk 5. The use educational au visual as a sh movies in addi to system training practical he Facilities	Assessment Majadharh directing questions direc 2. editorial test 3-step re-le the skill by student 4. feedback And reporting 5-chapter ex after the first weeks
2	Th. (1) Prac.(2) Total (3	Classify of bone and kind of bone	Use the skeleton to show the kind of bone		
3	**Th. (1) Prac.(2) Total (3)**	Bone of Lower extremity-pelvic bone and Bone of Femur	Use the skeleton to show the pelvic bone		
4	Th. (1) Prac.(2) Total (3	Neurophysiology Nervous Tissue Anatomy and Physiology of Neurons	Use the skeleton to show the Femur ,Tibia , Fibula and Foot		
5	**Th. (1) Prac.(2) Total (3)**	The body's energy systems	Use pictures video to see the application of energy systems		
6	**Th. (1) Prac.(2) Total (3)**	Bone of Tibia , Fibula	Use the skeleton to show the Femur		
7	**Th. (1) Prac.(2) Total (3)**	Bones of Foot	Use the skeleton to show the Tibia and Fibula		
8	**Th. (1) Prac.(2) Total (3)**	Introduction in Muscular system	Use the skeleton to show the bones of Foot		
9	**Th. (1) Prac.(2) Total (3)**	The muscles of anterior borde Arm reign (origin, insertion action)	Use pictures and skeleton to see the mus of Arm reign		
10	**Th. (1) Prac.(2) Total (3)**	The muscles of posterior borde Arm reign (origin, insertion action)	Use pictures and skeleton to see the mus of Arm reign		
11	**Th. (1) Prac.(2) Total (3)**	Elbow complex, Structure Motions, Bones and muscles of forearm	Use pictures and skeleton to see the mus of Elbow joint in skeleton		
12	**Th. (1) Prac.(2) Total (3)**	Wrist Joint, bones, mus Motions , hand, bones , mus Joints and Motions (2)	Use pictures and skeleton to see the mus of the Wrist joint		
13	**Th. (1) Prac.(2) Total (3)**	The muscles of the anterior border of Thigh reign (origin, insertion and action)	Use pictures and the skeleton to see the muscles of Thigh reign		

14	**Th. (1) Prac.(2) Total (3)**	The muscles of posterior border of Thigh reign (origin, insertion and action)	Use pictures and the skeleton to see the muscles of Thigh reign		
15	**Th. (1) Prac.(2) Total (3)**	The muscles of medial & lateral border of Thigh reign (origin, insertion and action)	Use pictures and the skeleton to see the muscles of Thigh reign		

11. Course Evaluation

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

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	2- 1- a book on human anato systematic(.2-Anatomy of the students the Faculty of Physi Education d. Qais Ibrahim Douri, 1980 3-Atlas of human body 4-Principles of anatomy a physiology 5-Internet
Main references (sources)	
Recommended books and references (scientific journals, reports...)	
Electronic References, Websites	Net

Course Description Form

1. Course Name:
English language
2. Course Code:
3. Semester / Year:
First semester / First year
4. Description Preparation Date:
15/2/2024
5. Available Attendance Forms:
Attendance
6. Number of Credit Hours (Total) / Number of Units (Total):
30 hours / 2 units

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

Name: Assit prof. Mohanad Hamza Hussein
Email:

7. Course Objectives

Course Objectives	Students can be able to know and use the medical terminology

8. Teaching and Learning Strategies

Strategy	- Lectures - Discussion

9. Course Structure/ Theoretical

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	2		**Chapter One : Medical terminology** Language of medicine Medical terms Spelling of medical terms	lecture	examination

			Pronunciation of medical terms		
2	2		**Chapter One :** Focus on reading Vocabulary development Focus on grammar Oral skills		
3	2		**Chapter One :** Focus on writing Pronunciation exercise Review exercises Self-assessment		
4	2		**Chapter Two : Suffixes** Medical terms Suffixes Focus on reading		
5	2		**Chapter Two :** Vocabulary development Focus on grammar Case report Oral communication skills		
6	2		**Chapter Two :** Focus on writing Pronunciation of medical terms Review exercises Self-assessment		
7	2		**Chapter Three : Prefixes** Medical terms Prefixes Focus on reading		
8	2		**Chapter Three :** Vocabulary development Focus on grammar Oral communication skills Focus on writing		
9	2		**Chapter Three :** Pronunciation of medical terms Review exercises Self-assessment		
10	2		**Chapter Four : Body structure** Body structure Principal body systems Planes of the body Orientation and directional terms		
11	2		**Chapter Four :** Body positions Body cavities Focus on reading Vocabulary development Focus on grammar		
12	2		**Chapter Four :** Oral communication skills Focus on writing Review exercises Self-assessment		
13	2		**Chapter Five : Body systems** Body systems Focus on reading Vocabulary development		

14	2		**Chapter Five :** Focus on grammar Oral communication skills Focus on writing		
15	2		**Chapter Five :** Pronunciation of medical terms Review exercises Self-assessment		

10. Course Evaluation

- Mid Examination: Theoretical 30 Marks

- Final examination: Theoretical 70 Marks

11. Learning and Teaching Resources

Required textbooks (curricular books, if any)	
Main references (sources)	English for Medicine & Health Sciences Shehdeh Fareh & Inaam Hamadi, Elsevier, 2017.
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:
2ND semester / first stage
4. Description Preparation Date:
15/2/2024
5. Available Attendance Forms:
Practical & Theory
6. Number of Credit Hours (Total) / Number of Units (Total)
255 / 17
7. Course administrator's name (mention all, if more than one name)
Name: Lec. Mohammed Kadhim Email:

8. Course Objectives

Course Objectives After finishing the study, the graduate will be able to produce different types of prostheses.	- Examine the patient and decide what are the findings, and amputee function - Cast the amputee to start producing the prosthesis designed for each amputee. - Fit the amputee with his prosthesis - Correct the gait deviation of amputee using his prosthesis.

9. Teaching and Learning Strategies

Strategy	Theoretical study through various teaching methods, such as the computer display screen, live examples, etc., and its practical application in the workshop and under the supervision of specialized technics.

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	17	Introduction TF	Assembling	Theory assignments And Experiment assignments	Homework, Reports, Simple test. Activities
2	=	Quadrilateral Socket	Assembling		
3	=	TF patient assessment, Casting procedure	Assembling		
4	=	TF Alternative Casting procedures, cast Rectification	T.K casting		
5	=	TF Components, prescription principles	Modification		
6	=	TF Socket Test and Alignment procedures	Assembling		
7	=	TF Gait Analysis, socket problem	Checking		
8	=	KD Introduction, Assessment,Casting Procedu	Cosmetic		
9	=	KD, Cast Rectification, Variations and Materials, Components	T.F casting		
10	=	KD prescription principles, Alignment, Checkout, Socket problems	T.F alignment		
11	=	Exam	Exam		
12	=	HD Introduction, patient assessment, casting procedure, cast rectification	Hip. Disarticulation casting		
13	=	HD Socket variation, fabrication, components, Alignment	Hip. Disarticulation modification		
14	=	HD and Hemipelvectomy Checkout procedure,	Hip. Disarticulati		
15	=	HD prosthetic problems and Socket Changes	modification		

11. Course Evaluation

Daily preparation, daily oral, monthly, written exams and reports

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	Prosthetics and Orthotics
Main references (sources)	Cambodian guideline of prosthetics and orthotics
Recommended books and references (scientific journals, reports...)	ISPO journals, Orthotics and Prosthetics in Rehabilitation, Prosthetics & Orthotics in Clinical Practice
Electronic References, Websites	https://shop.elsevier.com/books/orthoti and-prosthetics-in-rehabilitation/chui/978-0-323-60913-5

Course Description Form

1. Course Name:
Biomechanical of prostheses (level 4.5.6)
2. Course Code:
3. Semester / Year:
First 2 2023-2024
4. Description Preparation Date:
15/2/2024
5. Available Attendance Forms:
Technical diploma in Prosthesis &Orthoesis
6. Number of Credit Hours (Total) / Number of Units (Total)
45/3
7. Course administrator's name (mention all, if more than one name)
Name: Assist. Lec. Hiwaida Abbas Email:
8. Course Objectives

Course Objectives	The aim of this programme is to graduation a qualif technical staff have a good knowledge and skill able to w in the field of prosthetics and orthotic industry and doin in various kind and levels
9. Teaching and Learning Strategies	
Strategy	Knowledge and Understanding A1. To identify the amputation types in upper and lower limbs A2. To identify the kinds of deformation that affect the body A3. Identify ways of alignment for different kinds of artificial limb A4. Identify the type of prosthesis and orthotic that appropriate for each case A5. Identify the anatomical aspects and physiology of the human body and the deviations that occur during walking A6. Identify ways of receiving the patient and how to deal with it

10. Course Structure

Week	Hours	Unit or subject name theory	Unit or subject name practical	Learning method	Evaluation method
1	Th. (1) Prac.(2) Total (3	The biomechanics factors of through knee prosthesis	Application the biomechanics factors of through knee prosthesis	1-Mmethod lecture 2. Discuss 3Questioning. 4Presentation learn sk 5. The use educational au visual as a sh movies in addi to system training practical he Facilities	Assessment Majadharh directing questions direc 2. editorial test 3-step re-le the skill by student 4. feedback And reporting 5-chapter ex after the first weeks
2	Th. (1) Prac.(2) Total (3	Effect of forces during bench Alignment of through knee socket	View effect of forces during bench Alignment of through knee socket		
3	**Th. (1) Prac.(2) Total (3)**	Effect of forces during static alignment of through knee prosthesis	View effect of forces during static alignment of through knee prosthesis		
4	Th. (1) Prac.(2) Total (3	Effect of forces during dynamic alignment of through knee prosthesis	View effect of forces during dynamic alignment of through knee prosthesis		
5	**Th. (1) Prac.(2) Total (3)**	The biomechanics factors of Trans-fomral prosthesis	Application the biomechanics factors of Trans-fomral prosthesis		
6	**Th. (1) Prac.(2) Total (3)**	Effect of forces during bench alignment of Trans-fomra socket	Application the effect of forces during bench alignment of Trans-fomra socket		
7	**Th. (1) Prac.(2) Total (3)**	Effect of forces during static alignment of Trans-fomral prosthesis	Application the effect of forces during static alignment of Trans-fomral prosthesis		
8	**Th. (1) Prac.(2) Total (3)**	Effect of forces during dynamic alignment of Trans-fomral prosthesis	Application the effect of forces during dynamic alignment of Trans-fomral prosthesis		
9	**Th. (1) Prac.(2) Total (3)**	The biomechanics factors of Hip. disarticulation prosthesis	View the biomechanics factors of Hip. disarticulation prosthesis		
10	**Th. (1) Prac.(2) Total (3)**	Effect of forces during bench alignment of Hip. disarticulation socket	Application the effect of forces during bench alignment of Hip. disarticulation socket		
11	**Th. (1) Prac.(2) Total (3)**	Effect of forces during static alignment of Hip. disarticulation prosthesis	Application the effect of forces during static alignment of Hip. disarticulation prosthesis		
12	**Th. (1) Prac.(2) Total (3)**	Effect of forces during dynamic alignment of Hip. disarticulation prosthesis	Application the effect of forces during dynamic alignment of Hip. disarticulation prosthesis		
13	**Th. (1) Prac.(2)**	The biomechanics factors of Hemi pelvic prosthesis	View the biomechanics factors		

	Total (3)		of Hemi pelvic prosthesis		
14	**Th. (1) Prac.(2) Total (3)**	Effect of forces during alignment of Hemi pelvic prosthesis	Application the effect of forces during alignment of Hemi pelvic prosthesis		
15	**Th. (1) Prac.(2) Total (3)**	The biomechanics factors of Upper limb prosthesis	View the biomechanics factors of Upper limb prosthesis		

11. Course Evaluation

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

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	**7- Biomechanics of human locomotion** **8- Education for orthopedic technician part 3,4,5 and 6**
Main references (sources)	
Recommended books and references (scientific journals, reports...)	**International journal prosthesis and orthosis**
Electronic References, Websites	Net

Course Description Form

1. Course Name:
Bone and joint diseases
2. Course Code:
3. Semester / Year:
First 2 2023-2024
4. Description Preparation Date:
15/2/2024
5. Available Attendance Forms:
Technical diploma in Prosthesis & Orthoesis
6. Number of Credit Hours (Total) / Number of Units (Total)
30/2
7. Course administrator's name (mention all, if more than one name)
Name: Dr. Yacube Abdul-Zahraa Email:

8. Course Objectives

Course Objectives	**-Knowledge and Understanding** **-A1.Rehabilitation of the student to kn Musculoskeletal system diseases that infect human body** • **.....** • **.....** • **.....**

9. Teaching and Learning Strategies

Strategy	A1. To identify the amputation types in upper and lower limbs A2. To identify the kinds of deformation that affect the body A3. Identify ways of alignment for different kinds of artificial limb A4. Identify the type of prosthesis and orthotic that appropriate for ea case A5. Identify the anatomical aspects and physiology of the human bo and the deviations that occur during walking A6. Identify ways of receiving the patient and how to deal with it

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	2 theory	Orthopedic clinical method.	Orthopedic clinical met	1-Mmethod lecture 2. Discuss 3Questioning. 4Presentation learn sk 5. The use educational au visual as a sk movies in addi to system training practical he Facilities	Assessment Majadharh directing questi directly 2. editorial tests 3-step re-learn skill by the stud 4. feedback And reporting 5-chapter e after the first weeks
2	2 theory	Spinal deformities(torticollis)	Spinal deformities(torticollis)		
3	2 theory	Spinal deformities(Kyphosis).	Spinal deformities(Kyphosis).		
4	2 theory	Spinal deformities(scoliosis).	Spinal deformities(scoliosis).		
5	2 theory	Spinal deformities(lordosis).	Spinal deformities(lordosis).		
6	2 theory	Spinal cord disease	Spinal cord disease		
7	2 theory	spina bifida	spina bifida		
8	2 theory	Neurological diseases,CVA	Neurological diseases,C		
9	2 theory	Neurological diseases, spinal injuries	Neurological disea spinal cord injuries		
10	2 theory	Spinal fractures,introduc ,types,causes ,healing	Spinal fractures,introduction ,types,causes ,healing		
11	2 theory	Spinal fractures complications	Spinal fract complications		
12	2 theory	Fracture,physiotherapy,use orthosis	Fracture,physiotherapy, of orthosis		
13	2 theory	Sport injuries (spinal sport inju &use of orthosis)	Sport injuries (spinal s injuries &use of orthosi		
14	2 theory	Revision	Revision		
15	2 theory	Examination	Examination		

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)	4- orthopedic of nurses 2-A plays system of orthope and fractures
Recommended books and references (scientific journals, reports...)	International journal prosthesis and orthosis
Electronic References, Websites	

Course Description Form

1. Course Name:
Anatomy of lower limb
2. Course Code:
3. Semester / Year:
First 2 2023-2024
4. Description Preparation Date:
15/2/2024
5. Available Attendance Forms:
Attendance
6. Number of Credit Hours (Total) / Number of Units (Total)
45/3
7. Course administrator's name (mention all, if more than one name)
Name. Dr. Yacube Abdul-Zahraa Email:
8. Course Objectives

Course Objectives	The aim of this programme is to graduation a qualified technical staff have a good knowledge and skill able to work in the field of prosthetics and orthotic industry and doing it in various kind and levels

9. Teaching and Learning Strategies

Strategy	. To identify the amputation types in upper and lower limbs A2. To identify the kinds of deformation that affect the body A3. Identify ways of alignment for different kinds of artificial limb A4. Identify the type of prosthesis and orthotic that appropriate f each case A5. Identify the anatomical aspects and physiology of the human body and the deviations that occur during walking A6. Identify ways of receiving the patient and how to deal w itbody and the deviations that occur during walking A6. Identify ways of receiving the patient and how to deal with it

10. Course Structure

Week	Hours	Unit or subject name theory	Unit or subject name practical	Learning method	Evaluation method
1	Th. (1) Prac.(2) Total (3	The muscle of anterior border of Leg reign (origin, insertion and action)	Use pictures and the skeleton to see the muscles of Leg reign	1-Mmethod lecture 2. Discuss 3Questioning. 4Presentation learn sk 5. The use educational au visual as a sh movies in addi to system training practical he Facilities	Assessment Majadharh directing questions direc 2. editorial test 3-step re-le the skill by student 4. feedback And reporting 5-chapter ex after the first weeks
2	Th. (1) Prac.(2) Total (3	The muscle of posterior Leg reign (origin, insertion and action)	Use pictures and the skeleton to see the muscles of Leg reign		
3	**Th. (1) Prac.(2) Total (3)**	The superficial muscles of Foot reign (origin, insertion and action)	Use pictures and the skeleton to see the muscles of Foot reign		
4	Th. (1) Prac.(2) Total (3	The deep muscles of Foot reign (origin, insertion and action)	Use pictures and the skeleton to see the muscles of Foot reign		
5	**Th. (1) Prac.(2) Total (3)**	Neurophysiology Synaptic Communication Neuromuscular Junctions	Use pictures and the skeleton to see the kind of Joints in Upper & Lower limb		
6	**Th. (1) Prac.(2) Total (3)**	The kind of Joints ,The Hip joint	See the Hip joint in the skeleton and in the pictures		
7	**Th. (1) Prac.(2) Total (3)**	The Knee joint	See the Knee joint in the skeleton and in the pictures		
8	**Th. (1) Prac.(2) Total (3)**	The Ankle joint	See the Ankle joint in the skeleton and in the pictures		
9	**Th. (1) Prac.(2) Total (3)**	The Foot joints	See the Foot joints in the skeleton and in the pictures		
10	**Th. (1) Prac.(2) Total (3)**	Interlocution of Nervous system	Use pictures to show part of the Nervous in human body		
11	**Th. (1) Prac.(2) Total (3)**	Interlocution of Nervous system	Use pictures to show part of the Nervous in human body		
12	**Th. (1) Prac.(2) Total (3)**	Nervous System Pathways and Processing Sensory Pathways: Motor Pathways	Use diagram of the nerve supply of Lower limb		
13	**Th. (1) Prac.(2) Total (3)**	The Nerve supply of the Lower limb	Use diagram of the nerve supply of Lower limb		

14	**Th. (1) Prac.(2) Total (3)**	The Sciatic nerve	Use diagram of the Sciatic nerve		
15	**Th. (1) Prac.(2) Total (3)**	The blood supply (Arterial and Venous) of Lower limb	Use diagram showing the blood supply of Lower & Upper limb		

11. Course Evaluation

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

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	**4- 1- a book on human anato systematic(** **.2-Anatomy of the stude of the Faculty of Physi Education d. Qais Ibrahim Douri, 1980** **3-Atlas of human body** **4-Principles of anatomy a physiology** **5-Internet**
Main references (sources)	
Recommended books and references (scientific journals, reports...)	
Electronic References, Websites	Net

Course Description Form

1. Course Name:
Principles of clinical examination
2. Course Code:
3. Semester / Year:
First 2 2023-2024
4. Description Preparation Date:
15/2/2024
5. Available Attendance Forms:
Technical diploma in Prosthesis & Orthoesis
6. Number of Credit Hours (Total) / Number of Units (Total)
30/2
7. Course administrator's name (mention all, if more than one name)
Name: Dr: Yacube Abdul-Zahraa Email:
8. Course Objectives

Course Objectives	The aim of this programme is to graduation a qualified technical staff have a good knowledge and skill able to work in the field of prosthetics and orthotic industry and doing it in various kind and levels

9. Teaching and Learning Strategies	
Strategy	. To identify the amputation types in upper and lower limbs A2. To identify the kinds of deformation that affect the body A3. Identify ways of alignment for different kinds of artificial limb A4. Identify the type of prosthesis and orthotic that appropriate for ea case A5. Identify the anatomical aspects and physiology of the human body and the deviations that occur during walking A6. Identify ways of receiving the patient and how to deal with it bo and the deviations that occur during walking A6. Identify ways of receiving the patient and how to deal with it

10. Course Structure

Week	Hours	Unit or subject name theory	Unit or subject name practical	Learning method	Evaluation method
1	Th. (1) Prac.(1) Total (2	**Introduction and Overview to Health Assessment**	**(subjective and objecti Collecting data.Assessment, interview and he history.Functional he patterns.(Katz Index Independence) Gordon**	1-Mmethod lecture 2. Discuss 3Questioning. 4Presentation learn sk 5. The use educational au visual as a sh movies in addi to system training practical he Facilities	Assessment Majadharh directing questi directly 2. editorial tests 3-step re-learn skill by the stud 4. feedback And reporting 5-chapter e after the first weeks
2	Th. (1) Prac.(1) Total (2	**Introduction and Overview to Health Assessment**	**(subjective and objecti Collecting data.Assessment, interview and he history.Functional he patterns.(Katz Index Independence) Gordon**		
3	**Th. (1) Prac.(1) Total (2)**	**General Assessment**	**Initial evaluation of patient's ove condition, including v signs and gen appearance.**		
4	Th. (1) Prac.(1) Total (2	**Physical Examination Techniq**	**Inspection.-Palpation.-Percussion.-Auscultati**		
5	**Th. (1) Prac.(1) Total (2)**	**Physical Examination Techniq**	**Inspection.-Palpation.-Percussion.-Auscultati**		
6	**Th. (1) Prac.1) Total (2)**	**Specific SystemsAssessm :cardiovascular**	**Focused examination particular body syste such as cardiovascular**		
7	**Th. (1) Prac.(1) Total (2)**	**Respiratory assessment**	**Respiratory assessmen**		
8	**Th. (1) Prac.(1) Total (2)**	**Peripheral Assessment**	**Peripheral Assessment**		
9	**Th. (1) Prac.(1) Total (2)**	**Neurological System**	**Neurological System**		
10	**Th. (1) Prac.(1) Total (2)**	**Neurological System**	**Neurological System**		
11	**Th. (1) Prac.(1) Total (2)**	**Musculoskeletal System**	**Musculoskeletal Syste**		
12	**Th. (1) Prac.(1) Total (2)**	**Musculoskeletal System**	**Musculoskeletal Syste**		

13	**Th. (1) Prac.(1) Total (2)**	**Abdominal Assessment**	**Abdominal Assessmen**		
14	**Th. (1) Prac.(1) Total (2)**	**Integumentary Sys Assessment**	**Integumentary System Assessment Skin assessment, Hai nail assessment**		
15	**Th. (1) Prac.(1) Total (2)**	**Final Test**	**Final Test**		

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	Internet

Course Description Form

1. Course Name:
Manufacture orthosis below knee joint
2. Course Code:
3. Semester / Year:
Second Stage/ First course/2024
4. Description Preparation Date:
15/2/2024
5. Available Attendance Forms:
Second year students
6. Number of Credit Hours (Total) / Number of Units (Total)
(255) hour (17) unit
7. Course administrator's name (mention all, if more than one name)
Name: Mohammed Kadhim Email:
8. Course Objectives

Course Objectives	**.. This program aims to enable the student to learn about the permanent foundations manufacturing orthodontic devices at various levels.** **The steps for manufacturing orthodontic devices of different types are followed...**
9. Teaching and Learning Strategies	
Strategy	Theoretical and practical lecture

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	(2) Theoretical (15) practical lecture (17) Total	History of Orthosis, Introduction	Workshop orientation	1- Presentation lecture 2- Discussion 3-Explanatory means	1- Daily exam 2-Practical 3- Semester exam
2		Pathology of the foot, Insensate foot(FO)	Exercise ab casting workshop		
3		FO Design and prescription	Applied workshop		
4		Casting for FO	Applied workshop		
5		Rectification for FO, Footwear ,Modification	Applied workshop		
6		Fitting a FO	Applied workshop		
7		Checkout of a FO	Applied workshop		
8		(AFO) Introduction,	Applied workshop		
9		(AFO) Design and components,	Applied workshop		
10		(AFO) Prescription Criteria	Applied workshop		
11		Review of pathology AFO	Applied workshop		
12		Casting techniq Modification procedu	Applied workshop		

		AFO			
13		Fabrication of devices, Pathological Gait AFO, Orthotic Checkout AFO	Applied workshop		
14		KO Introduction,	Applied workshop		
15		KO design, components, function	Applied 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, if any)	- Cambodian Lieutenant - Company parts LIC
Main references (sources)	Books received from the ICRC
Recommended books and references (scientific journals, reports...)	International ICRC
Electronic References, Websites	Websites OF PROSTHETIC and ORTHOTIC

Course Description Form

1. Course Name:
Biomechanical of orthosis (Level 1.2 and trunk)
2. Course Code:
3. Semester / Year:
Second1 2023-2024
4. Description Preparation Date:
2024
5. Available Attendance Forms:
Attendance
6. Number of Credit Hours (Total) / Number of Units (Total)
45/3
7. Course administrator's name (mention all, if more than one name)
Name: Hwaida Abbas Email:
8. Course Objectives

Course Objectives	The aim of this programme is to graduation a qualif technical staff have a good knowledge and skill able to w in the field of prosthetics and orthotic industry and doin in various kind and levels
9. Teaching and Learning Strategies	
Strategy	Knowledge and Understanding A1. To identify the amputation types in upper and lower limbs A2. To identify the kinds of deformation that affect the body A3. Identify ways of alignment for different kinds of artificial limb A4. Identify the type of prosthesis and orthotic that appropriate for each case A5. Identify the anatomical aspects and physiology of the human

	body and the deviations that occur during walking A6. Identify ways of receiving the patient and how to deal with it

10. Course Structure

Week	Hours	Unit or subject name theory	Unit or subject name practical	Learning method	Evaluation method
1	Th. (1) Prac.(2) Total (3	Introduction in the biomechanics of Orthosis	View and apply for biomechanics principles in Orthosis	1-Mmethod lecture 2. Discuss 3Questioning. 4Presentation learn sk 5. The use educational au visual as a sh movies in addi to system training practical he Facilities	Assessment Majadharh directing questions direc 2. editorial test 3-step re-le the skill by student 4. feedback And reporting 5-chapter ex after the first weeks
2	Th. (1) Prac.(2) Total (3	The effect of forces and moment on the body	Application for the effect of forces and moment on the body		
3	**Th. (1) Prac.(2) Total (3)**	Study the difference between pressure, stress and strain	View the difference between pressure, stress and strain		
4	Th. (1) Prac.(2) Total (3	The types of loading in structureand the distribution of load & distortions of plantar vault	Applicationof the distribution of load & distortions of plantar vault		
5	**Th. (1) Prac.(2) Total (3)**	Determination of foot posture indices	View the right method for determinethe foot posture indices		
6	**Th. (1) Prac.(2) Total (3)**	The effect of Windlass Mechanism in the normal gait	Applicationof the Windlass Mechanism		
7	**Th. (1) Prac.(2) Total (3)**	The distribution of the forces in the foot orthosis	Applicationof the distribution of the forces in the foot orthosis		
8	**Th. (1) Prac.(2) Total (3)**	The biomechanics of Foot deformities and it correction	Applicationof the Foot deformities and it correction		
9	**Th. (1) Prac.(2) Total (3)**	The structure and the motion axis of the subtalar and ankle joint	View structure of subtalar and ankle joint and its motion		
10	**Th. (1) Prac.(2) Total (3)**	The types of Foot Deformities & its compensate and its effect in the distribute of weight line	View Foot Deformities & its compensate and its effect in the distribute of weight line		
11	**Th. (1) Prac.(2) Total (3)**	Anatomical &Biomechanical axis of ankle joint،mechanical principles of ankle foot orthosis	Applicationof the anatomical &biomechanical axis of ankle joint, Applicationof the		

			mechanical principles of ankle foot orthosis		
12	**Th. (1) Prac.(2) Total (3)**	The biomechanical functions of the Ankle Foot Orthosis, The corrective Control Systems	View the biomechanical functions of Ankle Foot Orthosis, applicationof the corrective Control Systems		
13	**Th. (1) Prac.(2) Total (3)**	The types of hind foot deformity and its effect in the distribute of weight line	View types of hind foot deformity and its effect in the distribute of weight line		
14	**Th. (1) Prac.(2) Total (3)**	The structure and the range of motion for spinal	View structure and the range of motion for spinal		
15	**Th. (1) Prac.(2) Total (3)**	The types of spinal deformities, and how we can distribute the corrections forces	View types of spinal deformities, and how we can distribute the corrections forces		

11. Course Evaluation	
Distributing the score out of 100 according to the tasks assigned to the student such as daily preparation, dailyoral, monthly, or written exams, reports..... etc	
12. Learning and Teaching Resources	
Required textbooks (curricular books, if any)	**11- Biomechanics of human locomotion** **12- Education for orthopedic technician part 3,4,5 and 6**
Main references (sources)	
Recommended books and references (scientific journals, reports...)	**International journal prosthesis and orthosis**
Electronic References, Websites	Net

Course Description Form

1. Course Name:
Limbs diseases and deformities
2. Course Code:
3. Semester / Year:
Second 1 2023-2024
4. Description Preparation Date:

2024

5. Available Attendance Forms:

Technical diploma in Prosthesis & Orthoesis

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

30/2

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

Name: Murtadha Saeed
Email:

8. Course Objectives

Course Objectives	-Knowledge and Understanding –A1.Rehabilitation of the student to kn Musculoskeletal system diseases that in the human body

9. Teaching and Learning Strategies

Strategy	A1. To identify the amputation types in upper and lower limbs A2. To identify the kinds of deformation that affect the body
	A3. Identify ways of alignment for different kinds of artificial limb A4. Identify the type of prosthesis and orthotic that appropriate each case A5. Identify the anatomical aspects and physiology of the hum body and the deviations that occur during walking A6. Identify ways of receiving the patient and how to deal with it

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	2 theory	Orthopedic clinical method.	Orthopedic clinical met		Assessment Majadharh directing questions direc 2. editorial test
2	2 theory	Foot and ankle deformities	Foot and ankle deformit		

3	2 theory	Club foot deformity	Club foot deformity	1-Mmethod lecture 2. Discuss 3Questioning. 4Presentation learn sk 5. The use educational au visual as a sh movies in addi to system training practical he Facilities	3-step re-le the skill by student 4. feedback And reporting 5-chapter ex after the first weeks
4	2 theory	Knee deformities(valgus,va valgus,varus, hyperextension.)	Knee deformities(valgus,varu valgus,varus, hyperextension.)		
5	2 theory	Hip deformities(DDH,Perthes,SCFE)	Hip deformities(DDH,Perth CFE)		
6	2 theory	Osteoarthritis disease deformities,	Osteoarthritis disease deformities,		
7	2 theory	Rheumatoid arthritis disease deformities.	Rheumatoid arth disease ,and deformities		
8	2 theory	Short limb,causes,management general.	Short limb,causes,managemen general.		
9	2 theory	Osteoarthritis disease deformities,	Osteoarthritis disease deformities,		
10	2 theory	poliomyelitis	poliomyelitis		
11	2 theory	Fractures,introduction ,types,ca ,healing, complications	Fractures,introduction ,types,causes ,heal complications		
12	2	Fracture,physiotherapy,use orthosis	Fracture,physiotherapy, of orthosis		
	theory				
13	2 theory	Diabetic foot,ulcer,types ,orth uses	Diabetic foot,ulcer,t ,orthosis uses		
14	2 theory	Diabetic foot,,charcotneuoropathicdisease d use of orthosis	Diabetic foot,,charcotneuoropath sease,and use of orthosi		
15	2 theory	Locomotoredisease,charcotemar tooth disease	Locomotoredisease,char emarie tooth disease		

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)	**6- orthopedic of nurses 2-A plays system of orthope and fractures**
Recommended books and references (scientific journals, reports...)	**International journal prosthesis and orthosis**
Electronic References, Websites	

Course Description Form

1. Course Name:
Anatomy of the upper limbs
2. Course Code:
3. Semester / Year:
Second 1 2023-2024
4. Description Preparation Date:
2024
5. Available Attendance Forms:
Attendance
6. Number of Credit Hours (Total) / Number of Units (Total) 45/3
45/3
7. Course administrator's name (mention all, if more than one name)
Name: Shatha Atta Email
8. Course Objectives

Course Objectives	The aim of this programme is to graduation a qualified technical staff have a good knowledge and skill able to work in the field of prosthetics and orthotic industry and doing it in various kind and levels
9. Teaching and Learning Strategies	
Strategy	. To identify the amputation types in upper and lower limbs A2. To identify the kinds of deformation that affect the body A3. Identify ways of alignment for different kinds of artificial limb A4. Identify the type of prosthesis and orthotic that appropriate f each case A5. Identify the anatomical aspects and physiology of the human body and the deviations that occur during walking

	A6. Identify ways of receiving the patient and how to deal with body and the deviations that occur during walking A6. Identify ways of receiving the patient and how to deal with it

10. Course Structure

Week	Hours	Unit or subject name theory	Unit or subject name practical	Learning method	Evaluation method
1	Th. (1) Prac.(2) Total (3	Basic anatomy: Introduction anatomy, definition, subdivisi Body Cavities, Body Regi anatomical position, terms relate movement, and planes.	Application in anatom terms	1-Mmethod lecture 2. Discuss 3Questioning. 4Presentation learn sk 5. The use educational au visual as a sh movies in addi to system training practical he Facilities	Assessment Majadharh directing questions direc 2. editorial test 3-step re-le the skill by student 4. feedback And reporting 5-chapter ex after the first weeks
2	Th. (1) Prac.(2) Total (3	Skeletal system, Cartilage, types, Bone, classificat development, Ossification. the a skeleton, appendicular skeleton	Application in anatom terms		
3	**Th. (1) Prac.(2) Total (3)**	Bone of Upper extremity- Clav bones , Bone of Scapula	Use the skeleton to s the Sca boneandClavicle		
4	Th. (1) Prac.(2) Total (3	Bone of Humerus	Use the skeleton to s the Humerus bone		
5	**Th. (1) Prac.(2) Total (3)**	Bone of Ulna	Use the skeleton to s the Ulna bone		
6	**Th. (1) Prac.(2) Total (3)**	Bone of Radius , Bones of Han	Use the skeleton to s the Radius bone		
7	**Th. (1) Prac.(2) Total (3)**	Shoulder (Pectoral) Girdle, bo muscles, joints, movem Musculoskeletal System of (Thoracic Wall)	Use pictures and skeleton to see the mus of Shoulder reign, See Shoulder joint		
8	**Th. (1) Prac.(2) Total (3)**	The shoulder joint, moveme Muscles of the Shoulder J Common ShoulderPathologies	Revision		
9	**Th. (1) Prac.(2) Total (3)**	The muscles of anterior borde Arm reign (origin, insertion action)	Use pictures and skeleton to see the mus of Arm reign		
10	**Th. (1) Prac.(2) Total (3)**	The muscles of posterior borde Arm reign (origin, insertion action)	Use pictures and skeleton to see the mus of Arm reign		
11	**Th. (1) Prac.(2)**	Elbow complex, Structure Motions, Bones and muscles of forearm	Use pictures and skeleton to see the mus of Elbow joint in		

	Total (3)		skeleton		
12	**Th. (1) Prac.(2) Total (3)**	Wrist Joint, bones, mus Motions , hand, bones , musc Joints and Motions (2)	Use pictures and skeleton to see the mus of the Wrist joint		
13	**Th. (1) Prac.(2) Total (3)**	The superficial muscles of H reign (origin, insertion and actio	Use pictures and skeleton to see the mus of Hand reign		
14	**Th. (1) Prac.(2) Total (3)**	The deep muscles of Hand r (origin, insertion and action)	Use pictures and skeleton to see the mus of Hand reign		
15	**Th. (1) Prac.(2) Total (3)**	The Nerve supply of the Upper l	Use diagram of the n supply of Upper limb		

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)	**6- 1- a book on human anato systematic(** **.2-Anatomy of the stude of the Faculty of Physi Education d. Qais Ibrahim Douri, 1980** **3-Atlas of human body** **4-Principles of anatomy a physiology** **5-Internet**
Main references (sources)	
Recommended books and references (scientific journals, reports...)	
Electronic References, Websites	Net

Course Description Form

1. Course Name:
Properties of materials
2. Course Code:
3. Semester / Year:
Semester- 2nd stage – 1 st semester
4. Description Preparation Date:
2024
5. Available Attendance Forms:
2nd stage student
6. Number of Credit Hours (Total) / Number of Units (Total)
30 hours -2 units
7. Course administrator's name (mention all, if more than one name)
Name: Mohammed Abdul-Kareem Email:
8. Course Objectives

Course Objectives This course aims to make student able to recognize the kind and principle of strength material that use prosthesis and orthosis. And can recogn the characteristic of the material that use prosthetic manufacturing	
9. Teaching and Learning Strategies	
Strategy	A- Knowledge and Understanding A1. Know the principle of strength material that use for prosthesis and orthosis. A2. Know the characteristic of the material that use

	prosthetic manufacturing B. Subject-specific skills B1. Able to recognize the nature of the material that he using it in manufacturing the prosthesis and orthosis

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	2	Introduction of materialsProperties	Introduction materialsProperti	1- Lecture 2- Discussion 3- Presentation	1- Assessment of the lecture through direct questions guide 2- The theoretical exam 3- Re footwork steps by the student 4- Feedback 5- Quarterly exams
2	2	Static Dynamic parameter	Static and Dyna parameter		
3	2	Hook law, young modules	Hook law, young modules		
4	2	Ductility ,Brittlness, Impact	Ductility ,Brittlness, Impact		
5	2	Mechanical behavior of solid material	Mechanical behavior of solid material		
6	2	Proportional limit, yield point	Proportional limit, yield point		
7	2	(U.T.S) point	(U.T.S) point		
8	2	Fracture and its kinds	Fracture and its kinds		
9	2	Fatigue and Greep	Fatigue and Greep		
10	2	Hardness and its measurements methods	Hardness and its measurements methods		
11	2	Iron alloy's and steel alloy's	Iron alloy's and steel alloy's		
12	2	Aluminum,	Aluminum, Titanium		

		Titanium and magnesium	and magnesium		
13	2	Rubber and Leather and it's properties	Rubber and Leather and it's properties		
14	2	Thermoplastic, H.T plastic pp.rt . pvc. Acp .	Thermoplastic, H.T plastic pp.rt . pvc. Acp .		
15	2	Thermosetting, L.T plastic and its application	Thermosetting, L.T plastic and its application		

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...)	**International journal prosthesis and orthosis**
Electronic References, Websites	

Course Description Form

1. Course Name:
Prosthesis of upper limb
2. Course Code:
3. Semester / Year:
The first course / the second stage / (2023-2024)
4. Description Preparation Date:
2024
5. Available Attendance Forms:
Second stage students
6. Number of Credit Hours (Total) / Number of Units (Total):
5 / 75
7. Course administrator's name (mention all, if more than one name)
Name: Hattim Flaieh Email:
8. Course Objectives

Course Objectives: **Objectives of the study material: This program aims to make the student familiar with theoretical principles of manufacturing the upper limb and its components (cosmetic parts, mechanical hand, and the hand that operates on nerve impulses). And know the steps manufacturing the upper prosthesis of different types.**	

9. Teaching and Learning Strategies

Strategy	1- Learn about the theoretical principles of manufacturing the upper lim and its components (cosmetic parts, the mechanical hand, and the hand that operates on nerve impulses). 2- Knowing the steps for manufacturing the upper prosthetic limb of its various types 3- Identify the measurements of the joint angles of the upper limb

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name		Learning method	Evaluation method
1	**Th. (1) Prac(4) Total (5)**	Cosmetic limb partial.Hand amputation	T	Cosmetic prosth. For partial	4- Lecture 5- Discussion 6- Presentation and learn skills 4-The utilizing instructional media, audio-visual	6- Assessment of the lecture through direct questions guide 7- The theoretical exam 8- Re footwork steps by the student 9- Feedback 10- Quarterly exams
			P	practical application of this subject		
2	**Th. (1) Prac(4) Total (5)**	Cosmetic-limb amputation the upper limb below elbow	T	Cosmetic limb amputation of the up limb below the elbow		
			P	practical application of this subject		
3	**Th. (1) Prac(4) Total (5)**	Cosmetic upper limb amputation through shoulder joint	T	Cosmetic upper limb amputation above elbow		
				practical application of this subject		
4	**Th. (1) Prac(4) Total (5)**	How to examine the stump	T	Cosmetic upper limb amputation thro the shoulder joint		
				practical application of this subject		
5	**Th. (1) Prac(4) Total (5)**	Mechanical limb for amputation through the wrist joint	T	How to examine the stump		
				practical application of this subject		
6	**Th. (1) Prac(4) Total (5)**	Mechanical limb for below elbow amputation	T	Mechanical limb for an amputa through the wrist joint		
			P	practical application of this subject		
7	**Th. (1) Prac(4) Total (5)**	Mechanical limb for an ab elbow amputation	T	Mechanical limb for below the el amputation		
			P	practical application of this subject		
8	**Th. (1) Prac(4) Total (5)**	How can a prosthetic limb made?	T	Mechanical limb for below the el amputation		
			P	practical application of this subject		
9	**Th. (1) Prac(4) Total (5)**	Introduction to prosthetic l type myoelectric	T	Mechanical limb for an above-el amputation		
			P	practical application of this subject		
10	**Th. (1) Prac(4) Total (5)**	Myoelectric prosthetic wor system	T	How can a prosthetic limb be made?		

			P	practical application of this subject		
11	**Th. (1) Prac(4) Total (5)**	The basic rules for the opera of the Myoelectric prosth limb	T	Introduction to myoelectric prosth limb		
			P	practical application of this subject		
12	**Th. (1) Prac(4) Total (5)**	Myoelectric prosthetic limb below the elbow amputation	T	Myoelectric prosthetic working syste		
			P	practical application of this subject		
13	**Th. (1) Prac(4) Total (5)**	Place the electrodes on the l under the elbow	T	Place the electrodes on the limb u the elbow		
			P	practical application of this subject		
14	**Th. (1) Prac(4) Total (5)**	Place the electrodes on the l above the elbow	T	Place the electrodes on the limb ab the elbow		
			P	practical application of this subject		
15	**Th. (1) Prac(4) Total (5)**	Instructions for the manufac of upper limbs/review	T	Place the electrodes on the limb ab the elbow		
			P	practical application of this subject		

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)	Biomechanics
Main references (sources)	Education for orthopedic technician part
Recommended books and references (scientific journals, reports...)	International journal of prosthesis and orthosis
Electronic References, Websites	Google Scholar/Pedro/PubMed

Course Description Form

1. Course Name:
Manufacture orthosis Above knee joint
2. Course Code:
3. Semester / Year:
Second Stage/ Second course/2024
4. Description Preparation Date:
2024
5. Available Attendance Forms:
Second year students
6. Number of Credit Hours (Total) / Number of Units (Total)
(255) hour (17) unit
7. Course administrator's name (mention all, if more than one name)
Name : Hussein Dahmer Email"
8. Course Objectives

Course Objectives	**This program aims to enable the student to learn about the permanent foundations of manufacturing orthodontic devices at various levels. The steps for manufacturing orthodontic devices of different types are followed...**

9. Teaching and Learning Strategies

Strategy	Theoretical and practical lecture

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1		*KAFO design, components ,function*	Applied on workshop	*1- Presentation c lecture* *2- Discussion* *3-* ***Explanatory means***	1-Daily exam 2-Practical 3- Semester ex
2		*Casting and rectification procedure for plastic KAFO*	**Applied on workshop**		
3		*Fabrication of Custom plastic KAFO*			
4		Measurement and Tracing for a Conventional KAFO			
5		Fabrication of conventional KAFO, Hybrid KAFO			
6		Ischial Weight Bearing KAFO			
7		HKAFP Introduction of the pelvic girdle			
8		Pathology HKAFO			
9		Introduction to spinal orthotic			
10		Introduction to spinal orthotic			
11		Pathology of the spinal orthotic			
12		Variations of design in spinal orthoti			
13		Patient Assessment and the Clinical Team Spinal orthosis			
14		Cast techniques for spinal orthosis			
15		Rectification, progects			

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)	**- Cambodian Lieutenant** **- Company parts LIC**
Main references (sources)	**Books received from the ICRC**
Recommended books and references (scientific journals, reports...)	International ICRC
Electronic References, Websites	**Websites OF PROSTHETIC and ORTHOTIC**

Course Description Form

1. Course Name:
Biomechanical of orthosis (Level 3.4 and upper limb)
2. Course Code:
3. Semester / Year:
Second2 2023-2024
4. Description Preparation Date:
2024
5. Available Attendance Forms:
6. Number of Credit Hours (Total) / Number of Units (Total)
45/3
7. Course administrator's name (mention all, if more than one name)
Name: Hwaida Abbas Email:
8. Course Objectives

Course Objectives	The aim of this programme is to graduation a qualif technical staff have a good knowledge and skill able to w in the field of prosthetics and orthotic industry and doin in various kind and levels
9. Teaching and Learning Strategies	
Strategy	Knowledge and Understanding A1. To identify the amputation types in upper and lower limbs A2. To identify the kinds of deformation that affect the body A3. Identify ways of alignment for different kinds of artificial limb A4. Identify the type of prosthesis and orthotic that appropriate for each case A5. Identify the anatomical aspects and physiology of the human body and the deviations that occur during walking A6. Identify ways of receiving the patient and how to deal with it

10. Course Structure

Week	Hours	Unit or subject name theory	Unit or subject name practical	Learning method	Evaluation method
1	Th. (1) Prac.(2) Total (3	Introduction in the biomechanics of Orthosis	View and apply for biomechanics principles in Orthosis	1-Mmethod lecture 2. Discuss 3Questioning. 4Presentation learn sk 5. The use educational au visual as a sh movies in addi to system training practical he Facilities	Assessment Majadharh directing questions direc 2. editorial test 3-step re-le the skill by student 4. feedback And reporting 5-chapter ex after the first weeks
2	Th. (1) Prac.(2) Total (3	The normal gait	Analysis normal gait		
3	**Th. (1) Prac.(2) Total (3)**	The pathological gait and its effect in the distribute of weight line	View the pathological gait and its effect in the distribute of weight line		
4	Th. (1) Prac.(2) Total (3	The structure and the range of motion for Knee joint	View structure and the range of motion for Knee joint		
5	**Th. (1) Prac.(2) Total (3)**	Biomechanical considerations that effect on knee joint	Applicationof the biomechanical considerations that effect on knee joint		
6	**Th. (1) Prac.(2) Total (3)**	Knee joint axis location and the effect of knee joint misalignment	Applicationof theknee joint axis location and the effect of knee joint misalignment		
7	**Th. (1) Prac.(2) Total (3)**	Angular deformities involving the knee joint and its effect in the distribute of weight line	Applicationof theangular deformities involving the knee joint and its effect in the distribute of weight line		
8	**Th. (1) Prac.(2) Total (3)**	The mechanical effect of KO on knee joint	Applicationof the biomechanical effect of KO on knee joint		
9	**Th. (1) Prac.(2) Total (3)**	The effect of Windlass Mechanism on the knee joint during normal gait	Applicationof the Windlass Mechanism		
10	**Th. (1) Prac.(2) Total (3)**	The structure and the range of motion for hip joint	View the structure and the range of motion for hip joint		
11	**Th. (1) Prac.(2) Total (3)**	The pathological angulations of femur	The pathological angulations of femur		
12	**Th. (1) Prac.(2) Total (3)**	The distributing weight on hip joint	Applicationof the distributing weight on hip joint		

13	**Th. (1) Prac.(2) Total (3)**	The mechanical effect of HKAFO on hip joint	Applicationof the mechanical effect of HKAFO on hip joint		
14	**Th. (1) Prac.(2) Total (3)**	The biomechanics of upper limb and its range of motion	Applicationof the biomechanics of upper limb and its range of motion		
15	**Th. (1) Prac.(2) Total (3)**	The types of upper limb orthosis, and how we can distribute the corrections forces	View types of upper limb orthosis, and how we can distribute the corrections forces		

11. Course Evaluation

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

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	**15- Biomechanics of human locomotion** **16- Education for orthopedic technician part 3,4,5 and 6**
Main references (sources)	
Recommended books and references (scientific journals, reports...)	**International journal prosthesis and orthosis**
Electronic References, Websites	Net

Course Description Form

1. Course Name:
Spine diseases and deformities
2. Course Code:
3. Semester / Year:
Second 2 2023-2024
4. Description Preparation Date:
2024
5. Available Attendance Forms:
Technical diploma in Prosthesis & Orthoesis
6. Number of Credit Hours (Total) / Number of Units (Total)
30/2
7. Course administrator's name (mention all, if more than one name)
Name: Murtadha Saeed Email:
8. Course Objectives

Course Objectives	**-Knowledge and Understanding** **–A1.Rehabilitation of the student to kn Musculoskeletal system diseases that in the human body** • **.....** • **.....** • **.....**
9. Teaching and Learning Strategies	
Strategy	A1. To identify the amputation types in upper and lower limbs A2. To identify the kinds of deformation that affect the body A3. Identify ways of alignment for different kinds of artificial limb A4. Identify the type of prosthesis and orthotic that appropriate each case A5. Identify the anatomical aspects and physiology of the hum body and the deviations that occur during walking A6. Identify ways of receiving the patient and how to deal with it

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	2 theory	Orthopedic clinical method.	Orthopedic clinical met	1-Mmethod lecture 2. Discuss 3Questioning. 4Presentation learn sk 5. The use educational au visual as a s movies in addi to system training practical he Facilities	Assessment Majadharh directing questions direc 2. editorial test 3-step re-le the skill by student 4. feedback And reporting 5-chapter ex after the first weeks
2	2 theory	Spinal deformities(torticollis)	Spinal deformities(torticollis)		
3	2 theory	Spinal deformities(Kyphosis).	Spinal deformities(Kyphosis).		
4	2 theory	Spinal deformities(scoliosis).	Spinal deformities(scoliosis).		
5	2 theory	Spinal deformities(lordosis).	Spinal deformities(lordosis).		
6	2 theory	Spinal cord disease	Spinal cord disease		
7	2 theory	spina bifida	spina bifida		
8	2 theory	Neurological diseases,CVA	Neurological diseases,C		
9	2 theory	Neurological diseases, spinal injuries	Neurological disea spinal cord injuries		
10	2 theory	Spinal fractures,introduc ,types,causes ,healing	Spinal fractures,introduction ,types,causes ,healing		
11	2 theory	Spinal fractures complications	Spinal fract complications		
12	2 theory	Fracture,physiotherapy,use orthosis	Fracture,physiotherapy, of orthosis		
13	2 theory	Sport injuries (spinal sport inju &use of orthosis)	Sport injuries (spinal s injuries &use of orthosi		
14	2 theory	Revision	Revision		
15	2 theory	Examination	Examination		

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)	**8- orthopedic of nurses** **2-A plays system of orthope and fractures**
Recommended books and references (scientific journals, reports...)	**International journal prosthesis and orthosis**
Electronic References, Websites	

Course Description Form

1. Course Name:
Anatomy of trunk and spine
2. Course Code:
3. Semester / Year:
Second 2 2023-2024
4. Description Preparation Date:
2024
5. Available Attendance Forms:
Technical diploma in Prosthesis & Orthoesis
6. Number of Credit Hours (Total) / Number of Units (Total)
45/3
7. Course administrator's name (mention all, if more than one name)
Name: Shatha Atta Email:
8. Course Objectives

Course Objectives	The aim of this programme is to graduation a qualified technical staff have a good knowledge and skill able to work in the field of prosthetics and orthotic industry and doing it in various kind and levels

9. Teaching and Learning Strategies	
Strategy	. To identify the amputation types in upper and lower limbs A2. To identify the kinds of deformation that affect the body A3. Identify ways of alignment for different kinds of artificial limb A4. Identify the type of prosthesis and orthotic that appropriate f each case A5. Identify the anatomical aspects and physiology of the human body and the deviations that occur during walking A6. Identify ways of receiving the patient and how to deal with body and the deviations that occur during walking A6. Identify ways of receiving the patient and how to deal with it

10. Course Structure

Week	Hours	Unit or subject name theory	Unit or subject name practical	Learning method	Evaluation method
1	Th. (1) Prac.(2) Total (3	The reign of Vertebral colu reign	Use pictures and skel to show Vertebral col part	1-Mmethod lecture 2. Discuss 3Questioning. 4Presentation learn sk 5. The use educational au visual as a sh movies in addi to system training practical he Facilities	Assessment Majadharh directing questions direc 2. editorial test 3-step re-le the skill by student 4. feedback And reporting 5-chapter ex after the first weeks
2	Th. (1) Prac.(2) Total (3	The curve of Vertebral column-its development	Use pictures and skel to show Vertebral col part		
3	**Th. (1) Prac.(2) Total (3)**	The structure of the vertebra bod	Use pictures and skel to show Vertebra body		
4	Th. (1) Prac.(2) Total (3	The pelvic girdle	Use pictures and skel to show pelvic girdle		
5	**Th. (1) Prac.(2) Total (3)**	The limber spine	Use pictures and skel to show limber spine		
6	**Th. (1) Prac.(2) Total (3)**	The thoracic spine	Use pictures and skel to show thoracic spine		
7	**Th. (1) Prac.(2) Total (3)**	The cervical spine	Use pictures and skel to show cervical spine		
8	**Th. (1) Prac.(2) Total (3)**	The movement that we can d our spinal	Use pictures sh movements that we abl do in spinal		
9	**Th. (1) Prac.(2) Total (3)**	Bone of the Thorax	Use pictures and skel to show Thorax part		
10	**Th. (1) Prac.(2) Total (3)**	The anterior muscles in Trunk	Use pictures and skeleton to see the mus of Trunk reign		
11	**Th. (1) Prac.(2) Total (3)**	The posterior muscles in Trunk	Use pictures and skeleton to see the mus of Trunk reign		
12	**Th. (1) Prac.(2) Total (3)**	The lateral muscles in Trunk	Use pictures and skeleton to see the mus of Trunk reign		
13	**Th. (1) Prac.(2) Total (3)**	The general Nerve supply in Tru	Use diagram showing Nerve supply of Trunk		
14	**Th. (1) Prac.(2) Total (3)**	The blood supply (Arterial Venous)	Use diagram showing blood supply of trunk		

15	**Th. (1) Prac.(2) Total (3)**	Review	Review		

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)	**8- 1- a book on human anato systematic(.2-Anatomy of the stude of the Faculty of Physi Education d. Qais Ibrahim Douri, 1980 3-Atlas of human body 4-Principles of anatomy a physiology 5-Internet**
Main references (sources)	
Recommended books and references (scientific journals, reports...)	
Electronic References, Websites	Net

Course Description Form

1. Course Name:
Engineering drawing
2. Course Code:
3. Semester / Year:
Semester -2nd stage – 2nd semester
4. Description Preparation Date:
2024
5. Available Attendance Forms:
Students of second class
6. Number of Credit Hours (Total) / Number of Units (Total)
30 hours 2 units
7. Course administrator's name (mention all, if more than one name)
Name: Ali Muhssin Email:
8. Course Objectives

Course Objectives After finishing of study, graduate will be able to describe the m principles of the engineering drawing and projections of shapes in different views	
9. Teaching and Learning Strategies	
Strategy	1- Draw anterior, side and top view of any object in the three plans. 2- Find and accumulate the dimensions of an object from the projections one. 3- Draw the complete object from the information got from the projections. 4- Able to measure dimensions fore shape

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	2	Introduction engineering drawing	Introduction engineering drawi	1- Lecture 2- drawing 3- Presentation and learn drawing	1- Assessment of the lecture through direct questions guide 2- The practical 3- Re footwork steps by the student 4- Monthly and daily exams
2	2	Tools that used engineering drawing	Tools that used engineering drawing		
3	2	Drawing bo and how to ins and plan it	Drawing board and how install and plan it		
4	2	Lines and th types	Lines and their types		
5	2	Application the lines and th types	Application on the lines a their types		
6	2	Engineering operations	Engineering operations		
7	2	Ellipse draw method	Ellipse drawing method		
8	2	Projection theory	Projection theory		
9	2	Multiple projec system	Multiple projection system		
10	2	Application on multiple projec system	Application on the mult projection system		
11	2	Application on multiple projec system	Application on the mult projection system		
12	2	Application on multiple projec system	Application on the mult projection system		
13	2	Application on multiple projec system	Application on the mult projection system		
14	2	Application on multiple projec system	Application on the mult projection system		
15	2	Application on multiple projec system	Application on the mult projection system		

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)	Cecil Jensen: Engineering Drawing and Design,2007
Recommended books and references (scientific journals, reports...)	
Electronic References, Websites	