

1. Course Name					
Democracy and human rights					
2. Course code					
NTU 114					
3. Class/Level					
the first/the first					
4. Date of preparation of description					
14/7/2025					
5. Available forms of attendance					
My attendance is weekly					
6. Number of study hours (College) / Number of units (College)					
2/30					
7- Name of the course coordinator Name: M.M. Hakim Abduljabbar Thamer Email address: hakeem.abdulgabar@ntu.edu.iq					
8-Course objectives					
Understanding the freedoms to which members of society are entitled and the role of each individual in it in terms of rights and duties, as well as understanding the various state policies.				Course objectives	
7. Teaching and learning strategies					
- Comprehensive explanation of the curriculum - Daily tests - student groups					
8. Course structure					
Evaluation Method	Forms of attendance	Learning method	the topic	Hours	Week
Exams	classroom	The lecture was explained using visual aids and practical application.	The concept of freedom and democracy	2	1
Exams	classroom	The lecture was explained using visual aids and practical application.	Citizen's rights and duties	2	2

Exams	classroom	The lecture was explained using visual aids and practical application.	The concept of the state and government	2	3
Exams	classroom	The lecture was explained using visual aids and practical application.	Intellectual and cultural freedom	2	4
Exams	classroom	The lecture was explained using visual aids and practical application.	Economic and social freedom	2	5
Exams	classroom	The lecture was explained using visual aids and practical application.	The right to vote and participate in elections	2	6
Exams	classroom	The lecture was explained using visual aids and practical application.	Freedom to form unions and associations	2	7
Exams	classroom	The lecture was explained using visual aids and practical application.	Freedom of social security and healthcare	2	8
Exams	classroom	The lecture was explained using visual aids and practical application.	Democracy, its goals and means of achieving it	2	9
Exams	classroom	The lecture was explained using visual aids and practical application.	Forms of democracy	2	10
Exams	classroom	The lecture was explained using visual aids and practical application.	Democracy in Iraq	2	11
Exams	classroom	The lecture was explained using visual aids and practical application.	People's participation in legislative work	2	12
Exams	classroom	The lecture was explained using visual	Referendum, its types and reasons	2	13

		aids and practical application.			
Exams	classroom	The lecture was explained using visual aids and practical application.	Popular referendum and popular solution	2	14
Exams	classroom	The lecture was explained using visual aids and practical application.	Election of the Iraqi Transitional National Assembly	2	15
9. Course evaluation					
Daily, monthly, and final exams, as well as weekly reports.					
10. Learning and teaching resources					
Textbooks					
Main References					
Scientific sources on the internet					

1- Course Name:
English language
2- Course code:
NTU101
3- The academic semester/Year:
First / First
4 -Date of description preparation:
2025/9/14
5Available forms of attendance:
In-person lectures
6-Number of credit hours(Total) /Number of units (total)
Theory 2/2 units
-7Name of course coordinator
Name: Dr. Hassan Mahmoud Hassan
e-mail:-hassan.mh@ntu.edu.iq
8-Course objectives:
1. Developing basic language skills. 2. Improving reading, writing, listening, and speaking skills. 3. Understanding English texts in general, especially formal and professional texts.. 4. Learn legal and administrative vocabulary and expressions. 5. The ability to understand contracts, laws, and legal documents written in English.
9-strategy Teaching and learning:
1. Understanding legal terminology in English.

2. Familiarization with legal vocabulary and expressions such as contracts, laws, judicial procedures, and official correspondence.
3. The ability to read and understand legal documents such as contracts, regulations, international agreements, and court rulings..
4. Developing the skill of writing official letters, legal reports, and drafting contracts in English correctly and accurately.
- 5- The ability to speak and communicate with international parties or foreign clients, whether in meetings or via email..

10- StructureThe course

Evaluation Method	Teaching method	Unit name/Or the topic	Required learning outcomes	Hours		Week
				practical	theoretical	
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Definition of basic English terms	Knowledge and Application	-	2	the first
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	English Language How many units are three in English	Knowledge and Application	-	2	the second
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	The eight parts of speech	Knowledge and Application	-	2	the third
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Parts of speech 2	Knowledge and Application	-	2	Fourth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Conversation	Knowledge and Application	-	2	Fifth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Translation of terms related to prosthetics	Knowledge and Application	-	2	Sixth
Reports, theoretical,	Whiteboard, PowerPoint slides,	Verb to be 1	Knowledge and Application	-	2	Seventh

oral, and written exams	practical experiments					
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Verb to be 2	Knowledge and Application	-	2	Eighth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Prepositions1	Knowledge and Application	-	2	Ninth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Preposition 2	Knowledge and Application	-	2	tenth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Punctuation marks	Knowledge and Application	-	2	eleventh
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Sentence types	Knowledge and Application	-	2	twelfth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Simple present tense	Knowledge and Application	-	2	thirteenth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Simple past tense	Knowledge and Application	-	2	fourteenth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Translation text	Knowledge and Application	-	2	fifteenth

11-Course evaluation
Student reports and activities, oral and written theoretical and practical exams

12 Learning and teaching resources	
	Required textbooks(Textbooks, if available)
	Main references (sources)
	Recommended books and references(Scientific journals and reports...)
	Electronic references and websites

1. Course Name:
Computer technologies
2. Course code:
NTU102
3. Semester/Year:
the first/the first
4. Date the description was prepared:
15/9/2025
5. Available forms of attendance:
My attendance is weekly
6. Number of credit hours (total) / Number of units (total)
30/2
7. Name of the course coordinator
Name: M.M. Hind Hatem Ramadan e-mail: hind.hr@ntu.edu.iq
8. Course Objectives:
The student's imamComputer applicationsAnddifferentAndHe is able to distinguish between the types of software that can be dealt with
9. Teaching and learning strategy:
- Comprehensive explanation of the curriculum - Daily tests - student groups

10. Course Structure					
Evaluation Method	Teaching method	Unit/Topic Name	Required learning outcomes	Hours	Week
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	The concept of networks networksIts types – The concept of the Internetinternet And its operation	Knowledge and Application	2	the first
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Description of the main screen and its components How to connect to the World Wide Webweb	Knowledge and Application	2	the second
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	How toLeveraging popular search engineslike Google	Knowledge and Application	2	the third

Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Understanding methods of searching for information and how to access it	Knowledge and Application	2	Fourth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	programExcel To understand the program's concept – its benefits, specifications, features, and how to operate it	Knowledge and Application	2	Fifth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Understanding the main screen, its components, and its various menus and active tools.	Knowledge and Application	2	Sixth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Cell concept – basic data types and how to input them	Knowledge and Application	2	Seventh
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	How to save a work page -Close the program and close the file.	Knowledge and Application	2	Eighth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Using some of the functions provided by the program, such ascount, SQRT, Ave, sum, Min, MaxAnd other useful related statistical functions	Knowledge and Application	2	Ninth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Understanding the editing processeditingWhich the program provides and	Knowledge and Application	2	tenth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	How to copy or transfer data, and to understand the concept of copying mathematical operations, as well as the concept of relative cells. relative and released cellsabsolute	Knowledge and Application	2	eleventh
Reports, theoretical,	Whiteboard, PowerPoint slides,	Controlling cell display – changing its style and	Knowledge and Application	2	twelfth

oral, and written exams	practical experiments	format using formatting tools			
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	programWord To understand the program's concept – its benefits, specifications, features, and how to operate it	Knowledge and Application	2	thirteenth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Program applicationsWorddifferent	Knowledge and Application	2	fourteenth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Statistical programSPSS – Program concept and operation	Knowledge and Application	2	fifteenth

11. Course Evaluation
Student reports and activities, oral and written theoretical and practical exams

12. Learning and teaching resources	
	Required textbooks (curriculum books, if available)
	Main references (sources)
	Recommended books and references (scientific journals and reports...)
	Electronic references and websites

1. Course Name:
Arabic
2. Course code:
NTU202
3. Semester/Year:
the first/the first
4. Date the description was prepared:
15/9/2025
5. Available forms of attendance:
My attendance is weekly
6. Number of credit hours (total) / Number of units (total)
30/2
7. Name of the course coordinator
the name: .Jaafar Sami Saleh Qaddouri
e-mail: gafaral000@gmail.com
8. Course Objectives:
Introducing Arab culture through understanding the rules and principles of the Arabic language and empowering students with their Arabic language through the ability to write correct texts and express themselves appropriately in various situations and cases within their medical specialization.
9. Teaching and learning strategy:
- Comprehensive explanation of the curriculum - Daily tests - student groups

10. Course Structure					
Evaluation Method	Teaching method	Unit/Topic Name	Required learning outcomes	Hours	Week
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Language is human identity	Knowledge and Application	2	the first

Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	The Arabic language and its origins	Knowledge and Application	2	the second
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	syntax	Knowledge and Application	2	the third
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Counting rules	Knowledge and Application	2	Fourth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Conditional sentences in Arabic	Knowledge and Application	2	Fifth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Dictation and writing	Knowledge and Application	2	Sixth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	punctuation marks	Knowledge and Application	2	Seventh
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Arabic calligraphy	Knowledge and Application	2	Eighth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Arabic literature	Knowledge and Application	2	Ninth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	The Merits of Writing by Al-Jahiz	Knowledge and Application	2	tenth

Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	A short story (Tigers on the Tenth Day)	Knowledge and Application	2	eleventh
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	The Night Lover's Poem by Nazik al-Mala'ika	Knowledge and Application	2	twelfth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Studying Surah Al-Fajr	Knowledge and Application	2	thirteenth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	The letter ta' marbuta	Knowledge and Application	2	fourteenth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Communicating in the language	Knowledge and Application	2	fifteenth

1. Course Evaluation
Student reports and activities, oral and written theoretical and practical exams

12. Learning and teaching resources	
	Required textbooks (curriculum books, if available)
	Main references (sources)
	Recommended books and references (scientific journals and reports...)
	Electronic references and websites

1. Course Name	
Sports	
2. Course code	
NTU104	
3. Class/Level	
the second/ the first	
4. Date of preparation of description	
15/9/2025	
5. Available forms of attendance	
My attendance is weekly	
6. Number of study hours (College) / Number of units (College)	
2/30	
Name of course coordinator	
Name: Ali Yahya Ahmed Email:ali.yahya@ntu.edu.iq	
7. Course objectives	
It aimsThe courseTo provide the student with the concept of exercises and their historical development, to introduce them to different schools of exercises, to familiarize them with original, derived, and special exercise positions, and to develop the basic motor skills of exercises.In addition to learning about some types of sports, their rules and benefits.	Course objectives

8. Teaching and learning strategies					
• Comprehensive explanation of the curriculum • Daily tests • student groups • Field visits					
9. Course structure					
Evaluation Method	Forms of attendance	Learning method	the topic	Hours	Week
Exams	classroom and gymnasium	The lecture was explained using visual aids and practical application.	Introduction to sports and their benefits	2	the first
Exams	classroom and gymnasium	The lecture was explained using visual aids and practical application.	Terms in human anatomy	2	the second
Exams	classroom and gymnasium	The lecture was explained using visual aids and practical application.	The skeletal system of the human body	2	the third
Exams	classroom and gymnasium	The lecture was explained using visual aids and practical application.	The muscular system of the human body	2	Fourth
Exams	classroom and gymnasium	The lecture was explained using visual aids and practical application.	The nervous system of the human body	2	Fifth
Exams	classroom and gymnasium	The lecture was explained using visual aids and practical application.	Sports medicine and sports injuries	2	Sixth
Exams	classroom and gymnasium	The lecture was explained using visual aids and practical application.	First aid for sports injuries	2	Seventh

Exams	classroom and gymnasium	The lecture was explained using visual aids and practical application.	Fatigue and ways to treat it	2	Eighth
Exams	classroom and gymnasium	The lecture was explained using visual aids and practical application.	Ethics and sportsmanship	2	Ninth
Exams	classroom and gymnasium	The lecture was explained using visual aids and practical application.	Laws of football	2	tenth
Exams	classroom and gymnasium	The lecture was explained using visual aids and practical application.	Basketball rules	2	eleventh
Exams	classroom and gymnasium	The lecture was explained using visual aids and practical application.	Volleyball rules	2	twelfth
Exams	classroom and gymnasium	The lecture was explained using visual aids and practical application.	Laws of tennis	2	thirteenth
Exams	classroom and gymnasium	The lecture was explained using visual aids and practical application.	Swimming and its benefits	2	fourteenth
Exams	classroom and gymnasium	The lecture was explained using visual aids and practical application.	Track and field athletes and their rules	2	fifteenth
10. Course evaluation					
Daily, monthly, and final exams, as well as weekly reports.					
11. Learning and teaching resources					
Textbooks					

Main References
Scientific sources on the internet

1. Course Name:
Physiology
2. Course code:
TID106
3. Semester/Year:
the first/the first
4. Date the description was prepared:
15/9/2025
5. Available forms of attendance:
My attendance is weekly
6. Number of credit hours (total) / Number of units (total)
60/4
7. Name of the course coordinator
Name: M.D. Saba Damin Shaker e-mail: sabada.dour@ntu.edu.iq
8. Course Objectives:
The student's understanding of the function of each organ in the human body and its role in maintaining body balance
9. Teaching and learning strategy:
- Comprehensive explanation of the curriculum - Daily tests - student groups

10. Course Structure					
Evaluation Method	Teaching method	Unit/Topic Name	Required learning outcomes	Hours	Week
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Blood – its components – blood smear – blood volume – red blood cells – red blood cell count – their shape – how to count them	Knowledge and Application	4	the first
Reports, theoretical,	Whiteboard, PowerPoint slides,	White blood cells - their number - their types - the normal ratios for each type	Knowledge and Application	4	the second

oral, and written exams	practical experiments	- the function of white blood cells.			
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Blood clotting – blood acidity – blood platelets and their function.	Knowledge and Application	4	the third
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Anemia – Types of anemia.	Knowledge and Application	4	Fourth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Jaundice – its types – causes of jaundice – destruction of red blood cells.	Knowledge and Application	4	Fifth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	The cardiovascular system – an overview of the circulatory system anatomy – heart anatomy – heart valves.	Knowledge and Application	4	Sixth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	The position of the heart in relation to the surface of the living body – the heart as a pump – cardiac output.	Knowledge and Application	4	Seventh
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Electrocardiogram – Heart sounds – Heart valve regions – Normal sounds.	Knowledge and Application	4	Eighth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Arterial blood pressure – silent blood flow – atmospheric pressure – blood pressure measurement.	Knowledge and Application	4	Ninth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Factors affecting blood pressure – high – low – central control of blood vessels – measuring high blood pressure – low.	Knowledge and Application	4	tenth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides,	The respiratory system – respiratory muscles – diaphragm – the function of	Knowledge and Application	4	eleventh

	practical experiments	the diaphragm in relation to the lungs.			
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Respiratory volumes – Expiratory reserve volume – Inspiratory reserve volume – Vital capacity – Factors affecting vital capacity.	Knowledge and Application	4	twelfth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Diseases that affect the effectiveness of respiratory volumes – nasal function.	Knowledge and Application	4	thirteenth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Function of the alveoli	Knowledge and Application	4	fourteenth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	The digestive system – the mouth – the pharynx.	Knowledge and Application	4	fifteenth

11. Course Evaluation
Student reports and activities, oral and written theoretical and practical exams

12. Learning and teaching resources	
	Required textbooks (curriculum books, if available)
	Main references (sources)
	Recommended books and references (scientific journals and reports...)
	Electronic references and websites

1. Course Name:
Medical terminology
2. Course code:
TIDO109
3. Semester/Year:
the first/the first
4. Date the description was prepared:
15/9/2025
5. Available forms of attendance:
My attendance is weekly
6. Number of credit hours (total) / Number of units (total)
30/2
7. Name of the course coordinator
Name: M.M. Ammar Khaled Shehab e-mail: ammar.khalid@ntu.edu.iq
8. Course Objectives:
- The Medical Terminology course aims to provide students with the fundamental knowledge necessary to understand and use medical terms related to the human body in general, with a focus on the limbs. Objectives include: becoming familiar with the terminology specific to the skeletal system of the limbs; and studying the names and functions of the bones of the upper and lower limbs. Learn about the terminology related to fractures, bone deformities, and bone diseases. Studying the terminology related to joints and ligaments: Understanding the terminology specific to joints, cartilage, and ligaments.
9. Teaching and learning strategy:
• Comprehensive explanation of the curriculum • Daily tests • student groups

10. Course Structure					
Evaluation Method	Teaching method	Unit/Topic Name	Required learning outcomes	Hours	Week
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Basic word roots	Knowledge and Application	3	the first
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Word roots, suffixes and prefixes	Knowledge and Application	3	the second
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Basic anatomical terms and abnormal conditions	Knowledge and Application	3	the third
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	The genitals and urinary tract	Knowledge and Application	3	Fourth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	The gastrointestinal tract	Knowledge and Application	3	Fifth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	The heart and cardiovascular system	Knowledge and Application	3	Sixth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Symptoms, diagnoses, treatments, communicationqualifiers, and statistics.	Knowledge and Application	3	Seventh
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Growth and development	Knowledge and Application	3	Eighth

Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Gynecology	Knowledge and Application	3	Ninth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	The eye	Knowledge and Application	3	tenth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	The nervous System	Knowledge and Application	3	eleventh
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Blood and immunity	Knowledge and Application	3	twelfth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Blood and immunity	Knowledge and Application	3	thirteenth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Bone and joint	Knowledge and Application	3	fourteenth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Blood and immunity	Knowledge and Application	3	fifteenth

11. Course Evaluation	
Student reports and activities, oral and written theoretical and practical exams	

12. Learning and teaching resources	
	Required textbooks (curriculum books, if available)

	Main references (sources)
	Recommended books and references (scientific journals and reports...)
	Electronic references and websites

1. Course Name					
Anatomy					
2. Course code					
TID110					
3. Class/Level					
the second/ the first					
4. Date of preparation of description					
15/9/2025					
5. Available forms of attendance					
My attendance is weekly					
6. Number of study hours (College) / Number of units (College)					
60/4					
7. Name of course coordinator					
Name: Dr. Rana Naseer Abdulhameed					
Email address: rana.naseer@ntu.edu.iq					
8. Course objectives					
The student's familiarity with the anatomy of the human body and its organs, as well as knowledge of the relationship between them.				Course objectives	
9. Teaching and learning strategies					
- Comprehensive explanation of the curriculum - Daily tests - student groups - Field visits					
10. Course structure					
Evaluation Method	Forms of attendance	Learning method	the topic	Hours	Week
Exams	classroom and laboratory	The lecture was explained using visual aids and practical application.	Anatomical orientations and body surfaces	4	the first

Exams	classroom and laboratory	The lecture was explained using visual aids and practical application.	Anatomy of the heart, its position relative to the chest wall, and the number of cells.AddNo	4	the second
Exams	classroom and laboratory	The lecture was explained using visual aids and practical application.	The anatomy of the lungs, their location according to the chest wall and the number of ribs	4	the third
Exams	classroom and laboratory	The lecture was explained using visual aids and practical application.	Abdominal dissection and division of the abdomen vertically and horizontally	4	Fourth
Exams	classroom and laboratory	The lecture was explained using visual aids and practical application.	Stomach anatomy, its parts and its relationship to other organs	4	Fifth
Exams	classroom and laboratory	The lecture was explained using visual aids and practical application.	Anatomy of the liver and spleen and their location according to body surfaces	4	Sixth
Exams	classroom and laboratory	The lecture was explained using visual aids and practical application.	Anatomy of the small intestine and its relationship to other organs in the abdominal cavity	4	Seventh
Exams	classroom and laboratory	The lecture was explained using visual aids and practical application.	Anatomy of the cecum and its location within the abdominal cavity	4	Eighth

Exams	classroom and laboratory	The lecture was explained using visual aids and practical application.	Dissection of the gallbladder and its location	4	Ninth
Exams	classroom and laboratory	The lecture was explained using visual aids and practical application.	Anatomy of the uterus and its location within the pelvic cavity	4	tenth
Exams	classroom and laboratory	The lecture was explained using visual aids and practical application.	Skeleton, skull and spine	4	eleventh
Exams	classroom and laboratory	The lecture was explained using visual aids and practical application.	Shoulder bones, scapula and clavicle	4	twelfth
Exams	classroom and laboratory	The lecture was explained using visual aids and practical application.	The forearm bone and its parts	4	thirteenth
Exams	classroom and laboratory	The lecture was explained using visual aids and practical application.	Hand and thigh bones	4	fourteenth
Exams	classroom and laboratory	The lecture was explained using visual aids and practical application.	pelvic bones and lower limbs	4	fifteenth

11. Course evaluation

Daily, monthly, and final exams, as well as weekly reports.

12. Learning and teaching resources

Textbooks

Main References

Scientific research

Scientific sources on the internet

Course name:1
Laboratory and workshop safety
Course code:2
TID108
semester/Year:3-
First/Second
-Date of description preparation:4
2025/9/14
Available forms of attendance5
In-person lectures
-Number of credit hours(Total) /6: Number of units (total)
Theory 2/2 units
Name of course coordinator-7
Name: Dr. Hassan Mahmoud Hassan hassan.mh@ntu.edu.iq For email:
- Course objectives:8
identification BASED ON SAFETY AND SECURITY RULES AND THE ABILITY TO DEAL WITH SOURCES OF HAZARDS IN LABORATORIES AND WORKSHOPS
-strategyTeaching and Learning: 9
• Comprehensive explanation of the curriculum • Daily tests • student groups • Field visits

1. Course structure					
Evaluation Method	Forms of attendance	Learning method	the topic	Hours	Week
Exams	classroom and laboratory	The lecture was explained using visual aids and practical application.	Essential equipment that must be available in the laboratory (laboratory layout)	2	1
Exams	classroom and laboratory	The lecture was explained using visual aids and practical application.	Safety precautions when handling laboratory equipment and chemicals	2	2
Exams	classroom and laboratory	The lecture was explained using visual aids and practical application.	Safety precautions upon completion of laboratory work	2	3
Exams	classroom and laboratory	The lecture was explained using visual aids and practical application.	Fires and their types	2	4
Exams	classroom and laboratory	The lecture was explained using visual aids and practical application.	Fire extinguishing equipment	2	5
Exams	classroom and laboratory	The lecture was explained using visual aids and practical application.	Personal protective equipment	2	6
Exams	classroom and laboratory	The lecture was explained using visual aids and practical application.	Chemical hazards and how to deal with them	2	7
Exams	classroom and laboratory	The lecture was explained using visual aids and practical application.	Radiation hazards	2	8

Exams	classroom and laboratory	The lecture was explained using visual aids and practical application.	biological hazards	2	9
Exams	classroom and laboratory	The lecture was explained using visual aids and practical application.	Disposal of laboratory (medical) waste	2	10
Exams	classroom and laboratory	The lecture was explained using visual aids and practical application.	First aid in laboratories	2	11
Exams	classroom and laboratory	The lecture was explained using visual aids and practical application.	Use of warning signs in the laboratory	2	12
Exams	classroom and laboratory	The lecture was explained using visual aids and practical application.	Environmental factors and their impact on safety and health (light, noise, heat, humidity)	2	13
Exams	classroom and laboratory	The lecture was explained using visual aids and practical application.	Safety in field studies	2	14
Exams	classroom and laboratory	The lecture was explained using visual aids and practical application.	Methods of storing chemical and medical materials	2	15

2. Course evaluation

Daily, monthly, and final exams, as well as weekly reports.

3. Learning and teaching resources

Textbooks

Main References

Scientific research

Scientific sources on the internet

1. Course Name:
Manufacturing below-knee prostheses
2. Course code:
IPT110
3. Semester/Year:
the first/the first
4. Date the description was prepared:
15/9/2025
5. Available forms of attendance:
My attendance is weekly
6. Number of credit hours (total) / Number of units (total)
75/5
7. Name of the course coordinator
Name: Dr. Anas Abbas Hussein e-mail: anas1993vi@gmail.com
8. Course Objectives:
The ability to understand the fundamental principles of below-knee prosthesis design and manufacturing; the ability to define problems and find appropriate solutions; guiding students to understand the physiological and technical factors influencing the design and manufacturing of lower limbs to ensure compatibility with the human body. .
9. Teaching and learning strategy:
• Comprehensive explanation of the curriculum • Daily tests • student groups

10. Course Structure

Evaluation Method	Teaching method	Unit/Topic Name	Required learning outcomes	Hours	Week
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Prosthetic Manufacturing	Knowledge and Application	5	the first
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Socket Design	Knowledge and Application	5	the second
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Static and dynamic equilibrium.	Knowledge and Application	5	the third
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Component Selection	Knowledge and Application	5	Fourth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Alignment	Knowledge and Application	5	Fifth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Socket Fabrication.	Knowledge and Application	5	Sixth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Suspension Systems	Knowledge and Application	5	Seventh
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	design the symes prosthesis	Knowledge and Application	5	Eighth
Reports, theoretical,	Whiteboard, PowerPoint slides,	Exam	Knowledge and Application	5	Ninth

oral, and written exams	practical experiments				
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Prosthetic Foot Design	Knowledge and Application	5	tenth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Biomechanics of TK prosthesis	Knowledge and Application	5	eleventh
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Gait Training	Knowledge and Application	5	twelfth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Alignment and force distribution of TK prosthesis	Knowledge and Application	5	thirteenth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Biomechanics of Ak Prosthesis	Knowledge and Application	5	fourteenth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Check out AK and TK prosthesis	Knowledge and Application	5	fifteenth

11. Course Evaluation	
Student reports and activities, oral and written theoretical and practical exams	
12. Learning and teaching resources	
	Required textbooks (curriculum books, if available)
	Main references (sources)

	Recommended books and references (scientific journals and reports...)
	Electronic references and websites

1. Course Name:
Musculoskeletal diseases
2. Course code:
IPT210
3. Semester/Year:
the first/the first
4. Date the description was prepared:
15/9/2025
5. Available forms of attendance:
My attendance is weekly
6. Number of credit hours (total) / Number of units (total)
30/2
7. Name of the course coordinator
the name: .Asia Ayad Dahash Hamid Al-Douri
e-mail:
asiaasiadr@gmail.com
8. Course Objectives:
• The ability to interact with people in multiple fields within the same discipline, AThe ability to define problems and find appropriate solutions; the ability to use modern methods to reach suitable treatment approaches. Distinguishing between diseases related to the limbs and others through accurate diagnosis..
9. Teaching and learning strategy:
• Comprehensive explanation of the curriculum • Daily tests • student groups

10. Course Structure

Evaluation Method	Teaching method	Unit/Topic Name	Required learning outcomes	Hours	Week
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Introduction & clinical methods, Ankle & foot disorders: club foot, pes plans, pes cares	Knowledge and Application	2	the first
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Metatarsal lesions; metatarsalagia..., finger lesions: hallux rigidus, hammer toe.	Knowledge and Application	2	the second
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Knee lesions: Genu varum, valgus, hyperextension, Hip lesions: CDH, pesorth's disease	Knowledge and Application	2	the third
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Hip lesions: (cont.), Spines lesions: cervical & lumbar; Spin bifida, Kyphosis, Scoliosis, Torricelli's	Knowledge and Application	2	Fourth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Rheumatoid arthritis & deformities, Ortheoarthritis & deformities	Knowledge and Application	2	Fifth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Revision, Metabolic disorders: DM, Scurvy & Rickets,	Knowledge and Application	2	Sixth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Metabolic disorders: DM, Scurvy & Rickets, Short limb: causes, management in general	Knowledge and Application	2	Seventh
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Muscle atrophy: eg polyomyelitis, cerebral palsy	Knowledge and Application	2	Eighth
Reports, theoretical,	Whiteboard, PowerPoint slides,	Peripheral nerve lesion: Radial plexus inj, radial,	Knowledge and Application	2	Ninth

oral, and written exams	practical experiments	ulnar N, Peripheral nerve lesion: & median			
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Peripheral nerve lesion: sciatic N, pop N & tibialis, Peripheral nerve lesion	Knowledge and Application	2	tenth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Cervical prolapsed disc, Limber PID & sciatic a	Knowledge and Application	2	eleventh
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Surgical management in orthopedic, Physiotherapy: in orthopedic	Knowledge and Application	2	twelfth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Physiotherapy: in orthopedic, Manipulation treatment of orthopedic lesions	Knowledge and Application	2	thirteenth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	The effect of orthosis [rules] in orthopedic, Protective orthosis	Knowledge and Application	2	fourteenth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Revision	Knowledge and Application	2	fifteenth

11. Course Evaluation
Student reports and activities, oral and written theoretical and practical exams

12. Learning and teaching resources	
	Required textbooks (curriculum books, if available)
	Main references (sources)
	Recommended books and references (scientific journals and reports...)

	Electronic references and websites
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1. Course Name :	
Anatomy of the lower limbs	
2. Course code:	
IPT114	
3. Class/Level	
First/First	
4. Date of preparation of description	
15/9/2025	
5. Available forms of attendance	
My attendance is weekly	
6. Number of study hours (College) / Number of units (College)	
3/45	
7- Name of the course coordinator	
Name: Dr. Rana Naseer Abdulhameed	
e-mail:	
rana.naseer@ntu.edu.iq	
8-Course objectives	
1. Anatomical understanding of the lower limbs: Recognizing the general structure of the lower limbs, including bones, joints, muscles, blood vessels, and nerves. 2. Studying the skeletal structure of the lower limbs: identifying the bones of the pelvis, femur, leg, and foot. 3. Study of joints and ligaments: Understanding the types of joints in the lower limb (such as the hip,	Course objectives

knee, and ankle joints). Studying the mechanisms of movement and stability in these joints.					
7. Teaching and learning strategies					
Comprehensive explanation of the curriculum ,Daily tests,student groups,Field visits					
8. Course structure					
Evaluation Method	Forms of attendance	Learning method	Subject name	Hours	Week
Tests and reports	classroom and laboratory	The lecture was explained using visual aids.	Introduction in anatomy and term of anatomy	3	1
Tests and reports	classroom and laboratory	The lecture was explained using visual aids.	Classify of bone and kind of bone	3	2
Tests and reports	classroom and laboratory	The lecture was explained using visual aids.	Bone of lower extremity- pelvic bone	3	3
Tests and reports	classroom and laboratory	The lecture was explained using visual aids.	Bone of Femur	3	4
Tests and reports	classroom and laboratory	The lecture was explained using visual aids.	Bone of Tibia, Fibula	3	5
Tests and reports	classroom and laboratory	The lecture was explained using visual aids.	Bones of Foot	3	6
Tests and reports	classroom and laboratory	The lecture was explained using visual aids.	Introduction in Muscular system	3	7

Tests and reports	classroom and laboratory	The lecture was explained using visual aids.	The type of muscles	3	8
Tests and reports	classroom and laboratory	The lecture was explained using visual aids.	The muscles of anterior border of pelvic reign (origin, insertion and action)	3	9
Tests and reports	classroom and laboratory	The lecture was explained using visual aids.	The muscles of posterior border of pelvic reign (origin, insertion and action)	3	10
Tests and reports	classroom and laboratory	The lecture was explained using visual aids.	The muscles of Iliac border of pelvic reign (origin, insertion and action)	3	11
Tests and reports	classroom and laboratory	The lecture was explained using visual aids.	The muscles of the anterior border of Thigh reign (origin, insertion and action)	3	12
Tests and reports	classroom and laboratory	The lecture was explained using visual aids.	The muscles of posterior border of Thigh reign (origin, insertion and action)	3	13
Tests and reports	classroom and laboratory	The lecture was explained using visual aids.	The muscles of medial & lateral border of Thigh reign (origin, insertion and action)	3	14
Tests and reports	classroom and laboratory	The lecture was explained using visual aids.	Exam	3	15
9. Course evaluation					
Daily, monthly, and final exams, weekly report writing, and practical application.					
10. Learning and teaching resources					
Textbooks					
Main References					

Scientific research
Scientific sources on the internet

11. Course Name :	
Anatomy of the lower limbs	
12. Course code:	
IPT114	
13. Class/Level	
First/First	
14. Date of preparation of description	
15/9/2025	
15. Available forms of attendance	
My attendance is weekly	
16. Number of study hours (College) / Number of units (College)	
3/45	
7- Name of the course coordinator	
Name: Dr. Rana Naseer Abdulhameed	
e-mail:	
rana.naseer@ntu.edu.iq	
8-Course objectives	
1. Anatomical understanding of the lower limbs: Recognizing the general structure of the lower limbs, including bones, joints, muscles, blood vessels, and nerves. 2. Studying the skeletal structure of the lower limbs: identifying the bones of the pelvis, femur, leg, and foot. 3. Study of joints and ligaments: Understanding the types of joints in	Course objectives

the lower limb (such as the hip, knee, and ankle joints). Studying the mechanisms of movement and stability in these joints.					
17.Teaching and learning strategies					
Comprehensive explanation of the curriculum ,Daily tests,student groups,Field visits					
18. Course structure					
Evaluation Method	Forms of attendance	Learning method	Subject name	Hours	Week
Tests and reports	classroom and laboratory	The lecture was explained using visual aids.	Introduction in anatomy and term of anatomy	3	1
Tests and reports	classroom and laboratory	The lecture was explained using visual aids.	Classify of bone and kind of bone	3	2
Tests and reports	classroom and laboratory	The lecture was explained using visual aids.	Bone of lower extremity- pelvic bone	3	3
Tests and reports	classroom and laboratory	The lecture was explained using visual aids.	Bone of Femur	3	4
Tests and reports	classroom and laboratory	The lecture was explained using visual aids.	Bone of Tibia, Fibula	3	5
Tests and reports	classroom and laboratory	The lecture was explained using visual aids.	Bones of Foot	3	6
Tests and reports	classroom and laboratory	The lecture was explained using visual aids.	Introduction in Muscular system	3	7

Tests and reports	classroom and laboratory	The lecture was explained using visual aids.	The type of muscles	3	8
Tests and reports	classroom and laboratory	The lecture was explained using visual aids.	The muscles of anterior border of pelvic reign (origin, insertion and action)	3	9
Tests and reports	classroom and laboratory	The lecture was explained using visual aids.	The muscles of posterior border of pelvic reign (origin, insertion and action)	3	10
Tests and reports	classroom and laboratory	The lecture was explained using visual aids.	The muscles of Iliac border of pelvic reign (origin, insertion and action)	3	11
Tests and reports	classroom and laboratory	The lecture was explained using visual aids.	The muscles of the anterior border of Thigh reign (origin, insertion and action)	3	12
Tests and reports	classroom and laboratory	The lecture was explained using visual aids.	The muscles of posterior border of Thigh reign (origin, insertion and action)	3	13
Tests and reports	classroom and laboratory	The lecture was explained using visual aids.	The muscles of medial & lateral border of Thigh reign (origin, insertion and action)	3	14
Tests and reports	classroom and laboratory	The lecture was explained using visual aids.	Exam	3	15
19. Course evaluation					
Daily, monthly, and final exams, weekly report writing, and practical application.					
20. Learning and teaching resources					
Textbooks					
Main References					

Scientific research
Scientific sources on the internet

1. Course Name:
Manufacturing above-knee prostheses
2. Course code:
IPT111
3. Semester/Year:
the first/the first
4. Date the description was prepared:
15/9/2025
5. Available forms of attendance:
My attendance is weekly
6. Number of credit hours (total) / Number of units (total)
75/5
7. Name of the course coordinator
Name: Dr. Anas Abbas Hussein e-mail: anas1993vi@gmail.com
8. Course Objectives:
The ability to understand the basic principles and foundations of above-knee prosthesis design and manufacturing; the ability to apply The problems are identified and appropriate solutions are found, guiding 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 strategy:
• Comprehensive explanation of the curriculum • Daily tests • student groups

10. Course Structure					
Evaluation Method	Teaching method	Unit/Topic Name	Required learning outcomes	Hours	Week
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Prosthetic Socket: The component of the above-knee prosthesis that interfaces with the residual tip	Knowledge and Application	5	the first
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Suspension System: The mechanism used to secure the prosthetic limb to the remaining limb, ensuring proper fit and function.	Knowledge and Application	5	the second
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Prosthetic Knee Joint: The artificial joint component of the above-knee prosthesis that mimics the function of the knee.	Knowledge and Application	5	the third
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Prosthetic Foot: The artificial foot component of the above-knee prosthesis, which provides support and stability during walking	Knowledge and Application	5	Fourth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Alignment: The process of ensuring that the prosthetic components are correctly aligned to optimize function and comfort	Knowledge and Application	5	Fifth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Component Selection: Choosing the appropriate materials and components for constructing above-knee prosthetics.	Knowledge and Application	5	Sixth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Fabrication Techniques: Methods used to manufacture above-knee prosthetic components, such as casting and machining.	Knowledge and Application	5	Seventh
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	design the system prosthesis	Knowledge and Application	5	Eighth

Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Exam	Knowledge and Application	5	Ninth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Gait Training: Teaching patients how to walk with their above-knee prosthetics effectively and safely	Knowledge and Application	5	tenth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Above-Knee Prosthetics: Artificial limbs designed to replace limbs lost above the knee due to various conditions or injuries	Knowledge and Application	5	eleventh
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Amputation: The surgical removal of a limb, often necessary due to trauma, vascular disease, or cancer.	Knowledge and Application	5	twelfth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Residual Limb: The remaining portion of a limb after calculation, which serves as the interface with the prosthetic device.	Knowledge and Application	5	thirteenth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Prosthetic Socket: The component of the above-knee prosthesis that interfaces with the residual limb, providing support and attachment.	Knowledge and Application	5	fourteenth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Check out AK and TK prosthesis	Knowledge and Application	5	fifteenth

11. Course Evaluation

Student reports and activities, oral and written theoretical and practical exams

12. Learning and teaching resources

	Required textbooks (curriculum books, if available)
	Main references (sources)
	Recommended books and references (scientific journals and reports...)
	Electronic references and websites

1. Course Name:
Biomechanics of supports
2. Course code:
IPT208
3. Semester/Year:
the first/the first
4. Date the description was prepared:
15/9/2025
5. Available forms of attendance:
My attendance is weekly
6. Number of credit hours (total) / Number of units (total)
45/3
7. Name of the course coordinator
Name: M.M. Omar Hassan Mahmoud e-mail: eng.omarhasan94@ntu.edu.iq
8. Course Objectives:
• The ability to master angles and deviations when manufacturing prostheses, the ability to pinpoint problems and find appropriate solutions, and the efficiency in distributing the stress on the amputated limb.
9. Teaching and learning strategy:
• Comprehensive explanation of the curriculum • Daily tests • student groups

10. Course Structure					
Evaluation Method	Teaching method	Unit/Topic Name	Required learning outcomes	Hours	Week
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Mechanics of Orthosis	Knowledge and Application	3	the first
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Moment of equilibrium.	Knowledge and Application	3	the second
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Free body diagram	Knowledge and Application	3	the third
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Bending moment	Knowledge and Application	3	Fourth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Design of Orthosis	Knowledge and Application	3	Fifth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Function of orthosis joint	Knowledge and Application	3	Sixth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Affected of joint on gait	Knowledge and Application	3	Seventh
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides,	Kinemtics and acceleration	Knowledge and Application	3	Eighth

	practical experiments				
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Equilibrium for ankle deformity	Knowledge and Application	3	Ninth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Effect of rigidity equipment	Knowledge and Application	3	tenth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Mechanic of function of AFO	Knowledge and Application	3	eleventh
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Examine the AFO	Knowledge and Application	3	twelfth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Biomechanics of ankle foot deformity	Knowledge and Application	3	thirteenth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Biomechanics of ankle foot gait	Knowledge and Application	3	fourteenth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Exam	Knowledge and Application	3	fifteenth

11. Course Evaluation
Student reports and activities, oral and written theoretical and practical exams

12. Learning and teaching resources	
	Required textbooks (curriculum books, if available)
	Main references (sources)
	Recommended books and references (scientific journals and reports...)
	Electronic references and websites

Course name:-1
Microbiology
Course code:-2
IMA 114
Semester:Year -3
2025/2026 / First
Date the description was prepared:-4
2026/7/27
Available forms of attendance:-5
In-person lectures
Credit Hours(Total) / Number of units (Total) -6
Theory 2/2 units
7- Name of the course coordinator
Name: M.M. Ammar Khaled Shehab e-mail:-ammar.khalid@ntu.edu.iq
Course objectives:-8
1. Cellular structure and function: Understanding the basic components of the bacterial cell, the structure of the bacterial cell wall and its pharmacological interactions (Pharmacokinetics). 2. Resistance and natural flora: Understanding the mechanisms of bacterial resistance to antibiotics, and the role of naturally occurring microorganisms (Natural/Inhabitants) in the body. 3. Pathogenesis and Classification: A study of the nature and development of bacterial diseases, including a review of different bacterial systems and examples of pathogenic groups. Comprehensive Pathological Study of Bacterial Groups: Toxins: The nature and effects of bacterial toxins. Infection: Modes of transmission and spread of pathogens. Diagnosis and Treatment: Laboratory diagnostic methods and appropriate treatment strategies. Prevention: Methods for reducing and preventing the spread of infection.
9- Teaching and learning strategy:
1. Interactive learning and discussion: It relies on brainstorming, exchanging ideas, and group dialogue to engage students in deriving concepts.

2. **Applied education and field training:** It focuses on studying practical cases and applying skills in the field to link theories to scientific reality.
3. **Self-learning and e-learning:** It allows students to conduct independent research and use digital platforms to enhance their ability to deduce and analyze.
4. **Collaborative learning and teamwork:** Cooperative learning is encouraged through work groups to promote problem-solving, vocabulary building and deconstruction.

10- Course structure:

Evaluation Method	Teaching method	Unit name/ or the topic	Required learning outcomes	Hours		Week
				practical	theoretical	
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Classification of microorganisms: fungi, algae, protozoa, bacteria, mycoplasma, viruses, and rickettsia	Knowledge and Application		2	the first
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	General structure of bacteria: cell wall, plasma membrane, capsule (Capsule), and protoplasm (cytoplasm and nucleus), a comparison between prokaryotic and eukaryotic cells	Knowledge and Application		2	the second
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Bacterial spores (Bacterial Spores): Types of spores and their mechanisms of resistance to harsh environmental conditions	Knowledge and Application		2	the third
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Environmental factors affecting bacterial growth: oxygen, temperature, humidity, pH (pH), light, osmotic pressure, and culture media. Stages of bacterial growth: adaptation (Lag), logarithmic (Log), stationary, and decline (Decline) phases.	Knowledge and Application		2	Fourth

Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Inhibiting bacterial growth (Inhibiting Growth): Basic concepts of sterilization and disinfection.	Knowledge and Application		2	Fifth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Sterilization and disinfection methods: radiation sterilization, filtration (Filtration), chemical sterilization, and other factors	Knowledge and Application		2	Sixth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Medical bacteria - StaphylococcusStaphylococcus aureus): General characteristics, toxins produced, pathogenic mechanism, and treatment methods	Knowledge and Application		2	Seventh
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Streptococcal bacteria (Streptococci: Their types (S. pyogenes viridans, S. faecalis) in terms of general structure, culture media, and modes of pathogenesis. Pneumococci (S. pneumoniae): Structure, pathogens, and treatment.	Knowledge and Application		2	Eighth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Neisseria genus(Neisseria): Meningococci Structure and disease.	Knowledge and Application		2	Ninth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Anaerobic bacteria (Anaerobic bacteria: General characteristics. Clostridium tetani: Description, factors affecting wound virulence, methods of prevention and treatment.	Knowledge and Application		2	tenth

Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Gastroenteritis and food poisoning Clostridium spp.: Toxins secreted in food, symptoms, and treatment. Bacillus anthracis: Pathological description and treatment.	Knowledge and Application		2	eleventh
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Intestinal bacteria (Enteric bacteria: medical importance and general characteristics. Salmonella group.	Knowledge and Application		2	twelfth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Shigella bacteria (Shigella: Diseases, food poisoning, and treatment. Proteus: Description, characteristics, and culture media.	Knowledge and Application		2	thirteenth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Brucella bacteria (Brucella: General diagnosis, disease, prognosis, and treatment. Bordetella: Morphology, culture media, disease, and treatment.	Knowledge and Application		2	fourteenth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Medical terminology related to bones and joints (closely related to prosthetics) Vibrio bacteria (Vibrio cholerae): General characteristics, pathogenic mechanism, and treatment options	Knowledge and Application		2	fifteenth

Course Evaluation -11

Student reports and activities, oral and written theoretical and practical exams

12- Learning and teaching resources:

	Required textbooks(School textbooks, if available)
	Main references (sources)

	Recommended books and references(Scientific journals and reports...)
	Electronic references and websites

1. Course Name:
Arabic
2. Course code:
NTU202
3. Semester/Year:
the first/the first
4. Date the description was prepared:
15/9/2025
5. Available forms of attendance:
My attendance is weekly
6. Number of credit hours (total) / Number of units (total)
30/2
7. Name of the course coordinator
the name: .Jaafar Sami Saleh Qaddouri e-mail: gafaral000@gmail.com
8. Course Objectives:
Introducing Arab culture through understanding the rules and principles of the Arabic language and empowering students with their Arabic language through the ability to write correct texts and express themselves appropriately in various situations and cases within their medical specialization.
9. Teaching and learning strategy:
- Comprehensive explanation of the curriculum - Daily tests - student groups

10. Course Structure					
Evaluation Method	Teaching method	Unit/Topic Name	Required learning outcomes	Hours	Week
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Language is human identity	Knowledge and Application	2	the first
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	The Arabic language and its origins	Knowledge and Application	2	the second
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	syntax	Knowledge and Application	2	the third
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Counting rules	Knowledge and Application	2	Fourth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Conditional sentences in Arabic	Knowledge and Application	2	Fifth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Dictation and writing	Knowledge and Application	2	Sixth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	punctuation marks	Knowledge and Application	2	Seventh

Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Arabic calligraphy	Knowledge and Application	2	Eighth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Arabic literature	Knowledge and Application	2	Ninth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	The Merits of Writing by Al-Jahiz	Knowledge and Application	2	tenth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	A short story (Tigers on the Tenth Day)	Knowledge and Application	2	eleventh
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	The Night Lover's Poem by Nazik al-Mala'ika	Knowledge and Application	2	twelfth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Studying Surah Al-Fajr	Knowledge and Application	2	thirteenth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	The letter ta' marbuta	Knowledge and Application	2	fourteenth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Communicating in the language	Knowledge and Application	2	fifteenth

11. Course Evaluation
Student reports and activities, oral and written theoretical and practical exams

12. Learning and teaching resources	
	Required textbooks (curriculum books, if available)
	Main references (sources)
	Recommended books and references (scientific journals and reports...)
	Electronic references and websites

1. Course Name:
Computer technologies
2. Course code:
NTU102
3. Semester/Year:
the first/the first
4. Date the description was prepared:
15/9/2025
5. Available forms of attendance:
My attendance is weekly
6. Number of credit hours (total) / Number of units (total)
30/2
7. Name of the course coordinator
Name: M.M. Hind Hatem Ramadan e-mail: hind.hr@ntu.edu.iq
8. Course Objectives:
The student's imamComputer applicationsAnddifferentAndHe is able to distinguish between the types of software that can be dealt with
9. Teaching and learning strategy:
• Comprehensive explanation of the curriculum • Daily tests • student groups

10. Course Structure					
Evaluation Method	Teaching method	Unit/Topic Name	Required learning outcomes	Hours	Week
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	The concept of networks networksIts types – The concept of the Internetinternet And its operation	Knowledge and Application	2	the first
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Description of the main screen and its components How to connect to the World Wide Webweb	Knowledge and Application	2	the second
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	How toLeveraging popular search engineslike Google	Knowledge and Application	2	the third
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Understanding methods of searching for information and how to access it	Knowledge and Application	2	Fourth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	programExcel To understand the program's concept – its benefits, specifications, features, and how to operate it	Knowledge and Application	2	Fifth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Understanding the main screen, its components, and its various menus and active tools.	Knowledge and Application	2	Sixth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Cell concept – basic data types and how to input them	Knowledge and Application	2	Seventh

Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	How to save a work page -Close the program and close the file.	Knowledge and Application	2	Eighth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Using some of the functions provided by the program, such ascount, SQRT, Ave, sum, Min, MaxAnd other useful related statistical functions	Knowledge and Application	2	Ninth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Understanding the editing processeditingWhich the program provides and	Knowledge and Application	2	tenth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	How to copy or transfer data, and to understand the concept of copying mathematical operations, as well as the concept of relative cells. relative and released cellsabsolute	Knowledge and Application	2	eleventh
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Controlling cell display – changing its style and format using formatting tools	Knowledge and Application	2	twelfth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	programWord To understand the program's concept – its benefits, specifications, features, and how to operate it	Knowledge and Application	2	thirteenth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Program applicationsWorddifferent	Knowledge and Application	2	fourteenth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Statistical programSPSS – Program concept and operation	Knowledge and Application	2	fifteenth

11. Course Evaluation
Student reports and activities, oral and written theoretical and practical exams

12. Learning and teaching resources	
	Required textbooks (curriculum books, if available)
	Main references (sources)
	Recommended books and references (scientific journals and reports...)
	Electronic references and websites

1. Course Name
Crimes of the Ba'ath regime in Iraq
2. Course code
NTU203
3. Class/Level
the first/the second
4. Date of preparation of description
14/7/2025
5. Available forms of attendance
My attendance is weekly
6. Number of study hours (College) / Number of units (College)
2/30
7- Name of the course coordinator
Name: A.M. Adnan Abdulkarim Khalil Email address:adnan.akh@ntu.edu.iq
7. Course objectives

Defining the Baath regime and its origins in Iraq, the types of crimes it committed over decades, and studying the motives behind the various crimes committed against the Iraqi people.	Course objectives				
8. Teaching and learning strategies					
- Comprehensive explanation of the curriculum - Daily tests - student groups					
9. Course structure					
Evaluation Method	Forms of attendance	Learning method	the topic	Hours	Week
Exams	classroom	Lecture explanation	Basic political terms	2	the first
Exams	classroom	Lecture explanation	The emergence of the Ba'ath Party in Iraq	2	the second
Exams	classroom	Lecture explanation	Types of crime	2	the third
Exams	classroom	Lecture explanation	Causes and motives for crime	2	Fourth
Exams	classroom	Lecture explanation	Perpetrators of Ba'ath regime crimes	2	Fifth
Exams	classroom	Lecture explanation	The United Nations' view of the crimes of the Ba'ath regime	2	Sixth
Exams	classroom	Lecture explanation	Human rights and the crimes of the Ba'ath regime	2	Seventh
Exams	classroom	Lecture explanation	Baath regime human rights violations	2	Eighth
Exams	classroom	Lecture explanation	military crimes	2	Ninth

Exams	classroom	Lecture explanation	Political crimes	2	tenth
Exams	classroom	Lecture explanation	economic crimes	2	eleventh
Exams	classroom	Lecture explanation	civil crimes	2	twelfth
Exams	classroom	Lecture explanation	social crimes	2	thirteenth
Exams	classroom	Lecture explanation	genocide	2	fourteenth
Exams	classroom	Lecture explanation	mass graves	2	fifteenth
10. Course evaluation					
Daily, monthly, and final exams					
11. Learning and teaching resources					
Textbooks					
Main References					
Scientific sources on the internet					

1. Course Name	
Professional ethics	
2. Course code	
NTU204	
3. Class/Level	
the first/the second	
4. Date of preparation of description	
14/7/2025	
5. Available forms of attendance	
My attendance is weekly	
6. Number of study hours (College) / Number of units (College)	
2/30	
7. Name of course coordinator:	
Name: M.M. Hassan Mohamed Hassan	
Email address:hasanmohammedhasan69@gmail.com	
7. Course objectives	
Understanding the basic principles of professional ethics for	Course objectives

those working in medical specialties andQualifying the graduate onProfessional handlingWith his profession and achieving harmony with himself and his professional environment (the patient, his companions, healthcare workers, and medical equipment).					
8. Teaching and learning strategies					
• Comprehensive explanation of the curriculum • Daily tests • student groups					
9. Course structure					
Evaluation Method	Forms of attendance	Learning method	the topic	Hours	Week
Exams	classroom	Lecture explanation	- Principles of professional ethics in the stages of civilizational development. - Principles of professional ethics in Arab and Islamic civilization. - Etiquette of dealing with patients in hospitals from ancient times until now.	2	the first
Exams	classroom	Lecture explanation	Professional conduct: its definition and concept,- Its practical applications,The relationship between employees and their superiors.	2	the second
Exams	classroom	Lecture explanation	Basic professional ethics - The characteristics of professional ethics as a	2	the third

			guide and mentor for behavior. - How to employ professional ethics from the position of a guide to the individual's behavior, emotions, and ability to make the appropriate decision. Characteristics and attributes of healthcare workers... Appearance, behavior, and commitment. Patient's moral and legal rights		
Exams	classroom	Lecture explanation	Behavioral/Human-Interactive-Associative Patterns. Its definition, nature, motives, interpretations, and influencing factors.	2	Fourth
Exams	classroom	Lecture explanation	Communication methods/linguistic and non-linguistic -Its definition, types, effects, and design of successful communication methods. -How do communication methods affect behavior, listening, and how can one practice them, with practical examples?	2	Fifth
Exams	classroom	Lecture explanation	Behavioral trends and tendencies. - Definition, classification, Factors affecting it, Methods of measuring it.	2	Sixth
Exams	classroom	Lecture explanation	Values, customs, and traditions. - Definition, classification, Factors affecting it, Methods of measuring it.	2	Seventh

Exams	classroom	Lecture explanation	Personality types and how to deal with them. -Definition of personality - its types - its relationship to the profession. -The techie's personality and characteristics	2	Eighth
Exams	classroom	Lecture explanation	Conditions for improving mental health - Definition,Factors affecting it,Prevention of mental illness,The role of mental health in vocational preparation.	2	Ninth
Exams	classroom	Lecture explanation	Conditions for professional compatibility and the associated working relationship. - its concept,Its conditions,Poor professional availability.	2	tenth
Exams	classroom	Lecture explanation	Job description for graduate work	2	atheistic ten
Exams	classroom	Lecture explanation	-Patient behavior. -Receiving the patient, dealing with him, gaining his trust, and maintaining professional confidentiality. -Setting dates to meet the requirements of the required procedure. -Preserving the patient's belongings.	2	the second ten
Exams	classroom	Lecture explanation	Behavioral behavior in dealing with medical devices and equipment.	2	the third ten

			-Daily inspection of equipment, tools, solutions and other requirements, preparing them for daily work, maintaining, servicing and preserving them. -Preparing the necessary medications for the job and handling them properly.		
Exams	classroom	Lecture explanation	Occupational safety -Prevention of workplace hazards and accidents. -Prevention of the risks of bacterial, toxic and radioactive contamination. -Prevention of thoughts of infection with contagious and infectious diseases. -Avoid bad practices in the workplace.	2	Fourth ten
Exams	classroom	Lecture explanation	Applications in professional conduct. - Field visits to hospitals and other health institutions to learn and exchange experiences and information.	2	fifteenth
10. Course evaluation					
Daily, monthly, and final exams, as well as weekly reports.					
11. Learning and teaching resources					

Textbooks
Main References
Scientific sources on the internet

1. Course Name	
Life statistics	
2. Course code	
TID205	
3. Class/Level	
the first/the second	
4. Date of preparation of description	
15/9/2025	
5. Available forms of attendance	
My attendance is weekly	
6. Number of study hours (College) / Number of units (College)	
2/30	
Name of course coordinator	
Name: M.M. Saja Jumaa Hammad	
Email address:	
saja.jumaa@ntu.edu.iq	
7. Course objectives	
The ability to deal with different statistical methods and their vital applications within the field of medical laboratories.	Course objectives
8. Teaching and learning strategies	
- Comprehensive explanation of the curriculum - Daily tests - student groups	
9. Course structure	

Evaluation Method	Forms of attendance	Learning method	the topic	Hours	Week
Exams	classroom	The lecture was explained using visual aids and practical application.	Basic concepts in mathematics	2	the first
Exams	classroom	The lecture was explained using visual aids and practical application.	division equation	2	the second
Exams	classroom	The lecture was explained using visual aids and practical application.	Purpose and continuity	2	the third
Exams	classroom	The lecture was explained using visual aids and practical application.	Biostatistics	2	Fourth
Exams	classroom	The lecture was explained using visual aids and practical application.	Statistical concepts	2	Fifth
Exams	classroom	The lecture was explained using visual aids and practical application.	The concept of probability	2	Sixth
Exams	classroom	The lecture was explained using visual aids and practical application.	Calculation and counting techniques	2	Seventh

Exams	classroom	The lecture was explained using visual aids and practical application.	Probability distribution	2	Eighth
Exams	classroom	The lecture was explained using visual aids and practical application.	Frequency distribution table	2	Ninth
Exams	classroom	The lecture was explained using visual aids and practical application.	Measures of central tendency	2	tenth
Exams	classroom	The lecture was explained using visual aids and practical application.	Methods of classifying and categorizing data	2	eleventh
Exams	classroom	The lecture was explained using visual aids and practical application.	Derived	2	twelfth
Exams	classroom	The lecture was explained using visual aids and practical application.	Derivative of trigonometric functions	2	thirteenth
Exams	classroom	The lecture was explained using visual aids and practical application.	integration	2	fourteenth
Exams	classroom	The lecture was explained using visual aids and	Deviation and contrast	2	fifteenth

		practical application.			
10. Course evaluation					
Daily, monthly, and final exams, as well as weekly reports.					
11. Learning and teaching resources					
Textbooks					
Main References					
Scientific sources on the internet					

1. Course Name:
Manufacturing prosthetics for lower limbs
2. Course code:
IPT206
3. Semester/Year:
the first/the first
4. Date the description was prepared:
15/9/2025
5. Available forms of attendance:
My attendance is weekly
6. Number of credit hours (total) / Number of units (total)
120/8
7. Name of the course coordinator
Name: Dr. Anas Abbas Hussein e-mail: anas1993vi@gmail.com
8. Course Objectives:
• Understanding the anatomical and biomechanical foundations of the lower limbs • Understanding the mechanical principles that affect body balance and walking Design and manufacture of lower limb prostheses • Identifying the types of supports used to support and treat lower limb disorderslike(AFO, KAFO, SMO). • Choosing the appropriate materials for manufacturing orthotics based on the patient's needs (such as plastics, fiberglass, lightweight metals).
9. Teaching and learning strategy:
• Comprehensive explanation of the curriculum • Daily tests • student groups

10. Course Structure					
Evaluation Method	Teaching method	Unit/Topic Name	Required learning outcomes	Hours	Week
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	History of Orthosis	Knowledge and Application	8	the first
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Motor disability	Knowledge and Application	8	the second
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Foot deformities (FO)	Knowledge and Application	8	the third
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Foot deformities	Knowledge and Application	8	Fourth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Foot deformities	Knowledge and Application	8	Fifth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Foot deformities	Knowledge and Application	8	Sixth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Ankle deformities	Knowledge and Application	8	Seventh
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides,	Foot deformities	Knowledge and Application	8	Eighth

	practical experiments				
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Foot deformities	Knowledge and Application	8	Ninth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Foot deformities	Knowledge and Application	8	tenth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	knee deformities	Knowledge and Application	8	eleventh
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Foot deformities	Knowledge and Application	8	twelfth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Foot deformities	Knowledge and Application	8	thirteenth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Hip deformities HKFO	Knowledge and Application	8	fourteenth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Exam	Knowledge and Application	8	fifteenth

11. Course Evaluation

Student reports and activities, oral and written theoretical and practical exams

12. Learning and teaching resources

	Required textbooks (curriculum books, if available)
	Main references (sources)
	Recommended books and references (scientific journals and reports...)
	Electronic references and websites

1. Course Name:
Manufacturing of components for upper limbs
2. Course code:
IPT 207
3. Semester/Year:
the first/the first
4. Date the description was prepared:
15/9/2025
5. Available forms of attendance:
My attendance is weekly
6. Number of credit hours (total) / Number of units (total)
30/2
7. Name of the course coordinator
Name: Dr. Anas Abbas Hussein e-mail: anas1993vi@gmail.com
8. Course Objectives:
The ability to understand the basic principles of how to design and manufacture upper limb prostheses, the ability to define problems and find appropriate solutions, and to encourage students to think creatively and develop new and innovative upper limb prosthesis designs..
9. Teaching and learning strategy:
• Comprehensive explanation of the curriculum • Daily tests • student groups

10. Course Structure					
Evaluation Method	Teaching method	Unit/Topic Name	Required learning outcomes	Hours	Week
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Orthotic Device: A device designed to support, align, prevent, or correct deformities or to improve	Knowledge and Application	8	the first

		the function of movable parts of the body.			
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Socket Design: The process of designing the interface between the residual tip and the orthotic socket.	Knowledge and Application	8	the second
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Component Selection: Choosing the appropriate materials and components for constructing upper-limb orthotic devices	Knowledge and Application	8	the third
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Alignment: Ensuring the correct alignment of the orthotic components to optimize function and comfort	Knowledge and Application	8	Fourth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Suspension Systems: Mechanisms used to secure the orthotic device to the body, ensuring proper fit and function.	Knowledge and Application	8	Fifth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Prosthetic Joint: The artificial joint component of an orthotic device, designed to mimic the function of the natural joint.	Knowledge and Application	8	Sixth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Fabrication Techniques: Methods used to manufacture upper-limb orthotic components, such as casting and machining.	Knowledge and Application	8	Seventh
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Gait Training: Teaching patients how to walk with their orthotic devices effectively and safely.	Knowledge and Application	8	Eighth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Exam	Knowledge and Application	8	Ninth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides,	Socket Design	Knowledge and Application	8	tenth

	practical experiments				
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Upper limb orthosis	Knowledge and Application	8	eleventh
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Prosthetic Arm	Knowledge and Application	8	twelfth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Orthotic Hand	Knowledge and Application	8	thirteenth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Biomechanics of Ak Prosthesis	Knowledge and Application	8	fourteenth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Check out AK and TK prosthesis	Knowledge and Application	8	fifteenth

11. Course Evaluation
Student reports and activities, oral and written theoretical and practical exams

12. Learning and teaching resources	
	Required textbooks (curriculum books, if available)
	Main references (sources)
	Recommended books and references (scientific journals and reports...)
	Electronic references and websites

1. Course Name:
Biomechanics of supports
2. Course code:
IPT208
3. Semester/Year:
the first/the second
4. Date the description was prepared:
15/9/2025
5. Available forms of attendance:
My attendance is weekly
6. Number of credit hours (total) / Number of units (total)
45/3
7. Name of the course coordinator
Name: M.M. Omar Hassan Mahmoud e-mail: eng.omarhasan94@ntu.edu.iq
8. Course Objectives:
• The ability to master angles and deviations when manufacturing prostheses, the ability to pinpoint problems and find appropriate solutions, and the efficiency in distributing the stress on the amputated limb.
9. Teaching and learning strategy:
• Comprehensive explanation of the curriculum • Daily tests • student groups

10. Course Structure					
Evaluation Method	Teaching method	Unit/Topic Name	Required learning outcomes	Hours	Week
Reports, theoretical,	Whiteboard, PowerPoint slides,	Mechanics of Orthosis	Knowledge and Application	3	the first

oral, and written exams	practical experiments				
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Moment of equilibrium.	Knowledge and Application	3	the second
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Free body diagram	Knowledge and Application	3	the third
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Bending moment	Knowledge and Application	3	Fourth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Design of Orthosis	Knowledge and Application	3	Fifth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Function of orthosis joint	Knowledge and Application	3	Sixth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Affected of joint on gait	Knowledge and Application	3	Seventh
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Kinematics and acceleration	Knowledge and Application	3	Eighth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Equilibrium for ankle deformity	Knowledge and Application	3	Ninth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides,	Effect of rigidity equipment	Knowledge and Application	3	tenth

	practical experiments				
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Mechanic of function of AFO	Knowledge and Application	3	eleventh
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Examine the AFO	Knowledge and Application	3	twelfth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Biomechanics of ankle foot deformity	Knowledge and Application	3	thirteenth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Biomechanics of ankle foot gait	Knowledge and Application	3	fourteenth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Exam	Knowledge and Application	3	fifteenth

11. Course Evaluation
Student reports and activities, oral and written theoretical and practical exams

12. Learning and teaching resources	
	Required textbooks (curriculum books, if available)
	Main references (sources)
	Recommended books and references (scientific journals and reports...)
	Electronic references and websites

1. Course Name:
Manufacturing replacements for upper limbs
2. Course code:
IPT209
3. Semester/Year:
the first/the first
4. Date the description was prepared:
15/9/2025
5. Available forms of attendance:
My attendance is weekly
6. Number of credit hours (total) / Number of units (total)
45/3
7. Name of the course coordinator
Name: Dr. Anas Abbas Hussein e-mail: anas1993vi@gmail.com
8. Course Objectives:
-1 aLefficiencyWhen dealing with patients during hand or arm fitting 2- ALefficiencyIn casting special molds and the hand carving method 3- The ability to interact with specialists in the field of handcrafts. 4- Distinguishing between what is required, whether the situation requires an electronic or mechanical hand..
9. Teaching and learning strategy:
• Comprehensive explanation of the curriculum • Daily tests • student groups

10. Course Structure					
Evaluation Method	Teaching method	Unit/Topic Name	Required learning outcomes	Hours	Week

Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Cosmetic prosth. For partial	Knowledge and Application	3	the first
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Cosmetic prosth. For partial	Knowledge and Application	3	the second
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Cosmetic prosth for blow elbow	Knowledge and Application	3	the third
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Cosmetic prosth for above elbow	Knowledge and Application	3	Fourth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Cosmetic prosth for above elbow	Knowledge and Application	3	Fifth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Cosmetic prosth for above elbow	Knowledge and Application	3	Sixth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Cosmetic prosth through shoulder	Knowledge and Application	3	Seventh
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Cosmetic prosth through shoulder	Knowledge and Application	3	Eighth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Stump examination	Knowledge and Application	3	Ninth

Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Mechanical proth. through'.wrist	Knowledge and Application	3	tenth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Mechanical proth. through below elbow	Knowledge and Application	3	eleventh
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Mechanical proth. through below elbow	Knowledge and Application	3	twelfth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Mechanical proth. through below elbow	Knowledge and Application	3	thirteenth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Mechanical proth. through above elbow	Knowledge and Application	3	fourteenth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Mechanical proth. through above elbow	Knowledge and Application	3	fifteenth

11. Course Evaluation
Student reports and activities, oral and written theoretical and practical exams

12. Learning and teaching resources	
	Required textbooks (curriculum books, if available)
	Main references (sources)
	Recommended books and references (scientific journals and reports...)
	Electronic references and websites

1. Course Name:
Musculoskeletal diseases
2. Course code:
IPT210
3. Semester/Year:
the first/the second
4. Date the description was prepared:
15/9/2025
5. Available forms of attendance:
My attendance is weekly
6. Number of credit hours (total) / Number of units (total)
30/2
7. Name of the course coordinator
the name: .Asia Ayad Dahash Hamid Al-Douri e-mail: asiaasiadr@gmail.com
8. Course Objectives:
The ability to interact with people in multiple fields within the same discipline, AThe ability to define problems and find appropriate solutions; the ability to use modern methods to reach suitable treatment approaches. Distinguishing between diseases related to the limbs and others through accurate diagnosis..
9. Teaching and learning strategy:
- Comprehensive explanation of the curriculum - Daily tests - student groups

10. Course Structure					
Evaluation Method	Teaching method	Unit/Topic Name	Required learning outcomes	Hours	Week

Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Introduction & clinical methods, Ankle & foot disorders: club foot, pes plans, pes cares	Knowledge and Application	2	the first
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Metatarsal lesions; metatarsalagia..., finger lesions: hallux rigidus, hummer toe.	Knowledge and Application	2	the second
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Knee lesions: Gemu varum, valgus, hyperextension, Hip lesions: CDH, pesorthe's disease	Knowledge and Application	2	the third
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Hip lesions: (cont.), Spines lesions: cervical & lumbar; Spin bifida, Kyphosis, Scoliosis, Torricelli's	Knowledge and Application	2	Fourth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Rheumatoid arthritis & deformities, Ortheoarthritis & deformities	Knowledge and Application	2	Fifth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Revision, Metabolic disorders: DM, Scurvy & Rickets,	Knowledge and Application	2	Sixth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Metabolic disorders: DM, Scurvy & Rickets, Short limb: causes, management in general	Knowledge and Application	2	Seventh
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Muscle atrophy: eg polyomyelitis, cerebral palsy	Knowledge and Application	2	Eighth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Peripheral nerve lesion: Radial plexus inj, radial, ulnar N, Peripheral nerve lesion: & median	Knowledge and Application	2	Ninth

Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Peripheral nerve lesion: sciatic N, pop N & tibialis, Peripheral nerve lesion	Knowledge and Application	2	tenth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Cervical prolapsed disc, Limber PID & sciatic a	Knowledge and Application	2	eleventh
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Surgical management in orthopedic, Physiotherapy: in orthopedic	Knowledge and Application	2	twelfth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Physiotherapy: in orthopedic, Manipulation treatment of orthopedic lesions	Knowledge and Application	2	thirteenth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	The effect of orthosis [rules] in orthopedic, Protective orthosis	Knowledge and Application	2	fourteenth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Revision	Knowledge and Application	2	fifteenth

11. Course Evaluation
Student reports and activities, oral and written theoretical and practical exams

12. Learning and teaching resources	
	Required textbooks (curriculum books, if available)
	Main references (sources)
	Recommended books and references (scientific journals and reports...)
	Electronic references and websites

1. Course Name	
Properties of materials	
2. Course code	
IPT211	
3. Class/Level	
First/Second	
4. Date of preparation of description	
15/9/2025	
5. Available forms of attendance	
My attendance is weekly	
6. Number of study hours (College) / Number of units (College)	
30/2	
Name of course coordinator	
Name: M.M. Yasser Taha Ayad	
Email address:yasser.ayad@ntu.edu.iq	
7. Course objectives	
1. The ability to use materials of all kinds 2. TheAbility to develop solutions and find alternative materials if the required quantities are not available to complete the work. 3.Proficiency in handling the introduction of materials within the reaction mold	Course objectives
8. Teaching and learning strategies	
• Comprehensive explanation of the curriculum • Daily tests • student groups • Field visits	
9. Course structure	

Evaluation Method	Forms of attendance	Learning method	the topic	Hours	Week
Exams	classroom	The lecture was explained using visual aids.	Power and energy systems	2	the first
Exams	classroom	The lecture was explained using visual aids.	Work and stress	2	the second
Exams	classroom	The lecture was explained using visual aids.	Stress and tension	2	the third
Exams	classroom	The lecture was explained using visual aids.	Stress and anxiety	2	Fourth
Exams	classroom	The lecture was explained using visual aids.	Breed and its types	2	Fifth
Exams	classroom	The lecture was explained using visual aids.	The relationship between stress and tension	2	Sixth

Exams	classroom	The lecture was explained using visual aids.	Steady motion	2	Seventh
Exams	classroom	The lecture was explained using visual aids.	Hooke's Law	2	Eighth
Exams	classroom	The lecture was explained using visual aids.	Kinematic measurements	2	Ninth
Exams	classroom	The lecture was explained using visual aids.	fragility	2	tenth
Exams	classroom	The lecture was explained using visual aids.	Plastic for orthopedics and prosthetics	2	eleventh
Exams	classroom	The lecture was explained using visual aids.	thermal plastic	2	twelfth
Exams	classroom	The lecture was explained	plasticTH/PP.RT/PVC/ACP	2	thirteenth

		using visual aids.			
Exams	classroom	The lecture was explained using visual aids.	plasticLT and its application	2	fourteenth
Exams	classroom	The lecture was explained using visual aids.	thermal assembly	2	fifteenth
10. Course evaluation					
Daily, monthly, and final exams, and preparing weekly reports.					
11. Learning and teaching resources					
Textbooks					
Main References					
Scientific research					
Scientific sources on the internet					

1. Course Name:
Anatomy of the upper limbs and trunk
2. Course code:
IPT212
3. Semester/Year:
the first/the second
4. Date the description was prepared:
15/9/2025
5. Available forms of attendance:
My attendance is weekly
6. Number of credit hours (total) / Number of units (total)
45/3
7. Name of the course coordinator
Name: M.D. Saba Damin Shaker e-mail: sabada.dour@ntu.edu.iq
8. Course Objectives:
The ability to use modern tools And the specialist in anatomy Proficiency in handling the arm installation from Through a thorough understanding of anatomical details, the ability to develop appropriate solutions to structural obstacles. The end on the arm
9. Teaching and learning strategy:
• Comprehensive explanation of the curriculum • Daily tests • student groups

10. Course Structure					
Evaluation Method	Teaching method	Unit/Topic Name	Required learning outcomes	Hours	Week
Reports, theoretical,	Whiteboard, PowerPoint slides,	Introduction in anatomy and term of anatomy	Knowledge and Application	3	the first

oral, and written exams	practical experiments				
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Bone of Upper extremity Clavicle bones	Knowledge and Application	3	the second
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Bone of Scapula	Knowledge and Application	3	the third
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Bone of Humerus	Knowledge and Application	3	Fourth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Bone of Ulna	Knowledge and Application	3	Fifth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Bone of Radius	Knowledge and Application	3	Sixth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Bones of Hand	Knowledge and Application	3	Seventh
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	The muscles of anterior border of Shoulder reign (origin, insertion and action)	Knowledge and Application	3	Eighth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	The muscles of posterior border of Shoulder reign (origin, insertion and action)	Knowledge and Application	3	Ninth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides,	Revision	Knowledge and Application	3	tenth

	practical experiments				
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Application in anatomical terms	Knowledge and Application	3	eleventh
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Use the skeleton to show the clavicle bone	Knowledge and Application	3	twelfth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Use the skeleton to show the Scapula bone	Knowledge and Application	3	thirteenth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Use the skeleton to show the Humerus bone	Knowledge and Application	3	fourteenth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Use the skeleton to show the Ulna bone	Knowledge and Application	3	fifteenth

11. Course Evaluation
Student reports and activities, oral and written theoretical and practical exams

12. Learning and teaching resources	
	Required textbooks (curriculum books, if available)
	Main references (sources)
	Recommended books and references (scientific journals and reports...)
	Electronic references and websites

1.Course Name	
biomaterials	
2. Course code	
IPT213	
3. Class/Level	
Second / Second	
4. Date of preparation of description	
2025/14	
5. Available forms of attendance	
My attendance is weekly	
6. Number of study hours (College) / Number of units (College)	
30/2	
Name of course coordinator	
Name: M.M. Yasser Taha Ayad Email address:yasser.ayad@ntu.edu.iq	
7. Course objectives	
-1 Lightness and flexibility: Biomaterials allow for the manufacture of lightweight and flexible prostheses and supports, making them easier for the wearer to use efficiently. Some biomaterials are characterized by high strength and rigidity, making them ideal for use in prosthetics that need to withstand pressure and heavy use.	Course objectives

-2The fit and adaptability of these materials allow for the precise shaping and customization of limbs and supports according to individual needs, making them easier for the person to use comfortably and effectively. 3Corrosion resistance: Some biomaterials offer high corrosion resistance, which extends the lifespan of prosthetics and medical supports.					
8. Teaching and learning strategies					
• Comprehensive explanation of the curriculum • Daily tests • student groups • Field visits					
9. Course structure					
Evaluation Method	Forms of attendance	Learning method	the topic	Hours	Week
Tests and	classroom	The lecture was explained using	Use of Biomaterials	2	the first
Tests and	classroom	The lecture was explained using	Biomaterials in Organs	2	the second
Tests and	classroom	The lecture was explained using	Materials for use in the Body	2	the third
Tests and	classroom	The lecture was explained using	Selection of Biomedical	2	Fourth
Tests and	classroom	The lecture was explained using	Materials Evaluation	2	Fifth
Tests and	classroom	The lecture was explained using	Polymers	2	Sixth
Tests and	classroom	The lecture was explained using	Metals	2	Seventh
Tests and	classroom	The lecture was explained using	Ceramics	2	Eighth
Tests and	classroom	The lecture was explained using	Biological Soft Tissue	2	Ninth
Tests and	classroom	The lecture was explained using	Mechanical properties of	2	tenth
Tests and	classroom	The lecture was explained using	Thermal Properties	2	eleventh
Tests and	classroom	The lecture was explained using	Bio-Ceramics	2	twelfth

Tests and	classroom	The lecture was explained using	Biomedical Application in	2	thirteenth
Tests and	classroom	The lecture was explained using	Modern Biotechnology	2	fourteenth
Tests and	classroom	The lecture was explained using	Advancements in	2	fifteenth
10. Course evaluation					
Daily, monthly, and final exams, and preparing weekly reports.					
11. Learning and teaching resources					
Textbooks					
Main References					
Scientific research					
Scientific sources on the internet					

1. Course Name:
Natural treatment methods
2. Course code:
IPT215
3. Semester/Year:
the first/the first
4. Date the description was prepared:
15/9/2025
5. Available forms of attendance:
My attendance is weekly
6. Number of credit hours (total) / Number of units (total)
45/3
7. Name of the course coordinator
Name: Dr. Anas Abbas Hussein
e-mail: anas1993vi@gmail.com
8. Course Objectives:
1- Physical therapy aims to improve an individual's ability to use prosthetic limbs efficiently and effectively in daily movement and performance. 2- Strengthening muscles and improving flexibility: Physical therapy includes exercises to strengthen the muscles surrounding prosthetic limbs and improve their flexibility, which facilitates movement and reduces the risk of injury. 3- Improving balance and motor coordination: Physical therapy includes exercises to improve an individual's balance and motor coordination using prosthetic limbs.

9. Teaching and learning strategy:
• Comprehensive explanation of the curriculum • Daily tests • student groups

10. Course Structure					
Evaluation Method	Teaching method	Unit/Topic Name	Required learning outcomes	Hours	Week
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Physical Therapy Techniques	Knowledge and Application	3	the first
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Muscles and Tendons	Knowledge and Application	3	the second
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Strength training exercises	Knowledge and Application	3	the third
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Stretching exercises	Knowledge and Application	3	Fourth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Balance Techniques	Knowledge and Application	3	Fifth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Pain Management	Knowledge and Application	3	Sixth
Reports, theoretical,	Whiteboard, PowerPoint slides,	Massage Techniques	Knowledge and Application	3	Seventh

oral, and written exams	practical experiments				
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Coordination exercises	Knowledge and Application	3	Eighth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Psychological Adaptation Techniques	Knowledge and Application	3	Ninth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Progress Monitoring	Knowledge and Application	3	tenth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Prosthetic Use	Knowledge and Application	3	eleventh
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Injury Prevention	Knowledge and Application	3	twelfth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Performance Enhancement	Knowledge and Application	3	thirteenth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Irritation Reduction Techniques	Knowledge and Application	3	fourteenth
Reports, theoretical, oral, and written exams	Whiteboard, PowerPoint slides, practical experiments	Self-care instructions	Knowledge and Application	3	fifteenth

11. Course Evaluation
Student reports and activities, oral and written theoretical and practical exams

12. Learning and teaching resources	
	Required textbooks (curriculum books, if available)
	Main references (sources)
	Recommended books and references (scientific journals and reports...)
	Electronic references and websites

1. Course Name	
parasites	
2. Course code	
IPT116	
3. Class/Level	
the second/the first	
4. Date of preparation of description	
14/7/2025	
5. Available forms of attendance	
My attendance is weekly	
6. Number of study hours (College) / Number of units (College)	
45/3	
7. Course objectives	
Student definition for parasites Primary (First) Diagnostic methods Ha and The diseases it causes, and knowledge of epidemiological information Her own Which helps in preventing and eradicating prevalent parasitic diseases.	Course objectives
8. Teaching and learning strategies	

- Comprehensive explanation of the curriculum
- Daily tests
- student groups
- Field visits

9. Course structure

Evaluation Method	Forms of attendance	Learning method	the topic	Hours	Week
Exams	classroom and laboratory	The lecture was explained using visual aids and practical application.	Introduction to Parasites	3	1
Exams	classroom and laboratory	The lecture was explained using visual aids and practical application.	Parasite classification	3	2
Exams	classroom and laboratory	The lecture was explained using visual aids and practical application.	Host and its types	3	3
Exams	classroom and laboratory	The lecture was explained using visual aids and practical application.	First classification and specifications	3	4
Exams	classroom and laboratory	The lecture was explained using visual aids and	radicals	3	5

		practical application.			
Exams	classroom and laboratory	The lecture was explained using visual aids and practical application.	Entamoeba: Form, Pathogenesis and Diagnostic Methods	3	6
Exams	classroom and laboratory	The lecture was explained using visual aids and practical application.	flagellate	3	7
Exams	classroom and laboratory	The lecture was explained using visual aids and practical application.	Giardia-Trichomonas: Morphology, Pathogenesis, and Diagnostic Methods	3	8
Exams	classroom and laboratory	The lecture was explained using visual aids and practical application.	Leishmaniasis: Form, Pathogenesis and Diagnostic Methods	3	9
Exams	classroom and laboratory	The lecture was explained using visual aids and practical application.	Trypanosoma: Morphology, Pathogenesis, and Diagnostic Methods	3	10
Exams	classroom and laboratory	The lecture was explained using	Ciliates	3	11

		visual aids and practical application.			
Exams	classroom and laboratory	The lecture was explained using visual aids and practical application.	Plantidium: Morphology, Pathogenesis and Diagnostic Methods	3	12
Exams	classroom and laboratory	The lecture was explained using visual aids and practical application.	sporozoites	3	13
Exams	classroom and laboratory	The lecture was explained using visual aids and practical application.	Plasmodium: Morphology, Pathogenesis and Diagnostic Methods	3	14
Exams	classroom and laboratory	The lecture was explained using visual aids and practical application.	Toxoplasmosis: Morphology, pathogenesis, and diagnostic methods	3	15
10. Course evaluation					
Daily, monthly, and final exams, as well as weekly reports.					
11. Learning and teaching resources					
Textbooks					
Main References					
Scientific research					

Scientific sources on the internet