

Ministry of Higher Education & Scientific Research
Supervision and Scientific Evaluation Directorate
Quality Assurance and Academic Accreditation
International Accreditation Dept.



Guide to Course Descriptions and Academic Programs for 2024

Academic Program Specification Form for The Academic Year 2024

University: Northern Technical University

Faculty/Institute: Al-dour Technical Institute

Department: Department of Prosthesis

Name of the academic or professional program: Technical Diploma in Prosthetics and Orthotics

Name of the final certificate: Technical Diploma in Prosthetics and Orthotics

Academic system: Curriculum system

File preparation date: 7-9-2024

File filling date: 9-9-2024

Signature 

The name of the head of the department
Lec. Dr. Saba Damen shaker

Signature

Dean's Assistant For Scientific Affair
Prof. Dr. Hanan Shahb Ahmad

Check the file by

Quality Assurance and University Performance Division

Name of the director of the Quality Assurance and University Performance Division:

Signature 

Lec. Hayder Ali Mohssn



Dean's endorsement
Assist. Prof. Dr. Maha Elttayef Jasim

1. Program Vision

The Department of Prosthetics seeks to meet the needs of patients from prosthetics and supports using high-quality materials and is an effective way to meet the community's need for specialized cadres in supporting various health, research and educational institutions.

2. Program Mission

The Department of Prosthetics was established according to the community's need for specialized service cadres with scientific specifications and modern technical standards and preparing those cadres to work in various health and research institutions as well as supporting the private sector.

3. Program Objectives

- 1- The department aims to graduate technical staff capable of working in the field of artificial limbs, conducting routine examinations, general chemical tests, examining people with needs and working in private workshops.
- 2- Manufacturing prosthetic limbs and prosthetic supports to meet the needs of the individual so that they can perform daily activities better.
- 3- Providing psychosocial support to patients with limb loss

4. Program Accreditation

The program have not accreditation

5. Other external influences

Nothing

6. Program Structure

Program Structure	Number of Courses	Study unit	Percentage	Reviews*
Institution Requirements	9	18	20.22%	Basic course
College Requirements	5	14	15.73%	
Department Requirements	16	57	64.04%	
Summer Training	Yes			
Other	Nothing			

7. Program Description

Year/Level	Course Code	Course Name	Credit Hours	
			theoretical	practical
First level – First semester	NTU IOO	Democracy and human rights	2	-
	NTU IOI	English Language	2	-
	NTU IO2	Computer	1	1
	TIDO IO6	Physiology	2	2
	TIDO IO9	Medical terminology	2	-
	IPT I IO	Manufacture prosthesis below knee joint	2	3
	IPT I 14	Anatomy of lower limb	1	2
	IPT I 12	Biomechanics of prosthetics	1	2
First level – Second semester	NTU IO3	Arabic Language	2	-
	NTU IO4	Sports	1	1
	NTU IO5	France Language	2	-
	TIDO IO7	Anatomy	2	2
	TIDO IO8	Occupational safety	2	-
	IPT I 13	Locomotors diseases	2	-
	IPT 111	Manufacture prosthesis above knee joint	2	3
	IPT I 15	Microbiology	1	2
	IPT I 16	Parasitology	1	2

7. Program Description				
Year/Level	Course Code	Course Name	Credit Hours	
			theoretical	practical
Second level – First semester	NTU 203	crimes of the Baath Party in Iraq	2	-
	TIDO 205	Biostatics	2	-
	IPT 207	upper limb orthosis manufacturing	2	6
	IPT 209	Manufacturing of upper limb prosthesis	1	2
	IPT 210	Locomotors diseases	2	-
	IPT 211	properties Material	2	-
	IPT 215	Physiotherapy methods	1	2
	IPT 216	Parasites	1	2
Second level – Second semester	NTU 200	English Language	2	-
	NTU 201	computer	1	1
	NTU 202	Arabic Language	2	-
	NTU 204	Professional ethics	2	-
	IPT 206	lower limb orthosis manufacturing	2	6
	IPT 208	Biomechanics of orthosis	1	2
	IPT 212	Anatomy of upper limbs and trunk	1	2
	IPT 213	Biomaterials	2	-
	IPT 214	Research project	-	2

8. Expected learning outcomes of the program

A.Knowledge

A-1	How to deal with patients with amputated legs
A-2	The ability to manufacture lower and upper limbs
A-3	Identify the various types of Lower limbs

B.Skills

B-1	Ability to Interact with people specialized in the field of stem manufacturing.
B-2	Ability to put problems into perspective and find appropriate solutions.
B-3	Proficiency in special die casting and leg carving method
B-4	Efficiency in dealing with patients while fitting the leg

C.Ethics

C-1	Promoting the spirit of cooperation between specialists and working as one team with the same specialty
C-2	The ability to develop oneself and update information in the field of specialization and in the long term
C-3	The optimal use of all possible means to keep pace with the modernity of the specialization
C-4	Integrating learning at the global and local levels to develop appropriate solutions to the problems presentence

9. Teaching and Learning Strategies

Theoretical lectures / discussion and dialogue / practical lectures / field visits / discussion circles /laboratories/office activities / solving examples / graduation project / summer training

10. Evaluation methods

Oral and written exams/observation and cumulative record

11. Faculty

Faculty Members

Academic Rank	Specialization		Special Requirements/Skills (if applicable)		Number of the teaching staff	
	General	Special			Staff	Lecturer
Assistant Proff.	Biology	physiology			Staff	
lecturer	agriculture	Heredity			Staff	
Assistant teacher	Mechanical Engineering	Production and minerals			Staff	
Assistant teacher	Life sciences	physiology			Staff	
Assistant teacher	Life sciences	physiology			Staff	
Assistant teacher	Life sciences	parasites				Lecturer
Specialist Physician	Bones and joints	fractures				Lecturer
Specialist Physician	physiology of bones and joints	physiology of bones and joints				Lecturer
Diploma in Prosthetics	Prosthetics	Prosthetics				Lecturer
Diploma in Prosthetics	Prosthetics	Prosthetics				Lecturer
Diploma in Prosthetics	Prosthetics	Prosthetics				Lecturer
Diploma in Prosthetics	Prosthetics	Prosthetics				Lecturer

Professional Development

Mentoring new faculty members

Directing new faculty members to follow up on the annual updates of the study plan and the necessity of updating the curricula in a manner consistent with the plan announced by the scientific department.

Professional development of faculty members

Conducting field visits to the public and private sectors and universities within the specialty to review the field development in the field of specialization.
Involving students in discussions, scientific seminars and training courses

12.Acceptance Criterion

According, on the Central Admission Guide approved by the Iraqi Ministry of Higher Education and Scientific Research for morning and evening studies

13.The most important sources of information about the program

1. (Anatomy):

- *Gray's Anatomy for Students – By Richard Drake*
- *Atlas of Human Anatomy – By Frank H. Netter*

2. (Physiology):

- *Guyton and Hall Textbook of Medical Physiology*

3. General diseases and medical rehabilitation:

- *Pathophysiology of Disease: An Introduction to Clinical Medicine*
- *Physical Rehabilitation – by Susan B. O'Sullivan*

4. Materials and Manufacturing:

- **Institute and laboratory manuals**
- **Prosthetic manufacturers' manuals (e.g., Ottobock, Ossur)**

***Practical and laboratory training**

- **Internal educational booklets based on the curriculum.**
- **Training videos from reliable sources such as:**
 - **YouTube channels (Ex: "Ottobock Training", "Prosthetics and Orthotics Education")**

14. Program Development Plan

The academic program is one of the accredited programs within the department's curriculum and is offered within one of the institute's specialized departments. This program aims to prepare graduates who possess the academic and skill requirements in their field, commensurate with the demands of the local labor market. Despite the good success, and as a result of the self-assessment results, a number of applications have been developed.

- **Improving the quality of academic learning outcomes.**
- **Aligning the program with local labor requirements.**
- **Improving the efficiency of faculty members and updating the educational and assessment department.**
- **Updating the curriculum, including scientific updates.**
- **The availability of modern technologies such as teaching and learning.**
- **Developing student assessment criteria and accredited measurement accreditations.**
- **Practical and field-based proficiency among students.**
- **Improving the readiness of robotics for educational processes.**

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
The First	IPT110	Manufacture prosthesis below knee joint	Basic	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓
	IPT112	Biomechanics of prosthetics	Basic	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓
	IPT113	Locomotors Diseases	Basic	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	TIDO 109	Medical terminology	Basic	✓	✓			✓	✓	✓	✓	✓	✓	✓	✓
	IPT114	Anatomy of the lower extremities	Basic	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	TIDO 106	Physiology	Basic	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓
	NTU 101	English Language	Basic	✓	✓ 13			✓	✓	✓	✓	✓	✓	✓	✓
	NTU 102	computer	Basic	✓			✓	✓	✓	✓	✓	✓	✓	✓	✓

	NTU 100	Democracy and human rights	Basic	✓	✓			✓	✓	✓	✓	✓	✓	✓	✓
	NTU 104	Sports	optional	✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
	TIDO 107	Anatomy	Basic	✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
The Second	IPT 207	upper limb orthosis	Basic	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓
	1100	manufacturing	Basic	✓		✓		✓	✓	✓	✓	✓	✓	✓	✓
	108	and workshop													
	IPT 208	biomechanics of orthosis	Basic	✓	✓			✓	✓	✓	✓	✓	✓	✓	✓
	IPT111	prosthesis above	Basic	✓		✓		✓	✓	✓	✓	✓	✓	✓	✓
	IPT 209	Manufacture of Upper Limb	Basic	✓	✓			✓	✓	✓	✓	✓	✓	✓	✓
	IPT115	prosthesis	optional	✓		✓		✓	✓	✓	✓	✓	✓	✓	✓
	IPT116	Parasites	optional	✓		✓		✓	✓	✓	✓	✓	✓	✓	✓
	NTU 103	Arabic Language	Basic	✓				✓	✓	✓	✓	✓	✓	✓	✓

	IPT 210	Locomotors diseases	Basic	✓	✓			✓	✓	✓	✓	✓	✓	✓	✓
	IPT 211	Properties of materials	Basic	✓	✓			✓	✓	✓	✓	✓	✓	✓	✓
	IPT 212	Anatomy of Upper Limb and trunk	Basic	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	IPT214	Research Project	Basic	✓				✓	✓	✓	✓	✓	✓	✓	✓
	NTU204	Professional Ethics	Basic	✓				✓	✓	✓	✓	✓	✓	✓	✓
	NTU201	Computer	Basic	✓		✓		✓	✓	✓	✓	✓	✓	✓	✓
	NTU202	Arabic Language	Basic	✓		✓		✓	✓	✓	✓	✓	✓	✓	✓
	NTU203	Crimes of Al-Baath Party in Iraq	Basic	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	TIDO205	Biostatics	Basic	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	IPT 206	lower limb orthosis manufacturing	Basic	✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
	IPT213	Biomaterials	optional	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	IPT 215	Physiotherapy methods	optional	✓			✓	✓	✓	✓	✓	✓	✓	✓	✓
	IPT 216	Parasites		✓			✓	✓	✓	✓	✓	✓	✓	✓	✓

Human Rights and Democracy Course Description Form

1. Course Name					
Human Rights and Democracy					
2. Course Code					
NTU 100					
3. Semester / Level					
First /First					
4. Description preparation date					
9/9/2024					
5. Available attendance formats					
Attendance on a weekly basis					
6. Number of Credit Hours (Total) / Number of Units (Total)					
30/2					
7. Course administrator's name					
Name: Adnan Abdulkarim Khalil					
Email: adnan.akh@ntu.edu.iq					
8. Course Objectives					
Course Objectives			Identify the freedoms due to members of society and the role of each individual in terms of rights and duties, as well as identify the various state policies		
9. Teaching and Learning Strategies					
- Adequate explanation of the course - Daily Tests - Student groups					
10. Course Structure					
Week	Hours	Subject	Learning method	Attendance Forms	Evaluation method
1	2	The concept of freedom and democracy	Explanation of the lecture with the presence of means of illustration	Classroom	Exams

2	2	Rights and duties of the citizen	Explanation of the lecture with the presence of means of illustration	Classroom	Exams
3	2	The concept of the state and government	Explanation of the lecture with the presence of means of illustration	Classroom	Exams
4	2	Intellectual and cultural freedom	Explanation of the lecture with the presence of means of illustration	Classroom	Exams
5	2	Economic and social freedom	Explanation of the lecture with the presence of means of illustration	Classroom	Exams
6	2	Right to vote and participate in elections	Explanation of the lecture with the presence of means of illustration	Classroom	Exams
7	2	Freedom to form trade unions and associations	Explanation of the lecture with the presence of means of illustration	Classroom	Exams
8	2	Freedom of social security and health care	Explanation of the lecture with the presence of means of illustration	Classroom	Exams
9	2	Democracy, its goals and ways to achieve it	Explanation of the lecture with the presence of means of illustration	Classroom	Exams
10	2	Forms of democracy	Explanation of the lecture with the presence of means of illustration	Classroom	Exams
11	2	Democracy in Iraq	Explanation of the lecture with the presence of means of illustration	Classroom	Exams
12	2	People's participation in legislative work	Explanation of the lecture with the presence of means of illustration	Classroom	Exams
13	2	The referendum and its types and causes	Explanation of the lecture with the presence of means of illustration	Classroom	Exams

14	2	Popular referendum and popular solution	Explanation of the lecture with the presence of means of illustration	Classroom	Exams
15	2	Election of the Iraqi Transitional National Assembly	Explanation of the lecture with the presence of means of illustration	Classroom	Exams
11. Course Evaluation					
Daily, monthly and final exams as well as weekly reports					
12. Learning and Teaching Resources					
Textbooks					
Main references					
Scientific resources within the Internet					

English language Course Description Form

1. Course Name					
English language					
2. Course Code					
NTU 101					
3. Semester / Level					
First /first					
4. Description preparation date					
9/9/2024					
5. Available attendance formats					
Presence					
6. Number of Credit Hours (Total) / Number of Units (Total)					
30 / 2					
7. Course administrator's name					
Name: Dr. Hassan Mahmoud Hassan					
Email: Hassan.mh@ntu.edu.i					
8. Course Objectives					
Course Objectives		1- The primary goal of studying the English language is to become familiar with the basics of the English language and its general rules, to know the methods of conversations and to quote medical phrases, to be competent in accessing the latest information through the student's proficiency in the language.			
9. Teaching and Learning Strategies					
- Adequate explanation of the course - Daily Tests - Student groups					
10. Course Structure					
Week	Hours	Subject	Learning method	Attendance Forms	Evaluation method
1	2	Definition of basic English terms	Explanation of the lecture with the presence of means of illustration and practical	Classroom	Exams

			application		
2	2	English Language How many units are three in English	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams
3	2	The eight parts of speech	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams
4	2	Parts of speech2	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams
5	2	Conversation	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams
6	2	Department of prosthetics and ambulance	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams
7	2	Verb to be 1	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams
8	2	Verb to be 2	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams
9	2	Prepositions1	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams
10	2	Preposition 2	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams

11	2	Punctuation marks	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams
12	2	Simple past tense	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams
13	2	Simple past continuous tense	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams
14	2	Past perfect tense	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams
15	2	Sentence types	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams

11. Course Evaluation

Daily, monthly and final exams as well as weekly reports

12. Learning and Teaching Resources

Textbooks

Main references

Scientific resources within the Internet

Computer Course Description Form

1. Course Name					
Computer					
2. Course Code					
NTU102					
3. Semester / Level					
First / First					
4. Description preparation date					
9/9/2024					
5. Available attendance formats					
Attendance on a weekly basis					
6. Number of Credit Hours (Total) / Number of Units (Total)					
2 / 30					
7. Course administrator's name					
Name:A.L. Hind Hatem Ramadan					
Email: hind.hr@nyu.edu.iq					
8. Course Objectives					
Course Objectives			The student is familiar with the different computer applications and can distinguish between the types of software that can be dealt with		
9. Teaching and Learning Strategies					
- Adequate explanation of the course - Daily Tests - Student groups					
10. Course Structure					
Week	Hours	Subject	Learning method	Attendance Forms	Evaluation method
1	2	The concept of networks and their types - the concept of the Internet and its operation	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and laboratory	Exams
2	2	Description of the home screen and its components	Explanation of the lecture with the presence of means of	Classroom and	Exams

		-How to connect to the World Wide Web	illustration and practical application	laboratory	
3	2	How to take advantage of popular search engines such as Google	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and laboratory	Exams
4	2	Learn how to search for information and how to access it	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and laboratory	Exams
5	2	Excel program to identify the concept of the program - benefits - specifications, features and methods of operation	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and laboratory	Exams
6	2	Learn about the home screen and its components and contain various menus and active tools	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and laboratory	Exams
7	2	The concept of the cell - the types of basic data and how to enter it	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and laboratory	Exams
8	2	How to save a work page - Close the program and close the file	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and laboratory	Exams
9	2	Using some functions provided by the program such as count, SQRT, Ave, sum, Min, Max and other relevant useful statistical functions	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and laboratory	Exams
10	2	Learn about the editing process provided by the software and	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and laboratory	Exams

11	2	How to copy data or transfer data and learn about the concept of copying calculations as well as the concept of relative cells and absolute cells	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and laboratory	Exams
12	2	Control cell width – change its style and theme through the use of formatting tools	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and laboratory	Exams
13	2	Word program to identify the concept of the program - its benefits - specifications, features and methods of operation	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and laboratory	Exams
14	2	Various Word applications	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and laboratory	Exams
15	2	SPSS Statistical Program - Program Concept and Operation	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and laboratory	Exams

11. Course Evaluation

Daily, monthly and final exams as well as weekly reports

12. Learning and Teaching Resources

Textbooks

Main references

Scientific resources within the Internet

Physiology Course Description Form

1. Course Name					
Physiology					
2. Course Code					
TID106					
3. Semester / Level					
First /First					
4. Description preparation date					
9/9/2024					
5. Available attendance formats					
Attendance on a weekly basis					
6. Number of Credit Hours (Total) / Number of Units (Total)					
60 / 4					
7. Course administrator name					
Name: Saba Damen Shaker					
Email: sabada.dur@ntu.edu.iq					
8. Course Objectives					
Course Objectives			The student's knowledge of the function of each organ in the human body and its role in the balance of the body		
9. Teaching and Learning Strategies					
- Adequate explanation of the course - Daily Tests - Student groups - Field visits					
10. Course Structure					
Week	Hours	Subject	Learning method	Attendance Forms	Evaluation method
1	4	Blood – its components – blood swab – blood volume – red blood cells – number of red blood cells – shape – method of counting	Explanation of the lecture with the presence of means of illustration and practical	Classroom and laboratory	Exams

		them	application		
2	4	Leukocytes - their number - types - the normal proportions of each type - the work of white blood cells.	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and laboratory	Exams
3	4	Blood clotting – blood acidity – blood discs and their function.	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and laboratory	Exams
4	4	Anemia – types of anemia.	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and laboratory	Exams
5	4	Jaundice - its types - causes of jaundice - erythrocyte decomposition.	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and laboratory	Exams
6	4	Cardiovascular system – Overview of the anatomy of the circulatory system – Anatomy of the heart – Heart valves.	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and laboratory	Exams
7	4	The location of the heart relative to the surface of the living body - the heart as a pump - cardiac subtraction.	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and laboratory	Exams
8	4	ECG – cardiac sounds – cardiac valve areas – natural sounds.	Explanation of the lecture with the presence of means of illustration and	Classroom and laboratory	Exams

			practical application		
9	4	Arterial blood pressure – silent blood flow – atmospheric pressure – blood pressure measurement.	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and laboratory	Exams
10	4	Factors affecting blood pressure - high - low - central control of blood vessels - measurement of high blood pressure - low.	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and laboratory	Exams
11	4	Respiratory system – respiratory muscles – diaphragm – diaphragm function relative to the lungs.	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and laboratory	Exams
12	4	Respiratory volumes – spare volume of exhalation – reserve volume of inhalation – vital capacity – factors affecting vital capacity.	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and laboratory	Exams
13	4	Diseases that affect the effectiveness of respiratory volumes – nasal function.	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and laboratory	Exams
14	4	Pulmonary alveoli function	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and laboratory	Exams
15	4	Digestive system – mouth – pharynx.	Explanation of the lecture with the presence of means	Classroom and	Exams

			of illustration and practical application	laboratory	
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11. Course Evaluation

Daily, monthly and final exams as well as weekly reports

12. Learning and Teaching Resources

Textbooks

Main references

Scientific research

Scientific resources within the Internet

Medical Terminology Course Description Form

1. Course Name					
Medical terminology					
2. Course Code					
TID109					
3. Semester / Level					
First /First					
4. Description preparation date					
9/9/2024					
5. Available attendance formats					
attendance on a weekly basis					
6. Number of Credit Hours (Total) / Number of Units (Total)					
2 / 30					
7. Course administrator's name					
Name:A.L. Ammar Khaled Shehab					
Email: ammar.khalid@ntu.edu.iq					
8. Course Objectives					
Course Objectives			The student's knowledge of comprehensive and detailed information about the terminology used to describe the organs and structures of the human body, the different types of tests and their medical abbreviations, and enable him to understand the bulk of the discussions in English for any topic within the systematic lectures, seminars and external conferences.		
9. Teaching and Learning Strategies					
- Adequate explanation of the course - Daily Tests - Student groups - Field visits					
10. Course Structure					
Week	Hours	Subject	Learning method	Attendance Forms	Evaluation method
1	2	Introduction to Medical Terminology	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams

2	2	Root	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams
3	2	Prefix	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams
4	2	Subsequent	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams
5	2	Mobile Splicing Rules	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams
6	2	Connecting forms	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams
7	2	Medical terminology and pathology	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams
8	2	Terminology of the heart, circulation and nervous system	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams
9	2	Gastrointestinal and urinary terminology	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams
10	2	Lymphatic system terminology	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams
11	2	Respiratory terminology	Explanation of the lecture with the presence of means of illustration and	Classroom	Exams

			practical application		
12	2	Teeth and maxillofacial	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams
13	2	Terms of conditions and trends	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams
14	2	Musculoskeletal terminology	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams
15	2	Terminology of the skeletal system	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams

11. Course Evaluation

Daily, monthly and final exams as well as weekly reports

12. Learning and Teaching Resources

Textbooks

Main references

Scientific research

Scientific resources within the Internet

Manufacture prosthesis below knee joint Course Description Form

1. Course Name					
Manufacture prosthesis below knee joint					
2. Course Code					
IPT 110					
3. Semester / Level					
First /first					
4. Description preparation date					
9/9/2024					
5. Available attendance formats					
Presence					
6. Number of Credit Hours (Total) / Number of Units (Total)					
75 / 5					
7. Course administrator's name					
Name: D. Mazhar Ali Aboud					
Email: mzhralazawy6@gmail.com					
8. Course Objectives					
Course Objectives		The ability to understand the basic foundations and principles of designing and manufacturing lower limbs, the ability to put problems into perspective and find appropriate solutions, directing students to understand the physiological and technical factors affecting the design and manufacture of lower limbs to ensure compatibility with the human body.			
9. Teaching and Learning Strategies					
- Adequate explanation of the course - Daily Tests - Student groups					
10. Course Structure					
Week	Hours	Subject	Learning method	Attendance Forms	Evaluation method
1	5	Prosthetic Manufacturing	Explanation of the lecture with the presence of means of illustration and practical	Classroom and Workshop	Exams

			application		
2	5	Socket Design	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and Workshop	Exams
3	5	Static and dynamic equilibrium.	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and Workshop	Exams
4	5	Component Selection	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and Workshop	Exams
5	5	Alignment	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and Workshop	Exams
6	5	Socket Fabrication.	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and Workshop	Exams
7	5	Suspension Systems	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and Workshop	Exams
8	5	design the symes prosthesis	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and Workshop	Exams
9	5	Exam	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and Workshop	Exams
10	5	Prosthetic Foot Design	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and Workshop	Exams

11	5	Biomechanics of T.K prosthesis	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and Workshop	Exams
12	5	Gait Training	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and Workshop	Exams
13	5	Alignment and force distribution of T.K prosthesis	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and Workshop	Exams
14	5	Biomechanics of A.k Prosthesis	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and Workshop	Exams
15	5	Check out of A.K and T.K prosthesis	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and Workshop	Exams
11. Course Evaluation					
Daily, monthly and final exams as well as weekly reports					
12. Learning and Teaching Resources					
Textbooks					
Main references					
Scientific resources within the Internet					

Anatomy of lower limb Course Description Form

1. Course Name					
Anatomy of lower limb					
2. Course Code					
IPT 114					
3. Semester / Level					
First semester/first level					
4. Description preparation date					
9/9/2024					
5. Available attendance formats					
First semester/first level					
6. Number of Credit Hours (Total) / Number of Units (Total)					
30 practical hours + 15 theoretical hours / number of units 3					
7. Course administrator's name					
Name: A.L. Naeel Mustafa Muhammad					
Email: naeel.mustafa@ntu.edu.iq					
8. Course Objectives					
Course Objectives		The ability to master angles and deviations when manufacturing limbs, the ability to put problems into perspective and find appropriate solutions, the ability to use modern means to reach appropriate therapeutic methods, and efficiency in distributing the stress on the amputated limb.			
9. Teaching and Learning Strategies					
- Adequate explanation of the course - Daily Tests - Student groups					
10. Course Structure					
Week	Hours	Subject	Learning method	Attendance Forms	Evaluation method
1	3	Introduction in anatomy and term of anatomy	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and laboratory	Exams

2	3	Classify of bone and kind of bone	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and laboratory	Exams
3	3	Bone of Lower extremity- pelvic bone	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and laboratory	Exams
4	3	Bone of Femur	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and laboratory	Exams
5	3	Bone of Tibia , Fibula	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and laboratory	Exams
6	3	Bones of Foot	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and laboratory	Exams
7	3	Introduction in Muscular system	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and laboratory	Exams
8	3	The kind of muscles	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and laboratory	Exams
9	3	The muscles of anterior border of	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and laboratory	Exams

		pelvic reign (origin, insertion and action)			
10	3	The muscles of posterior border of pelvic reign (origin, insertion and action)	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and laboratory	Exams
11	3	The muscles of Iliac border of pelvic reign (origin, insertion and action)	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and laboratory	Exams
12	3	The muscles of the anterior border of Thigh reign (origin, insertion and action)	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and laboratory	Exams
13	3	The muscles of posterior border of Thigh reign (origin, insertion and action)	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and laboratory	Exams
14	3	The muscles of medial & lateral border of Thigh reign (origin, insertion and action)	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and laboratory	Exams

15	3	Exam	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and laboratory and laboratory	Exams
11. Course Evaluation					
Daily, monthly and final exams as well as weekly reports					
12. Learning and Teaching Resources					
Textbooks					
Main references					
Scientific resources within the Internet					

Biomechanics of prosthesis Course Description Form

1. Course Name	
Biomechanics of prosthesis	
2. Course Code	
IPT 112	
3. Semester / Level	
First /first	
4. Description preparation date	
9/9/2024	
5. Available attendance formats	
Presence	
6. Number of Credit Hours (Total) / Number of Units (Total)	
45 / 3	
7. Course administrator's name	
Name: Zena Kwan Ibrahim	
Email: External Lecturer	
8. Course Objectives	
Course Objectives	The ability to master angles and deviations w manufacturing limbs, the ability to put problems i perspective and find appropriate solutions, efficien in distributing the stress on the amputated limb.
9. Teaching and Learning Strategies	

- Adequate explanation of the course
- Daily Tests
- Student groups

10. Course Structure

Week	Hours	Subject	Learning method	Attendance Forms	Evaluation method
1	3	Terminology of biomechanics	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and Workshop	Exams
2	3	Study of force and its component.	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and Workshop	Exams
3	3	Static and dynamic equilibrium.	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and Workshop	Exams
4	3	Gait analysis	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and Workshop	Exams
5	3	Relation ship between gait and force for B.K prosthesis.	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and Workshop	Exams
6	3	Relation ship between gait and force for B.K prosthesis.	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and Workshop	Exams
7	3	Force distribution on symes prosthesis	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and Workshop	Exams

8	3	design the symes prosthesis	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and Workshop	Exams
9	3	Exam	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and Workshop	Exams
10	3	Alignment of symes prosthesis , the type of windows in the socket	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and Workshop	Exams
11	3	Biomechanics of T.K prosthesis	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and Workshop	Exams
12	3	Alignment and force distribution of T.K prosthesis	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and Workshop	Exams
13	3	Alignment and force distribution of T.K prosthesis	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and Workshop	Exams
14	3	Biomechanics of A.k Prosthesis	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and Workshop	Exams
15	3	Check out of A.K and T.K prosthesis	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and Workshop	Exams

11. Course Evaluation

Daily, monthly and final exams as well as weekly reports

12. Learning and Teaching Resources
Textbooks
Main references
Scientific resources within the Internet

Arabic Course Description Form

1. Course Name	
Arabic Language	
2. Course Code	
NTU103	
3. Semester / Level	
Second /First	
4. Description preparation date	
9/9/2024	
5. Available attendance formats	
Attendance on a weekly basis	
6. Number of Credit Hours (Total) / Number of Units (Total)	
30/2	
7. Course administrator's name	
Name: Ezaldin Abdul Rahim Hamad	
Email: External Lecturer	
8. Course Objectives	
Course Objectives	It aims to enable students with Arabic language skills and issues at all levels: phonetic, morphological, grammatical,

			semantic, stylistic, and written		
9. Teaching and Learning Strategies					
• Adequate explanation of the course • Daily Tests • Student groups					
10. Course Structure					
Week	Hours	Subject	Learning method	Attendance Forms	Evaluation method
1	2	Introduction to linguistic errors	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams
2	2	Rules for writing an elongated and compartment thousand	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams
3	2	Al-Daad and Al-Zaa	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams
4	2	Hamza writing	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams
5	2	Punctuation	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams

6	2	Noun and verb and differentiate between them	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams
7	2	Effects	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams
8	2	Number	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams
9	2	Applications of common linguistic errors	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams
10	2	Noon and Tanween	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams
11	2	Formal aspects of administrative discourse	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams
12	2	Meanings of prepositions	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams

13	2	Solar and lunar letters	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams
14	2	T tied and long	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams
15	2	T Open	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams

11. Course Evaluation

Daily, monthly and final exams as well as weekly reports

12. Learning and Teaching Resources

Textbooks

Main references

Scientific resources within the Internet

Sport Course Description Form

1.Course Name	
Sport	
2. Course Code	
NTU104	
3. Semester/Level	
Second /First	
4. Description preparation date	
9/9/2024	
5. Available attendance formats	
Attendance on a weekly basis	
6. Number of Credit Hours (Total) / Number of Units (Total)	
30/2	
7. Course administrator's name	
Name: Ali Yahya Ahmed	
Email: ali.Yahya@ntu.edu.iq	
8. Course Objectives	
Course Objectives	The course aims to provide the student with the concept of exercises and their historical development, introduce him to the different exercise schools, introduce him to the original and derived exercise situations and special situations, develop the basic motor skills of exercise, as well as identify some types of sports, their laws and benefits.

9. Teaching and Learning Strategies					
• Adequate explanation of the course • Daily Tests • Student groups • Field visits					
10. Course Structure					
Week	Hours	Subject	Learning method	Attendance Forms	Evaluation method
1	2	Introduction to sport and its benefits	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and sports hall	Exams
2	2	Terms in the anatomy of the human body	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and sports hall	Exams
3	2	The skeletal system of the human body	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and sports hall	Exams
4	2	Muscular system of the human body	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and sports hall	Exams
5	2	The nervous system of the human body	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and sports hall	Exams
6	2	Sports Medicine and Sports Injuries	Explanation of the lecture with the presence of means of illustration and practical	Classroom and sports hall	Exams

			application		
7	2	First aid for sports injuries	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and sports hall	Exams
8	2	Fatigue and ways to treat it	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and sports hall	Exams
9	2	Ethics and sportsmanship	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and sports hall	Exams
10	2	Football Laws	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and sports hall	Exams
11	2	Basketball Laws	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and sports hall	Exams
12	2	Volleyball Laws	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and sports hall	Exams
13	2	Tennis Laws	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and sports hall	Exams
14	2	Swimming radiance and its benefits	Explanation of the lecture with the presence of means of illustration and practical	Classroom and sports hall	Exams

			application		
15	2	Athletes of the arena and the field and its laws	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and sports hall	Exams
11. Course Evaluation					
Daily, monthly and final exams as well as weekly reports					
12. Learning and Teaching Resources					
Textbooks					
Main references					
Scientific resources within the Internet					

Anatomy Course Description Form

1. Course Name
Anatomy
2. Course Code
TIDO 107
3. Semester/Level
Second /First
4. Description preparation date
9/9/2024
5. Available attendance formats
Attendance on a weekly basis
6. Number of Credit Hours (Total) / Number of Units (Total)

60 / 4

7. Course administrator's name

Name: Fakhr aldin Nour aldin

Email: External lecturer

8. Course administrator name

9. Course Objectives

Course Objectives

- The student's knowledge of the anatomy of the human body and organs, as well as knowledge of the relationship between them.

10. Teaching and Learning Strategies

- Adequate explanation of the course
- Daily Tests
- Student groups
- Field visits

11. Course Structure

Week	Hours	Subject	Learning method	Attendance Forms	Evaluation method
1	4	Anatomical trends and body surfaces	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and laboratory	Exams
2	4	Anatomy of the heart, its location according to the chest wall and the number of shades	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and laboratory	Exams
3	4	Anatomy of the lungs, its location according to the chest wall and the number of ribs	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and laboratory	Exams

4	4	Abdominal anatomy and dividing the abdomen vertically and horizontally	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and laboratory	Exams
5	4	Anatomy of the stomach - its sections and its relationship to other organs	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and laboratory	Exams
6	4	Anatomy of the liver and spleen and their location according to bodily surfaces	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and laboratory	Exams
7	4	Anatomy of the small intestine and its relationship to other organs in the abdominal cavity	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and laboratory	Exams
8	4	Anatomy of the cecum and its location within the abdominal cavity	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and laboratory	Exams
9	4	Bile cyst anatomy and location	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and laboratory	Exams
10	4	Anatomy of the uterus and its location within the pelvic cavity	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and laboratory	Exams
11	4	Skeleton, Skull and Spine	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and laboratory	Exams

12	4	Shoulder bones, plank and collarbone	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and laboratory	Exams
13	4	Forearm bone and parts	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and laboratory	Exams
14	4	Hand and thigh bones	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and laboratory	Exams
15	4	Pelvic bones and lower limbs	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and laboratory	Exams

12. Course Evaluation

Daily, monthly and final exams as well as weekly reports

13. Learning and Teaching Resources

Textbooks

Main references

Scientific research

Scientific resources within the Internet

Laboratory and Workshop Safety Course Description Form

1. Course Name					
Safety of laboratories and workshops					
2. Course Code					
TID108					
3. Semester/Level					
second /First					
4. Description preparation date					
9/9/2024					
5. Available attendance formats					
Attendance on a weekly basis					
6. Number of Credit Hours (Total) / Number of Units (Total)					
30/2					
7. Course administrator's name					
Name: D. Hassan Mahmoud Hassan					
Email: Hassan.mh@ntu.edu.i					
8. Course Objectives					
Course Objectives			Identify the rules of safety and security and the ability to deal with sources of hazards in laboratories and workshops		
9. Teaching and Learning Strategies					
- Adequate explanation of the course - Daily Tests - Student groups					
10. Course Structure					
Week	Hours	Subject	Learning method	Attendance Forms	Evaluation method

1	2	Basic equipment to be available in the laboratory (laboratory arrangements)	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams
2	2	Safety precautions when handling laboratory instruments, chemicals	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams
3	2	Safety precautions upon completion of laboratory work	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams
4	2	Fires and their types	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams
5	2	Fire extinguishing means	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams
6	2	Personal Protective Equipment	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams
7	2	Chemical hazards - and how to deal with them	Explanation of the lecture with the presence of means of illustration and practical	Classroom	Exams

			application		
8	2	Radiological hazards	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams
9	2	Biological hazards	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams
10	2	Laboratory (medical) waste disposal	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams
11	2	First aid in laboratories	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams
12	2	Use of warning signs in the laboratory	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams
13	2	Environmental factors and their impact on safety and health (light, noise, heat, humidity)	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams

14	2	Safety in Field Studies	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams
15	2	Chemical and medical storage methods	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams
11. Course Evaluation					
Daily, monthly and final exams as well as weekly reports					
12. Learning and Teaching Resources					
Textbooks					
Main references					
Scientific research					
Scientific resources within the Internet					

Locomotors Diseases Course Description Form

1. Course Name	
Locomotors Diseases	
2. Course Code	
IPT 113	
3. Semester / Level	
second semester/first level	
4. Description preparation date	
9/9/2024	
5. Available attendance formats	
Presence	
6. Number of Credit Hours (Total) / Number of Units (Total)	
30/2	
7. Course administrator's name	
Name: Asia Ayad Dahash	
Email: asiaasiadr@gmail.com	
8. Course Objectives	
Course Objectives	The ability to interact with people in several fields within one specialty, the ability to put problems into perspective and find appropriate solutions, the ability to use modern means to reach appropriate treatment methods, and distinguish between diseases related to the limbs and not others by diagnosing them accurately..
9. Teaching and Learning Strategies	
- Adequate explanation of the course - Daily Tests - Student groups	

10. Course Structure					
Week	Hours	Subject	Learning method	Attendance Forms	Evaluation method
1	2	Introduction in orthopedic	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams
2	2	Glossary terminology ;[orthoepadic med. Terms]	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams
3	2	Clinical methods & approached. History , investigations & examination.	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams
4	2	Clinical methods & approached. History , Investigations & examination.	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams
5	2	Deformities :general causes / A cqwired &congenital	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams

6	2	Cont. :common deformities	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams
7	2	Arthritis : acute &chronic : definition , clinical exam	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams
8	2	Arthritis :clinical features ; diagnoses & management	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams
9	2	Arthritis : RA, OA, infective & gout	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams
10	2	Bone tumors : Benign& malignant	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams
11	2	Introduction in neurological disease , locomotors disorders	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams
12	2	Cerebral palsy	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams

13	2	Fractures : complication	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams
14	2	Uses of orthosis in soft tissue dis & injuries	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams
15	2	Revision	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams

11. Course Evaluation

Daily, monthly and final exams as well as weekly reports

12. Learning and Teaching Resources

Textbooks

Main references

Scientific resources within the Internet

Manufacture prosthesis above knee joint Course Description Form

1. Course Name	
Manufacture prosthesis above knee joint	
2. Course Code	
IPT 111	
3. Semester / Level	
9/9/2024	
4. Description preparation date	
Second semester/first level	
5. Available attendance formats	
Presence	
6. Number of Credit Hours (Total) / Number of Units (Total)	
75 / 5	
7. Course administrator's name	
Name: D. Mazhar Ali Aboud	
Email: mzhralazawy6@gmail.com	
8. Course Objectives	
Course Objectives	The ability to understand the basic foundations and principles of designing and manufacturing limbs above the knee, the ability to put problems into perspective and find appropriate solutions, directing students to understand the physiological and technical factors affecting the design and manufacture of upper limbs to ensure compatibility with the human body
9. Teaching and Learning Strategies	
- Adequate explanation of the course - Daily Tests	

- Student groups

10. Course Structure

Week	Hours	Subject	Learning method	Attendance Forms	Evaluation method
1	5	Prosthetic Socket: The component of the above-knee prosthesis that interfaces with the residual limb	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and Workshop	Exams
2	5	Suspension System: The mechanism used to secure the prosthetic limb to the residual limb, ensuring proper fit and function	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and Workshop	Exams
3	5	Prosthetic Knee Joint: The artificial joint component of the above-knee prosthesis that mimics the function of the knee.	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and Workshop	Exams
4	5	Prosthetic Foot: The artificial foot component of the above-knee prosthesis, which provides support and stability during walking	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and Workshop	Exams
5	5	Alignment: The process of ensuring that the prosthetic components are correctly aligned to optimize function and comfort	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and Workshop	Exams
6	5	Component Selection: Choosing the appropriate materials and components for constructing above-knee prosthetics	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and Workshop	Exams

7	5	Fabrication Techniques: Methods used to manufacture above-knee prosthetic components, such as casting and machining.	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and Workshop	Exams
8	5	design the system prosthesis	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and Workshop	Exams
9	5	Exam	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and Workshop	Exams
10	5	Gait Training: Teaching patients how to walk with their above-knee prosthetics effectively and safely	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and Workshop	Exams
11	5	Above-Knee Prosthetics: Artificial limbs designed to replace limbs lost above the knee due to various conditions or injuries	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and Workshop	Exams
12	5	Amputation: The surgical removal of a limb, often necessary due to trauma, vascular disease, or cancer.	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and laboratory	Exams
13	5	Residual Limb: The remaining portion of a limb after amputation, which serves as the interface with the prosthetic	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and laboratory	Exams

		device.			
14	5	Prosthetic Socket: The component of the above-knee prosthesis that interfaces with the residual limb, providing support and attachment.	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and laboratory	Exams
15	5	Check out of A.K and T.K prosthesis.	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and laboratory	Exams

11. Course Evaluation

Daily, monthly and final exams as well as weekly reports

12. Learning and Teaching Resources

Textbooks

Main references

Scientific resources within the Internet

Microbiology Course Description Form

1. Course Name	
Microbiology	
2. Course Code	
IPT115	
3. Semester/Level	
Second / First	
4. Description preparation date	
9/9/2024	
5. Available attendance formats	
Attendance on a weekly basis	
6. Number of Credit Hours (Total) / Number of Units (Total)	
45 / 3	
7. Course administrator's name	
Name: A.L. Ammar Khaled Shehab	
Email: ammar.khalid@ntu.edu.iq	
8. Course Objectives	
Course Objectives	It aims to provide a broad introduction to bacteriology, classification of bacteria, bacterial cell structure and mode of operation, bacterial growth and methods of estimation and factors affecting it, metabolism, genetics and the biological and economic

	importance of bacteria.
9. Teaching and Learning Strategies	
• Adequate explanation of the course • Daily Tests • Student groups • Field visits	

10. Course Structure					
Week	Hours	Subject	Learning method	Attendance Forms	Evaluation method
1	3	Introduction to Microbiology	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and laboratory	Exams
2	3	The structure and shape of bacteria, the classification of bacteria, the chemical composition and secondary structure of the bacterial cell.	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and laboratory	Exams
3	3	Physiology of bacteria, growth requirements, types of nutrition and factors affecting growth.	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and laboratory	Exams
4	3	Sterilization and disinfection . Classification of sterilization, physical and chemical methods.	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and laboratory	Exams
5	3	Tools, equipment and devices used in the diagnosis of bacteria	Explanation of the lecture with the presence of means of illustration	Classroom and laboratory	Exams

			and practical application		
6	3	Infections, sources of infection, virulence, toxins and enzymes related to bacteria	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and laboratory	Exams
7	3	Cultivation media and their types	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and laboratory	Exams
8	3	Chemical tests for the detection of bacteria	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and laboratory	Exams
9	3	Anaerobic bacteria	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and laboratory	Exams
10	3	Clostridium	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and laboratory	Exams
11	3	Aerobic bacteria	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and laboratory	Exams
12	3	staphylococcus, general characteristics, toxin production, enzyme, immunomodulator,	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and laboratory	Exams

		Allergy test.			
13	3	streptococci, general characteristics, toxin production, enzyme, immunomodulator, Allergy test.	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and laboratory	Exams
14	3	Bacilli (Anthrax), general characteristics, toxin production, enzyme, immunomodulatory, allergy test.	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and laboratory	Exams
15	3	Bordetella and Haemophilus, general characteristics, toxin production, enzyme, immunomodulatory, allergy test.	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and laboratory	Exams

11. Course Evaluation

Daily, monthly and final exams as well as weekly reports

12. Learning and Teaching Resources

Textbooks

Main references

Scientific research

Scientific resources within the Internet

Parasites Course Description Form

1. Course Name	
Parasites	
2. Course Code	
IPT116	
3. Semester / Level	
Second /First	
4. Description preparation date	
9/9/2024	
5. Available attendance formats	
Attendance on a weekly basis	
6. Number of Credit Hours (College) / Number of Units (College)	
45 / 3	
7. Course administrator name	
Name: A.L. Ammar Khaled Shehab	
Email: ammar.khalid@ntu.edu.iq	
8. Course Objectives	
Course Objectives	Introducing the student to primary parasites (protozoa), methods of diagnosis and the diseases they cause, and familiarity with their epidemiological information, which helps to prevent and eradicate the prevailing parasitic diseases.
9. Teaching and Learning Strategies	
- Adequate explanation of the course - Daily Tests - Student groups - Field visits	
10. Course Structure	

Week	Hours	Subject	Learning method	Attendance Forms	Evaluation method
1	3	Introduction to parasites	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and laboratory	Exams
2	3	Classification of parasites	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and laboratory	Exams
3	3	Host and its types	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and laboratory	Exams
4	3	Classification of protozoans and their specifications	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and laboratory	Exams
5	3	Roots	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and laboratory	Exams
6	3	Antamoeba: form, pathogenesis and diagnostic methods	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and laboratory	Exams
7	3	Flagella	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and laboratory	Exams

			application	laboratory	
8	3	Giardiasis - Trichomonas: form, pathogenesis and diagnostic methods	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and laboratory	Exams
9	3	Leishmaniasis: form, pathogenesis and diagnostic methods	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and laboratory	Exams
10	3	Trypanosoma: form, pathogenesis and diagnostic methods	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and laboratory	Exams
11	3	Ciliary	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and laboratory	Exams
12	3	Plantidium: form, pathogenesis and diagnostic methods	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and laboratory	Exams
13	3	Spores	Explanation of the lecture with the presence of means of illustration and practical	Classroom and laboratory	Exams

			application		
14	3	Plasmodium: form, pathogenesis and diagnostic methods	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and laboratory	Exams
15	3	Toxoplasma: form, pathogenesis and diagnostic methods	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and laboratory	Exams
11. Course Evaluation					
Daily, monthly and final exams as well as weekly reports					
12. Learning and Teaching Resources					
Textbooks					
Main references					
Scientific research					
Scientific resources within the Internet					

Sample Course Description of the Crimes of the Baath Regime in Iraq

1. Course Name					
Crimes of the Baath regime in Iraq					
2. Course Code					
NTU203					
3. Semester / Level					
First / Second					
4. Description preparation date					
9/9/2024					
5. Available attendance formats					
Attendance on a weekly basis					
6. Number of Credit Hours (Total) / Number of Units (Total)					
2 / 30					
7. Course administrator's name					
Name: Adnan Abdul Karim Khalil					
Email: adnan.akh@ntu.edu.iq					
8. Course Objectives					
Course Objectives			Introducing the Baath regime and its emergence in Iraq and the types of crimes practiced by it over decades and studying the motives behind the implementation of various crimes against the Iraqi people.		
9. Teaching and Learning Strategies					
- Adequate explanation of the course - Daily Tests - Student groups					
10. Course Structure					
Week	Hours	Subject	Learning method	Attendance Forms	Evaluation method

1	2	Basic political terminology	Explanation of the lecture with the presence of means of illustration	Classroom	Exams
2	2	The emergence of the Baath Party in Iraq	Explanation of the lecture with the presence of means of illustration	Classroom	Exams
3	2	Types of crime	Explanation of the lecture with the presence of means of illustration	Classroom	Exams
4	2	Causes and motives of the crime	Explanation of the lecture with the presence of means of illustration	Classroom	Exams
5	2	Perpetrators of Baath regime crimes	Explanation of the lecture with the presence of means of illustration	Classroom	Exams
6	2	The United Nations' view of the crimes of the Baath regime	Explanation of the lecture with the presence of means of illustration	Classroom	Exams
7	2	Human rights and crimes of the Baath regime	Explanation of the lecture with the presence of means of illustration	Classroom	Exams
8	2	Human rights violations by the Baath regime	Explanation of the lecture with the presence of means of illustration	Classroom	Exams

9	2	Military crimes	Explanation of the lecture with the presence of means of illustration	Classroom	Exams
10	2	Political crimes	Explanation of the lecture with the presence of means of illustration	Classroom	Exams
11	2	Economic crimes	Explanation of the lecture with the presence of means of illustration	Classroom	Exams
12	2	Civil offenses	Explanation of the lecture with the presence of means of illustration	Classroom	Exams
13	2	Social crimes	Explanation of the lecture with the presence of means of illustration	Classroom	Exams
14	2	Genocide	Explanation of the lecture with the presence of means of illustration	Classroom	Exams
15	2	Mass graves	Explanation of the lecture with the presence of means of illustration	Classroom	Exams

11. Course Evaluation

Daily, monthly and final exams as well as weekly reports

12. Learning and Teaching Resources

Textbooks

Main references

Scientific resources within the Internet

Statistics Course Description Form

1. Course Name					
Statistics					
2. Course Code					
TID205					
3. Semester / Level					
First / Second					
4. Description preparation date					
9/9/2024					
5. Available attendance formats					
Attendance on a weekly basis					
6. Number of Credit Hours (College) / Number of Units (College)					
2 / 30					
7. Course administrator's name					
Name: A.I. Saja Juma Hammad					
Email: saja.jumaa@ntu.edu.iq					
8. Course Objectives					
Course Objectives			Ability to deal with various statistical methods and their vital applications within the field of medical laboratories.		
9. Teaching and Learning Strategies					
- Adequate explanation of the course - Daily Tests - Student groups					
10. Course Structure					
Week	Hours	Subject	Learning method	Attendance Forms	Evaluation method

1	2	Basic concepts in mathematics	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams
2	2	Division equation	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams
3	2	Purpose and continuity	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams
4	2	Biostatistics	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams
5	2	Statistical concepts	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams
6	2	The concept of probability	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams
7	2	Calculation and counting techniques	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams

8	2	Probability distribution	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams
9	2	Frequency distribution table	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams
10	2	Measures of central tendency	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams
11	2	Methods of data classification and tabulation	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams
12	2	Derivative	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams
13	2	Derivative of Trigonometric Functions	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams
14	2	Integration	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams

15	2	Deviation and contrast	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams
11. Course Evaluation					
Daily, monthly and final exams as well as weekly reports					
12. Learning and Teaching Resources					
Textbooks					
Main references					
Scientific resources within the Internet					

Upper limb orthosis Manufacturing Course Description Form

1. Course Name
Upper limb orthosis Manufacturing
2. Course Code
IPT 207
3. Semester / Level
First /Second
4. Description preparation date
9/9/2024
5. Available attendance formats
Presence
6. Number of Credit Hours (Total) / Number of Units (Total)

120 / 8

7. Course administrator's name

Name: Anas Ali Aboud

Email: anas1993vi@gmail.com

8. Course Objectives

Course Objectives

The ability to understand the basic foundations and principles of how to design and manufacture upper limb orthotics, the ability to put problems into definition and find appropriate solutions, and encourage students to think creatively and invent new and innovative designs for upper limb orthotics.

9. Teaching and Learning Strategies

- Adequate explanation of the course
- Daily Tests
- Student groups

10. Course Structure

Week	Hours	Subject	Learning method	Attendance Forms	Evaluation method
1	8	Orthotic Device: A device designed to support, align, prevent, or correct deformities or to improve the function of movable parts of the body.	Theoretical + practical	Classroom+Workshop	Tests and reports
2	8	Socket Design: The process of designing the interface between the residual limb and the orthotic socket.	Theoretical + practical	Classroom+Workshop	Tests and reports
3	8	Component Selection: Choosing the appropriate materials and	Theoretical	Classroom+Workshop	Tests and

		components for constructing upper-limb orthotic devices	+ practical		reports
4	8	Alignment: Ensuring the correct alignment of the orthotic components to optimize function and comfort	Theoretical + practical	Classroom+Workshop	Tests and reports
5	8	Suspension Systems: Mechanisms used to secure the orthotic device to the body, ensuring proper fit and function.	Theoretical + practical	Classroom+Workshop	Tests and reports
6	8	Prosthetic Joint: The artificial joint component of an orthotic device, designed to mimic the function of the natural joint.	Theoretical + practical	Classroom+Workshop	Tests and reports
7	8	Fabrication Techniques: Methods used to manufacture upper-limb orthotic components, such as casting and machining.	Theoretical + practical	Classroom+Workshop	Tests and reports
8	8	Gait Training: Teaching patients how to walk with their orthotic devices effectively and safely.	Theoretical + practical	Classroom+Workshop	Tests and reports
9	8	Exam	Theoretical + practical	Classroom+Workshop	Tests and reports
10	8	Socket Design	Theoretical + practical	Classroom+Workshop	Tests and reports
11	8	Upper limb Orthosis	Theoretical + practical	Classroom+Workshop	Tests and reports

12	8	Prosthetic Arm	Theoretical + practical	Classroom+Workshop	Tests and reports
13	8	Orthotic Hand	Theoretical + practical	Classroom+Workshop	Tests and reports
14	8	Biomechanics of A.k Prosthesis	Theoretical + practical	Classroom+Workshop	Tests and reports
15	8		Theoretical + practical	Classroom+Workshop	Tests and reports

11. Course Evaluation

Daily, monthly and final exams as well as weekly reports

12. Learning and Teaching Resources

Textbooks

Main references

Scientific resources within the Internet

Manufacturing of upper limbs prosthesis Course Description Form

1. Course Name	
Manufacturing of upper limbs prosthesis	
2. Course Code	
IPT 209	
3. Semester / Level	
First /second	
4. Description preparation date	
9/9/2024	
5. Available attendance formats	
Presence	
6. Number of Credit Hours (Total) / Number of Units (Total)	
45 / 3	
7. Course administrator's name	
Name: D. Mazhar Ali Aboud	
Email: mzhralazawy6@gmail.com	
8. Course Objectives	
Course Objectives	1-Competence in dealing with patients during the installation of a hand or arm 2- Proficiency in casting special molds and the hand carving method 3-The ability to interact with those specialized in the field of handicrafts. 4- Distinguish between what is required, whether the case requires an electronic or mechanical hand
9. Teaching and Learning Strategies	
• Adequate explanation of the course • Daily Tests • Student groups	

10. Course Structure					
Week	Hours	Subject	Learning method	Attendance Forms	Evaluation method
1	3	Cosmetic prosth. For partial.	Theoretical + practical	Classroom and Workshop	Tests and reports
2	3	Cosmetic prosth. For partial	Theoretical + practical	Classroom and Workshop	Tests and reports
3	3	Cosmetic prosth for blow elbow	Theoretical + practical	Classroom and Workshop	Tests and reports
4	3	Cosmetic prosth for above elbow	Theoretical + practical	Classroom and Workshop	Tests and reports
5	3	Cosmetic prosth for above elbow	Theoretical + practical	Classroom and Workshop	Tests and reports
6	3	Cosmetic prosth for above elbow	Theoretical + practical	Classroom and Workshop	Tests and reports
7	3	Cosmetic prosth through shoulder	Theoretical + practical	Classroom and Workshop	Tests and

					reports
8	3	Cosmetic prosth through shoulder	Theoretical + practical	Classroom and Workshop	Tests and reports
9	3	Stump examination	Theoretical + practical	Classroom and Workshop	Tests and reports
10	3	Mechanical prosth. through' .wrist	Theoretical + practical	Classroom and Workshop	Tests and reports
11	3	Mechanical prosth. through below elbow	Theoretical + practical	Classroom and Workshop	Tests and reports
12	3	Mechanical prosth. through below elbow	Theoretical + practical	Classroom and Workshop	Tests and reports
13	3	Mechanical prosth. through below elbow	Theoretical + practical	Classroom and Workshop	Tests and reports
14	3	Mechanical prosth. through below elbow	Theoretical + practical	Classroom and Workshop	Tests and reports

15	3	Introduction about the myoelectric prosth.	Theoretical + practical	Classroom and Workshop	Tests and reports
11. Course Evaluation					
Daily, monthly and final exams as well as weekly reports					
12. Learning and Teaching Resources					
Textbooks					
Main references					
Scientific resources within the Internet					

Locomotors Diseases Course Description Form

1. Course Name
Locomotors Diseases
2. Course Code
IPT 113
3. Semester / Level
First /second
4. Description preparation date
9/9/2024
5. Available attendance formats
Presence
6. Number of Credit Hours (Total) / Number of Units (Total)
30 / 2

7. Course administrator's name					
Name: Anas Ali Aboud					
Email: anas1993vi@gmail.com					
8. Course Objectives					
Course Objectives			-The ability to interact with people in several fields within one specialty, the ability to put problems into perspective and find appropriate solutions, the ability to use modern means to reach appropriate treatment methods, and distinguish between diseases related to the limbs and not others by diagnosing them accurately.		
9. Teaching and Learning Strategies					
-Brainstorming strategy - Teamwork strategy - Discussion strategy -Case study strategy - Inductive teaching strategy - Alpha maps strategy Himiya - Practical field training strategy - Self-learning strategy -E-learning strategy -Study strategy -Conclusion strategy - Divergent practice strategy - Switching strategy Ideas - strategy for providing examples					
10. Course Structure					
Week	Hours	Subject	Learning method	Attendance Forms	Evaluation method
1	2	Introduction in orthopedic	theoretical	Classroom	Tests and reports
2	2	Glossary terminology ;[orthoepadic med. Terms]	theoretical	Classroom	Tests and

					reports
3	2	Clinical methods & approached. History , investigations & examination.	theoretical	Classroom	Tests and reports
4	2	Clinical methods & approached. History , Investigations & examination.	theoretical	Classroom	Tests and reports
5	2	Deformities :general causes / A cqwired &congenital	theoretical	Classroom	Tests and reports
6	2	Cont. :common deformities	theoretical	Classroom	Tests and reports
7	2	Arthritis : acute &chronic : definition , clinical exam	theoretical	Classroom	Tests and reports
8	2	Arthritis :clinical features ; diagnoses & management	theoretical	Classroom	Tests and reports
9	2	Arthritis : RA, OA, infective & gout	theoretical	Classroom	Tests and reports

10	2	Bone tumors : Benign& malignant	theoretical	Classroom	Tests and reports
11	2	Introduction in neurological disease , locomotors disorders	theoretical	Classroom	Tests and reports
12	2	Cerebral palsy	theoretical	Classroom	Tests and reports
13	2	Fractures : complication	theoretical	Classroom	Tests and reports
14	2	Uses of orthosis in soft tissue dis & injuries	theoretical	Classroom	Tests and reports
15	2	Revision	theoretical	Classroom	Tests and reports

11. Course Evaluation

Distribution of the score from 100 according to the tasks assigned to the student, such as preparation today And daily, oral and monthly exams editorial, reports, etc.

12. Learning and Teaching Resources

Textbooks
Main references
Scientific resources within the Internet

Properties of Material Course Description Form

1. Course Name
Properties of Material
2. Course Code
IPT 211
3. Semester / Level
First semester/second level
4. Description preparation date
9/9/2024
5. Available attendance formats
Presence
6. Number of Credit Hours (Total) / Number of Units (Total)
30/ 2
7. Course administrator's name
Name: Yasser Ayad Taha
Email: External Lecturer
8. Course Objectives
Course Objectives
1-The ability to use various types of materials 2 -The ability to develop solutions and find alternative materials in the event that the quantities required to

	complete the work are not available 3- Proficiency in dealing with introducing materials into the interaction template
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9. Teaching and Learning Strategies

- Adequate explanation of the course
- Daily Tests
- Student groups

10. Course Structure

Week	Hours	Subject	Learning method	Attendance Forms	Evaluation method
1	2	Power and energy systems	Theoretical	Classroom	Tests and reports
2	2	Work and stress	Theoretical	Classroom	Tests and reports
3	2	Stress and tension	Theoretical	Classroom	Tests and reports
4	2	Stress and emotion	Theoretical	Classroom	Tests and reports
5	2	The breed and its types	Theoretical	Classroom	Tests and reports
6	2	The relationship between stress and tension	Theoretical	Classroom	Tests and reports
7	2	Constant movement	Theoretical	Classroom	Tests and reports
8	2	Hooke's law	Theoretical	Classroom	Tests and reports
9	2	Kinetic measurements	Theoretical	Classroom	Tests and reports
10	2	Fragility	Theoretical	Classroom	Tests and reports

11	2	Plastic for orthotics and prosthetics	Theoretical	Classroom	Tests and reports
12	2	Thermal plastic	Theoretical	Classroom	Tests and reports
13	2	Plastic T.H/PP.RT/PVC/ACP	Theoretical	Classroom	Tests and reports
14	2	Plastic LT and its application	Theoretical	Classroom	Tests and reports
15	2	Thermal assembly	Theoretical	Classroom	Tests and reports
11. Course Evaluation					
Daily, monthly and final exams as well as weekly reports					
12. Learning and Teaching Resources					
Textbooks					
Main references					
Scientific resources within the Internet					

Physiotherapy methods Course Description Form

1. Course Name
Physiotherapy methods
2. Course Code
IPT215
3. Semester / Level
First /second

4. Description preparation date					
9/9/2024					
5. Available attendance formats					
Presence					
6. Number of Credit Hours (Total) / Number of Units (Total)					
45/3					
7. Course administrator's name					
Name: Asia Ayad Dahash					
Email: asiaasiadr@gmail.com					
8. Course Objectives					
Course Objectives		- Physical therapy aims to improve the individual's ability to use prosthetic limbs efficiently and effectively in movement and daily performance - Strengthening the muscles and improving flexibility. Physical therapy includes exercises to strengthen the muscles surrounding the prosthetic limbs and improve their flexibility, which facilitates the movement process and reduces the risk of injury. - Improving balance and motor coordination, as physical therapy includes exercises to improve the individual's balance and motor coordination using prosthetic limbs.			
9. Teaching and Learning Strategies					
- Adequate explanation of the course - Daily Tests - Student groups					
10. Course Structure					
Week	Hours	Subject	Learning method	Attendance Forms	Evaluation method
1	3	Physical Therapy Techniques	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams

2	3	Muscles and Tendons	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams
3	3	Strength training exercises	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams
4	3	Stretching exercises	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams
5	3	Balance Techniques	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams
6	3	Pain Management	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams
7	3	Massage Techniques	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams
8	3	Coordination exercises	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams
9	3	Psychological Adaptation Techniques	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams
10	3	Progress Monitoring	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams

11	3	Prosthetic Use	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams
12	3	Injury Prevention	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams
13	3	Performance Enhancement	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams
14	3	Irritation Reduction Techniques	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams
15	3	Self – care Instructions	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams

11. Course Evaluation

Daily, monthly and final exams as well as weekly reports

12. Learning and Teaching Resources

Textbooks

Main references

Scientific resources within the Internet

Parasites Course Description Form

1. Course Name	
Parasites	
2. Course Code	
IPT 216	
3. Semester / Level	
first semester/second level	
4. Description preparation date	
9//9/2024	
5. Available attendance formats	
Presence	
6. Number of Credit Hours (Total) / Number of Units (Total)	
45/3	
7. Course administrator's name	
Name:A.L. Ammar Khaled Shehab	
Email: ammar.khalid@ntu.edu.iq	
8. Course Objectives	
Course Objectives	The new parasites are specially designed to enable Dravis to create new software, which is world-famous, which is world-famous, with what we need to design and program software Why do we need more features, methods, methods, and new methods This article has become brief, character design methods and the main part of it.
9. Teaching and Learning Strategies	
- Adequate explanation of the course - Daily Tests - Student groups	
10. Course Structure	

Week	Hours	Subject	Learning method	Attendance Forms	Evaluation method
1	3	Defines the parasites ,parasitology types of parasites Types of host Classification of parasites Protozoa + metazoan Metazoa [helminthes and arthropoda]	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and laboratory	Exams
2	3	Introduction generally in characteristic feature of protozoa and classification:- Rhizopoda ,Mastigophora ,Cilophora (ciliate) ,Telospora	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and laboratory	Exams
3	3	Class Rhizopoda Pathogenic amoeba Entamoeba histolytica Morphology ,life cycle ,Pathogenicity ,Lab.diagnosis	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and laboratory	Exams
4	3	Few of morphology ,pathogenicity ,diagnosis of :- Entamoeba gingivalis , A canthomoeba ,Naegleria	Explanation of the lecture with the presence of means of illustration and	Classroom and laboratory	Exams

			practical application		
5	3	Non pathogenic amoeba Different between Entamoeba coli and E. histolytica . and morphology , Lab, diagnosis of Iodamoeba butschlii , Endolimax nana ,E. dispar ,Dientamoeba fragilis	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and laboratory	Exams
6	3	Class Mastigophor or Flagellates generally introduction in characteristic feature and classification in (intestinal flagellate, blood and tissue flagellates ,genital flagellates). Intestinal Flagellate :- Giardia lamblia ,Chilomastix mesnili ,Trichomonas hominis ,Morphology ,life cycle ,pathogenicity ,and lab. Diagnosis .	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and laboratory	Exams
7	3	Genital flagellate Trichomonas vaginales Oral flagellates Trichomonas tenax Morphology ,pathogenicity	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and laboratory	Exams

		and lab. diagnosis			
8	3	Tissue and blood flagellate Haemoflagellates forms. Lishmania donovani Lishmania tropica Lishmania brazeliensis Morphology ,life cycle ,pathogenicity, Lab. diagnosis	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and laboratory	Exams
9	3	Trypanosoma cruzi Trypanosoma brucei Morphology ,life cycle ,pathogenicity, Lab. Diagnosis Sample of Tse-tse fly and Reduviid bug.	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and laboratory	Exams
10	3	Class Ciliophra (cilata) Blantidium coli Morphology ,life cycle ,pathogenicity, Lab. diagnosis	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and laboratory	Exams
11	3	Class Sporozoa Generally introduction of characteristic features of sporozoa. Life cycle in	Explanation of the lecture with the presence of means of illustration and	Classroom and laboratory	Exams

		generally of Plasmodium spp. In man and insects.	practical application		
12	3	Plasmodium vivax Plasmodium ovale pathogenicity, Lab. Diagnosis	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and laboratory	Exams
13	3	Plasmodium malariae Plasmodium falciparum pathogenicity, Lab. diagnosis and short notes of parasites Babesia spp. The defferentes in lab. diagnosis with Plasmodium spp.	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and laboratory	Exams
14	3	Isosporia belli , Toxoplasma gondii Morphology ,life cycle ,pathogenicity, Lab. Diagnosis	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and laboratory	Exams
15	3	Cryptosporidium spp. Morphology ,life cycle ,pathogenicity, Lab. Diagnosis	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and laboratory	Exams
11. Course Evaluation					

Daily, monthly and final exams as well as weekly reports
12. Learning and Teaching Resources
Textbooks
Main references
Scientific resources within the Internet

Computer Course Description Form

1. Course Name	
computer	
2. Course Code	
NTU 200	
3. Semester / Level	
Second/ second	
4. Description of preparation date	
9/9/2024	
5. Available attendance formats	
weekly attendance	
6. Number of Credit Hours (Total) / Number of Units (Total)	
30 / 2	
7. Course administrator's name	
Name: A.L. Hind Hatem Ramadan	
Email: hind.hr@nyu.edu.iq	
8. Course Objectives	
Course Objectives	Familiarize the student with various computer applications and be able to distinguish between the types of software that can be handled, and identify artificial intelligence and the

			prospects of dealing with it and how to benefit from it in all areas of life.		
9. Teaching and Learning Strategies					
• Adequate explanation of the course • Daily Tests • Student groups					
10. Course Structure					
Week	Hours	Subject	Learning method	Attendance Forms	Evaluation method
1	2	Introduction to artificial intelligence	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and Laboratory	Exams
2	2	History of artificial intelligence	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and Laboratory	Exams
3	2	Artificial intelligence techniques and methods	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and Laboratory	Exams
4	2	Challenges and ethical considerations in artificial intelligence	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and Laboratory	Exams
5	2	Artificial intelligence in smartphones and virtual assistants such as siri / Google assistant	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and Laboratory	Exams

6	2	Applications of artificial intelligence in education, health, finance, transport and marketing	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and Laboratory	Exams
7	2	The impact of artificial intelligence on society	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and Laboratory	Exams
8	2	Artificial intelligence and international relations	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and Laboratory	Exams
9	2	Artificial intelligence and the future of humanity.	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and Laboratory	Exams
10	2	Ethics of artificial intelligence	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and Laboratory	Exams
11	2	Artificial intelligence, privacy and surveillance	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and Laboratory	Exams
12	2	Future directions in artificial intelligence	Explanation of the lecture with the presence of means of illustration and practical	Classroom and Laboratory	Exams

			application		
13	2	Modern research and emerging technologies in the field of artificial intelligence	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and Laboratory	Exams
14	2	Future outlook	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and Laboratory	Exams
15	2	The role of intelligence in smartphones	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and Laboratory	Exams
11. Course Evaluation					
Daily, monthly, and final exams as well as weekly reports					
12. Learning and Teaching Resources					
Textbooks					
Main references					
Scientific resources within the Internet					

Arabic Course Description Form

1. Course Name	
Arabic Language	
2. Course Code	
NTU202	
3. Semester / Level	
Second / Second	
4. Description preparation date	
9/9/2024	
5. Available attendance formats	
Attendance on a weekly basis	
6. Number of Credit Hours (Total) / Number of Units (Total)	
2 / 30	
7. Course administrator's name	
Name: Ezaldin Abdul Rahim Hamad	
Email: External Lecturer	
8. Course Objectives	
Course Objectives	Introducing the Arab culture by understanding the rules and principles of the Arabic language and enabling students to master their Arabic language through the ability to write the correct texts and the appropriate expression of various situations and situations within their medical specialization.
9. Teaching and Learning Strategies	
- Adequate explanation of the course - Daily Tests	

- Student groups

10. Course Structure

Week	Hours	Subject	Learning method	Attendance Forms	Evaluation method
1	2	Language is human identity	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams
2	2	The Arabic language and its origins	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams
3	2	Syntax	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams
4	2	Counting rules	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams
5	2	The style of the condition in the Arabic language	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams
6	2	Dictation and writing	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams
7	2	Punctuation	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams
8	2	Calligraphy	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams

9	2	Arabic literature	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams
10	2	The merits of writing for Al-Jahiz	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams
11	2	Short Story (Tigers on the Tenth Day)	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams
12	2	The poem of the night lover by Nazik Al-Malaika	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams
13	2	Study of Surat Al-Fajr	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams
14	2	T tied	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams
15	2	Communication in the language	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams

11. Course Evaluation

Daily, monthly and final exams as well as weekly reports

12. Learning and Teaching Resources

Textbooks

Main references
Scientific resources within the Internet

Professional Ethics Course Description Form

1. Course Name	
Professional Ethics	
2. Course Code	
NTU204	
3. Semester / Level	
Second / Second	
4. Description preparation date	
9/9/2024	
5. Available attendance formats	
Attendance on a weekly basis	
6. Number of Credit Hours (Total) / Number of Units (Total)	
2 / 30	
7. Course administrator's name	
Name: A.L. Hassan Mohamed Hassan	
Email: hasan.aljbory@ntu.edu.iq	
8. Course Objectives	
Course Objectives	Identify the basic ethics of the profession for workers in medical specialties and qualify the graduate to deal professionally with his profession and achieve compatibility with himself and his professional environment (the patient, his companions, health workers and

			medical devices).		
9. Teaching and Learning Strategies					
• Adequate explanation of the course • Daily Tests • Student groups					
10. Course Structure					
Week	Hours	Subject	Learning method	Attendance Forms	Evaluation method
1	2	- Principles of professional ethics in the stages of civilizational developments. - Principles of professional ethics in Arab and Islamic civilization. - Etiquette of dealing with patients in hospitals since ancient times until now.	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams
2	2	Professional behavior: definition, concept, practical applications, relationship between employees and their superiors.	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams
3		Basic ethics of the profession - Characteristics of professional ethics as a guide and guide for behavior. - How to employ professional ethics from the position of the guide to the behavior of the individual and his emotions and his ability to make the appropriate decision.	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams

	2	-Characteristics and qualities of health workers... - Appearance, behavior and commitment. - Moral and legal rights of the patient			
4	2	Behavioral / human - interactive - collective patterns. Its definition, nature, motives, interpretations, and factors affecting it.	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams
5	2	Communication/linguistic and non-linguistic styles - Definition, types, effects, design of successful communication methods. - How communication styles affect behavior, listening and listening, and how to practice it with practical examples.	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams
6	2	Behavioral attitudes and tendencies. - Definition, classification, factors affecting them, methods of measurement.	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams
7	2	Values, customs and traditions. - Definition, classification, factors affecting them, methods of measurement.	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams

8	2	Personality styles and how to deal with them. - Definition of personality - types - relationship to the profession. - Technician's personality and manifestations	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams
9	2	Conditions for improving mental health - Definition, factors affecting it, prevention of mental illness, the role of mental health in professional preparation.	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams
10	2	Conditions of professional compatibility and associated employment relationship. - Concept, conditions, poor professional availability.	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams
11	2	Job description of the graduate's work	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams

12	2	- Behavioral dealing with the patient. - Receiving the patient, dealing with him, gaining his trust and maintaining the secrets of the profession. - Scheduling the requirements of the required procedure. - Maintaining the patient's needs.	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams
13	2	Behavioral handling of medical devices and equipment. - Daily access to devices, tools, solutions and other requirements and preparing them for daily work, sustaining, maintaining and maintaining them. Preparing the necessary medicines for work and good disposition of them.	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams

14	2	Occupational Safety -Prevention of work hazards and accidents.Prevention of the risks of bacterial, toxic and radioactive contamination.Preventionof thoughts of infection with infectious and communicable diseases. Avoid wrong practices in the field of work.	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams
15	2	Applications in professional conduct. - Field visits to hospitals and other health institutions to view and exchange experience and information.	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams
11. Course Evaluation					
Daily, monthly and final exams as well as weekly reports					
12. Learning and Teaching Resources					
Textbooks					
Main references					
Scientific resources within the Internet					

Manufacturing lower limbs orthosis \ Course Description Form

1. Course Name	
manufacturing lower limbs orthosis	
2. Course Code	
IPT206	
3. Semester / Level	
Second /second	
4. Description preparation date	
9/9/2024	
5. Available attendance formats	
Presence	
6. Number of Credit Hours (Total) / Number of Units (Total)	
120 / 8	
7. Course administrator's name	
Name: Anas Ali Aboud	
Email: anas1993vi@gmail.com	
8. Course Objectives	
Objectives	1-Efficiency in communicating with workers in the field of support industry and exchanging experiences 2-Emphasizing the knowledge and skill required to perform duties and responsibilities. Technician in prosthetics. Efficiently . 3-The ability to identify amputation areas and find the appropriate support for them 4-The ability to use molding and sculpting devices to achieve optimal

		manufacturing.			
9. Teaching and Learning Strategies					
• Adequate explanation of the course • Daily Tests • Student groups					
10. Course Structure					
Week	Hours	Subject	Learning method	Attendance Forms	Evaluation method
1	8	History of Orthosis	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and Workshop	Exams
2	8	Motor disability	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and Workshop	Exams
3	8	Foot deformities (F.O)	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and Workshop	Exams
4	8	Foot deformities	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and Workshop	Exams
5	8	Foot deformities	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and Workshop	Exams
6	8	Foot deformities	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and Workshop	Exams
7	8	Ankle deformities	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and Workshop	Exams

8	8	Foot deformities	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and Workshop	Exams
9	8	Foot deformities	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and Workshop	Exams
10	8	Foot deformities	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and Workshop	Exams
11	8	knee deformities	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and Workshop	Exams
12	8	Foot deformities	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and Workshop	Exams
13	8	Foot deformities	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and Workshop	Exams
14	8	Hip deformities HKFO	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and Workshop	Exams
15	8	Exam	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and Workshop	Exams

11. Course Evaluation

Daily, monthly and final exams as well as weekly reports

12. Learning and Teaching Resources

Textbooks
Main references
Scientific resources within the Internet

Biomechanics of prosthesis Course Description Form

1. Course Name	
Biomechanics of prosthesis	
2. Course Code	
IPT112	
3. Semester / Level	
Second /second	
4. Description preparation date	
9/9/2024	
5. Available attendance formats	
Presence	
6. Number of Credit Hours (Total) / Number of Units (Total)	
45 / 3	
7. Course administrator's name	
Name: Zena Kwan Ibrahim	
Email: External Lecturer	
8. Course Objectives	
Objectives	- Ability to master angles and deflections when manufacturing limbs. - The ability to put problems into perspective and find appropriate solutions. - Ability to use modern methods and tools specialized in manufacturing - Efficiency in distributing stress on the amputated limb

9. Teaching and Learning Strategies

Brainstorming strategy - Teamwork strategy - Discussion strategy

Case study strategy - inductive teaching strategy - concept maps strategy Yamiyah - Practical field training strategy - Self-learning strategy
-E-learning

10. Course Structure

Week	Hours	Subject	Learning method	Attendance Forms	Evaluation method
1	3	Terminology of biomechanics	Explanation of the lecture with the presence of means of illustration and practical application	Theoretical + practical	Exams
2	3	Study of force and its component.	Explanation of the lecture with the presence of means of illustration and practical application	Theoretical + practical	Exams
3	3	Static and dynamic equilibrium.	Explanation of the lecture with the presence of means of illustration and practical application	Theoretical + practical	Exams
4	3	Gait analysis	Explanation of the lecture with the presence of means of illustration and practical application	Theoretical + practical	Exams
5	3	Relation ship between gait and force for B.K prosthesis.	Explanation of the lecture with the presence of means of illustration and practical application	Theoretical + practical	Exams
6	3	Relation ship between gait and force for B.K prosthesis.	Explanation of the lecture with the presence of means of illustration and practical application	Theoretical + practical	Exams
7	3	Force distribution on symes prosthesis	Explanation of the lecture with the presence of means of illustration and practical application	Theoretical + practical	Exams

8	3	design the symes prosthesis	Explanation of the lecture with the presence of means of illustration and practical application	Theoretical + practical	Exams
9	3	Exam	Explanation of the lecture with the presence of means of illustration and practical application	Theoretical + practical	Exams
10	3	Alignment of symes prosthesis , the type of windows in the socket	Explanation of the lecture with the presence of means of illustration and practical application	Theoretical + practical	Exams
11	3	Biomechanics of T.K prosthesis	Explanation of the lecture with the presence of means of illustration and practical application	Theoretical + practical	Exams
12	3	Alignment and force distribution of T.K prosthesis	Explanation of the lecture with the presence of means of illustration and practical application	Theoretical + practical	Exams
13	3	Alignment and force distribution of T.K prosthesis	Explanation of the lecture with the presence of means of illustration and practical application	Theoretical + practical	Exams
14	3	Biomechanics of A.k Prosthesis	Explanation of the lecture with the presence of means of illustration and practical application	Theoretical + practical	Exams
15	3	Check out of A.K and T.K prosthesis	Explanation of the lecture with the presence of means of illustration and practical application	Theoretical + practical	Exams

11. Course Evaluation

Daily, monthly and final exams as well as weekly reports
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12. Learning and Teaching Resources

Textbooks

Main references

Scientific resources within the Internet
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Anatomy of upper limbs and trunk Course Description Form

1. Course Name

Anatomy of upper limbs and trunk

2. Course Code

IPT 212

3. Semester / Level

Second semester/second level

4. Description preparation date

9/9/2024

5. Available attendance formats

Presence

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

45/ 3

7. Course administrator's name

Name: Fakhr aldin Nour aldin					
Email: External lecturer					
8. Course Objectives					
Course Objectives		1-The ability to use modern tools specialized in anatomy 2 - Proficiency in dealing with the structure of the arm through knowledge of the smallest anatomical details . 3- The ability to develop appropriate solutions to the obstacles of installing the limb on the arm			
9. Teaching and Learning Strategies					
• Adequate explanation of the course • Daily Tests • Student groups					
10. Course Structure					
Week	Hours	Subject	Learning method	Attendance Forms	Evaluation method
1	3	Introduction in anatomy and term of anatomy	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and laboratory	Exams
2	3	Bone of Upper extremity- Clavicle bones	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and laboratory	Exams
3	3	Bone of Scapula	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and laboratory	Exams

4	3	Bone of Humerus	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and laboratory	Exams
5	3	Bone of Ulna	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and laboratory	Exams
6	3	Bone of Radius	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and laboratory	Exams
7	3	Bones of Hand	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and laboratory	Exams
8	3	The muscles of anterior border of Shoulder reign (origin, insertion and action)	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and laboratory	Exams
9	3	The muscles of posterior border of Shoulder reign (origin, insertion and action)	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and laboratory	Exams
10	3	Revision	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and laboratory	Exams

11	3	Application in anatomical terms	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and laboratory	Exams
12	3	Use the skeleton to show the Clavicle bone	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and laboratory	Exams
13	3	Use the skeleton to show the Scapula bone	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and laboratory	Exams
14	3	Use the skeleton to show the Humerus bone	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and laboratory	Exams
15	3	Use the skeleton to show the Ulna bone	Explanation of the lecture with the presence of means of illustration and practical application	Classroom and laboratory	Exams

11. Course Evaluation

Daily, monthly and final exams as well as weekly reports

12. Learning and Teaching Resources

Textbooks

Main references

Scientific resources within the Internet

Biomaterials Course Description Form

1. Course Name	
Biomaterials	
2. Course Code	
IPT213	
3. Semester / Level	
Second semester/second level	
4. Description preparation date	
9/9/2024	
5. Available attendance formats	
Presence	
6. Number of Credit Hours (Total) / Number of Units (Total)	
30/2	
7. Course administrator's name	
Name: Zena Kwan Ibrahim	
Email: External Lecturer	
8. Course Objectives	
Course Objectives	- Lightness and flexibility. Biomaterials allow the manufacture of lightweight and flexible limbs and supports, which makes it easy for a person to wear them and use them efficiently. Some biomaterials are characterized by high strength and hardness, which makes them ideal for use in prosthetic limbs that need to withstand pressure and severe use. - Suitability and adaptation, as these materials allow for the formation and customization of limbs and supports precisely according to the needs of the individual, which makes it easier for the person to use them comfortably and effectively. - Corrosion resistance: Some biomaterials provide high resistance to corrosion, which extends the life of prosthetic limbs and medical supports.
9. Teaching and Learning Strategies	
Adequate explanation of the course	

- Daily Tests
- Student groups

10. Course Structure

Week	Hours	Subject	Learning method	Attendance Forms	Evaluation method
1	2	Use of Biomaterials	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams
2	2	Biomaterials in Organs	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams
3	2	Materials for use in the Body	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams
4	2	Selection of Biomedical Materials	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams
5	2	Materials Evaluation	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams
6	2	Polymers	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams
7	2	Metals	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams
8	2	Ceramics	Explanation of the lecture with the presence of means of illustration and	Classroom	Exams

			practical application		
9	2	Biological Soft Tissue Materials	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams
10	2	Mechanical properties of Biomaterial	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams
11	2	Thermal Properties	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams
12	2	Bio-Ceramics	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams
13	2	Biomedical Application in Medicine	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams
14	2	Modern Biotechnology Techniques	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams
15	2	exam	Explanation of the lecture with the presence of means of illustration and practical application	Classroom	Exams

11. Course Evaluation

Daily, monthly and final exams as well as weekly reports

12. Learning and Teaching Resources

Textbooks

Main references

Scientific resources within the Internet

