

Study Plan for the "Intermediate University Degree" Program In Physiotherapy Specialty

This study plan was approved by the decision of the Council of Deans of Al-Balqa Applied University No. Date and applied

As of the beginning of the academic year

The study plan for the intermediate university degree consists of the Allied Medical Professions Program/ Specialization

Physiotherapy from (72) credit hours, distributed as follows:

No.	Requirement	Credit Hour
1.	general Skills	12
2.	Operating Skills	6
3.	Allied Sciences	6
4.	Specialized skills	48
Total		72

Description of the specialty:

The specialization provides the appropriate environment to learn some medical and practical sciences to graduate cohorts capable of practicing the profession of physical therapy and to provide local medical institutions with professionals capable of practicing the profession with academic and medical and practical skill and knowledge.

Specialization Objectives:

The specialization aims to prepare talented, trained and scientifically and medically qualified physiotherapists who are able to provide effective and safe treatment services to patients and the recovered (Rehabilitation & Wellness care)

As well as having the ability to provide advice and recommendations for the treatment plan in proportion to each patient, recovered or athlete and his health condition in:

1. Public and private hospitals, outpatient and inpatient clinics
2. Specialized clinics for the body, nervous system, growth and rehabilitation.
3. Rehabilitation centers for children with special needs.
4. Nursing homes.
5. Fitness centers (gyms)
6. Public and private schools.

Learning Outcomes:

After completing the requirements of the physical therapy program, the student must be able to:

- Knowledge and understanding
 1. Recognize the medical, behavioral, social and basic sciences related to the field of physical therapy.
 2. Recognize the principles and standards of evaluation and treatment.

- Mental abilities

1. Recognize the relationship between science and experience and its importance in professional practices.
2. Identify the problems they may face and find solutions to them under the framework of physical therapy.
3. Differentiate between the problems that different types of patients may face under the framework of physiotherapy.

- Professional and practical skills

1. The ability to perform various physical therapy skills, methods, effects and uses.
2. Independent practice work in the field of physiotherapy.
3. Implement a care plan that is consistent with legal, ethical and professional obligations.
4. Recognize multiple perspectives and interdisciplinary collaboration, and expand the ability to visualize the potential impacts of public health problems on public communities and populations.
5. Commitment to the administrative policies and procedures of the health institution.

- General and imparted skills

1. The ability to self-learn, think and keep pace with medical development in the field of physiotherapy.
2. Ability to work within the medical team in its various specialties
3. Demonstrate professional conduct in all dealings with patients, family members, and medical and health care providers.

Knowledge areas of specialized skills:

No.	Domain Name	Credit Hours		Teaching materials for the field
		practical	theoretical	
1.	Allied Medical Sciences:	3	12	anatomy Pathophysiology Specialized Anatomy Radiological Diagnostics
2.	Principles of physiotherapy:	7	4	Therapeutic exercises 1 Therapeutic exercises 2 Physical and Electrotherapy Tests & Measurements
3.	Basics of Physiotherapy:	2	2	Biomechanics and Kinesiology Prostheses and assistive devices
4.	Rehabilitation:	9	6	Rehabilitation of cardiology and respiratory system Rehabilitation of nerve and muscle diseases Pediatric Rehabilitation Rehabilitation of general surgery and burns Rehabilitation of diseases of the musculoskeletal system Rehabilitation of internal diseases and special cases Sports Injury Rehabilitation Physiotherapy for the elderly Advanced Rehabilitation Training
5.	Field Training:	3	-	
Total Credit Hours		24	24	

Study Plan for "Physical Therapy"

First: general skills, (12) Credit Hour, Distributed as follows:

Course number	Course name	C.H	theoretical	practical	Prerequisite
020000111	Positive Citizenship and Life Skills	3	3	0	
020000121	Islamic culture	3	3	0	
020000131	National education	2	2	0	
020000181	Military science	1	1	0	
020000101	Language skills\English	3	3	0	
Total (C.H)		12	12	0	

Second: Operating Skills, (6) Credit Hour, Distributed as follows:

Course number	Course name	C.H	theoretical	practical	Prerequisite
020000122	Communication skills in English	2	2	0	
020000231	Entrepreneurship	2	2	0	
020000141	Health, safety and occupational environment	2	2	0	
Total (C.H)		6	6	0	

Third: Allied Sciences, (6) Credit Hour, Distributed as follows:

Course number	Course name	C.H	theoretical	practical	Prerequisite
020800161	Biochemistry	2	2	0	
020800162	Biochemistry lab	1	0	3	020800161**
020800271	Medical sociology	3	3	0	
Total (C.H)		6	5	3	

Study Plan for" Physical Therapy"

Fourth: Specialized skills, (48) Credit Hour, Distributed as follows:

Course number	Course name	C.H	theoretical	practical	Prerequisite
020800131	Anatomy	3	3	0	
020800141	Physiology	3	3	0	020800131**
020800211	Pathophysiology	3	3	0	020800141
020818111	Kinesiology and biomechanics	2	1	3	
020818121	Specialized anatomy	2	1	3	020800131**
020818131	Test and measurements	2	1	3	
020818141	Therapeutic exercise 1	3	1	6	020818131**
020818242	Therapeutic exercise 2	3	1	6	020818141
020818151	Electrotherapy	3	2	3	
020818260	Diagnostic radiology	2	1	3	020818121
020818271	Burns and general surgery rehabilitation	2	1	3	020818121
020818272	Neuromuscular disorders rehabilitation	3	1	6	020818242**
020818273	Cardiopulmonary pathology rehabilitation	2	1	3	020818242
020818274	Musculoskeletal disorders rehabilitation	3	1	6	020818242
020818275	Pediatrics pathologies rehabilitation	1	0	3	020818274**
020818276	Orthosis ,prosthesis and assistive devises	2	1	3	020818111
020818277	Special cases and internal diseases rehabilitation	1	1	0	020800141
020818281	Sport injuries rehabilitation	2	1	3	020818242
020818282	Geriatric physical therapy	1	0	3	020818141
020818283	Advanced rehabilitation training	2	0	6	020818242** 020818274**
020818291	Field training *	3	0	*	
Total (C.H)		48	24	24	

*Continuous practical training for a period of (8) weeks, provided that he has completed (36) credit hours of specialized skills.

** Prerequisite.

Advisory Plan for “Physiotherapy”

First Semester			second Semester		
Course name	Course number	C.H.	Course name	Course number	C.H.
Language skills\English	020000101	3	Islamic culture	020000121	3
Positive Citizenship and Life Skills	020000111	3	Health, safety and occupational environment	020000141	2
National education	020000131	2	Biochemistry	020800161	2
anatomy	020800131	3	Biochemistry lab	020800162	1
Physiology	020800141	3	Specialized anatomy	020818121	2
Kinesiology and biomechanics	020818111	2	Therapeutic exercise 1	020818141	3
Test and measurements	020818131	2	Electrotherapy	020818151	3
			Diagnostic radiology	020818261	2
total		18	total		18

third Semester			fourth Semester		
Course name	Course number	C.H.	Course name	Course number	C.H.
Pathophysiology	020800211	3	Communication skills in English	020000122	2
Medical sociology	020800271	3	Military science	020000181	1
Therapeutic exercise 2	020818242	3	Entrepreneurship	020000231	2
Burns and general surgery rehabilitation	020818271	2	Neuromuscular disorders rehabilitation	020818272	3
Musculoskeletal disorders rehabilitation	020818274	3	Cardiopulmonary pathology rehabilitation	020818273	2
Special cases and internal diseases rehabilitation	020818277	1	Pediatrics pathologies rehabilitation	020818275	1
Geriatric physical therapy	020818282	1	Orthosis ,prosthesis and assistive devises	020818276	2
Advanced rehabilitation training	020818283	2	Sport injuries rehabilitation	020818281	2
			training	020818291	3
		18			18

Brief description of the educational materials for the physiotherapy specialty

First: General culture

Positive Citizenship and Life Skills 020000111 (3:3-0)

The course explains the concept of citizenship and life skills and their importance in acquiring valuable skills, and working to use these skills in their quest to obtain better education and positive results at work, as the course takes into account building knowledge in the topics included in the program and builds the skill in young people to be used in the application of knowledge and builds confidence in the abilities of young people to use this knowledge and skill in addition to providing personal and environmental support to change behavior by promoting the values of citizenship Positivity, constructive community culture and voluntary community work.

Islamic Culture 020000121 (3: 3-0)

1. Definition of Islamic culture and statement of its meanings, subjects and related systems - functions and objectives.
2. The sources and components of Islamic culture and the pillars and foundations on which it is based.
3. Characteristics of Islamic culture.
4. Islam and science, and the relationship between science and faith.
5. Challenges facing Islamic culture.
6. Refutation of suspicions raised about Islam.
7. Islamic ethics and legal etiquette within the framework of Islamic culture.
8. Islamic systems.

National Education 020000131 (2: 2-0)

The national education course is one of the compulsory requirements for all students of Jordanian community colleges and an organic extension of the philosophy of national education and education as a dimension of the national strategy for higher education. Jordanian constants, foremost of which is the tolerant Islamic faith, the principles of the Great Arab Revolt, the Jordanian constitution and the national experience.

Military Science 020000181 (1: 1-0)

The first axis: the emergence and development of the armed forces / Arab army, maneuvering weapons, support weapons, service weapons Second Theme: The Great Arab Revolt, Arab-Israeli Wars (1948, 1967, Battle of Dignity 1968, October | War 1973), The Role of the Jordanian Armed Forces-Arab Army in Comprehensive National Development Third Theme: Public Security, General Intelligence, Gendarmerie Forces, Civil Defense.

Language / English Skills 020000101 (0-3:3)

The course consists of 8 units. Each unit has speaking activities that deal with dialogues, introducing oneself talking about families. Also, the units include pronunciation and listening with intonation activities. The reading and writing activities concentrate on question writing biography, E-mail, and writing blog post.

Second: Employment and Utilization Skills

Communication Skills in English 020000122 (2: 2-0)

This is a communication skills course which aims at improving learners' oral and written communication skills by providing learners with the language needed to communicate in an English-speaking workplace environment and real-life situations naturally and confidently.

Entrepreneurship 020000231 (2:2-0)

The course explains the concept of entrepreneurship, its impact on the national economy and its role in eliminating unemployment, how to develop pioneering and innovative ideas to suit the needs of society and face the risks and challenges it faces, and evaluate its chances of success through a feasibility study, how to calculate its cost, financing and managing its financial affairs, how to do marketing it, the legal nature of it and the action plan necessary to start it with a focus on the Jordanian experience in this field.

Health, safety and occupational environment 020000141 (2: 2-0)

Health and safety objectives in the work environment and ways to protect those present and affected. Studying the most important and prevalent hazards in the fields of work, distinguishing chemical and biological hazards, falling from heights, physical hazards in the work environment, fire, electricity and hazards resulting from appropriateness, distinguishing the sources of hazards and their effects on health and work safety and methods of controlling risks to reduce the likelihood of their occurrence and mitigate their consequences if they occur. Discuss the hierarchy of risk control, methods of selecting personal protective equipment and applying first aid in cases of human injuries.

Third: Supporting Sciences

Biochemistry 020800161 (2: 2-0)

In this course, the student learns the foundations and principles of biochemistry and deals with the study of the various structures and reactions in living cells that provide the necessary energy for the vital processes and activities carried out by biological molecules, including organic ones such as carbohydrates, protein, fats, nucleic acids and other inorganic substances such as water and mineral salts. Catalytic enzymes play an important role in biological reactions in humans, animals, plants and microorganisms. Emphasis on the role of vitamins and enzymes is followed in various cycles, such as the crepe cycle. The study includes the components of compounds and their chemical and physical qualities.

Biochemistry Laboratory (1:0-3) ** 020800162

This course includes color tests for the detection of carbohydrates, study of the reductive properties of sugars, tests for some sugars, ozone formation, starch and sucrose analysis, solubility of lipids, emulsification and separation of lecithin from eggs, acrolein formation, saponification, rancidity of oils, determination of acidity value in oils, general color tests for the detection of proteins, precipitation of proteins, identification of unknown amino acid and unknown carbohydrate compound, action of amylase, infrtaze and aldehyde oxidase, Cholesterol and methods of detection, estimation of cholesterol in the blood.



Medical Sociology 020800271 (0-3:3)

This course deals with the cognitive content of sociology in terms of social thought and health care, and provides a presentation of the concepts of disease, health care, health service and pathological behavior, as well as the role exercised by society in health service and the social context of health and disease and the repercussions of the concept of health and disease on health services, then the course deals with the most important fields of study in the social and behavioral sciences in order to understand social behavior at the theoretical and practical level by addressing the concepts of standards, trends and values

Fourth: Specialized skills

Anatomy 020800131 (0-3 : 3)

This course deals with a comparative anatomical study of the different systems in most vertebrate classes, which include: the cutaneous system and its functional mutations, the digestive system and its derivatives, the respiratory system, the circulatory system, the excretory system, the reproductive system, the nervous system and the sense organs.

Physiology 020800141 (0-3:3) 020800131**

This course aims to focus on the most important principles of the mechanism of different organs and tissues of the human body and the link between anatomy, histology and physiology by focusing on the close link between the effect of the shape and size of the body parts on the function performed by each part. With a focus on the interdependence between the organs of the human body (dermatological system, digestive system, respiratory system, circulatory system, excretory system, endocrine system, reproductive system, nervous system and sense organs) and contributing to the internal balance that ensures the preservation of human health and life and prevents the occurrence of diseases that affect the health of organs and systems.

Pathophysiology 020800211 (3:3-0)

This course provides an in-depth study of human pathological processes and their effects on internal balance. Diseases associated with body systems and general health management of diseases are explored across human lifespan. This course focuses on making clinical decisions and procedures related to nursing care.

Biomechanics and Kinesiology (2:1-3) 020818111

This course includes the theory of movement and its application to the human body, as well as the active and static mechanical behavior of body tissues, focusing on the interaction between joints and muscles, joint movement and limitations, in addition to tensile methods and its usefulness to the skeleton, through the application of the principles of physics and physiology to human movement, thus converting the rigid anatomical image into three-dimensional dynamic movement and on analyzing movement in normal and pathological conditions and how to treat the defect, and return the body to equilibrium Motor.

Specialized Anatomy 020818121 (3-1:2) 020800131**

This course covers the exact anatomy of the musculoskeletal system, the circulatory and respiratory systems, the anatomy of the head, neck and chest, focusing on the relationships and functions controlled by the center in the brain, the ways in which commands are transmitted to the periphery, with special attention to functional anatomy and its relationship to disabilities that require medical rehabilitation. Students learn about all body systems through ready-made models of the body and its organs and illustrations.

Tests and Measurements 020818131 (3-1:2)

This course focuses on the importance of evaluation and measurement in qualification. Provides an overview of concepts related to evaluation and measurement in the areas of the practical part of the course includes the practical application of the skills of evaluation of the musculoskeletal system such as measuring the range of motion and muscle strength in addition to the analysis of pathological scenarios using the International Classification of Functioning, Disability and Health.

Therapeutic Exercises 1: 020818141 020818131 (6-1:3)**

This course includes two parts, theoretical and practical, the theoretical part is covered through lectures that include studying some selected cases, giving an introduction to therapeutic exercises in general, and focusing on flexibility exercises in particular, including range exercise, stretching exercises and manual therapy, while the practical part includes the practice and application of all the skills and techniques discussed in the theoretical part and application to peers in order to master the required skills.

Therapeutic exercises 2:020818242(6-1:3)

This course introduces the theoretical principles and practical application methods of manual and mechanical resistance exercises, aerobic exercises, underwater exercises, balance exercises and neuromuscular coordination exercises, the theoretical material includes a study of the selected cases, discussing the latest scientific research and how to design therapeutic exercise programs Practical application depends on practicing skills and techniques practically using indoor and outdoor facilities.

Physical and Electrotherapy 20818151 (3-2:3)

This course covers the principles (physical, chemical, mechanical), tools and methods of application and clinical applications of a variety of electrical and physical methods used in physiotherapy, the means covered are heat, cold, electric current, shock waves, laser, hydrotherapy, magnetic therapy, vertebral tension and pneumatic pressure.

Radiological diagnosis 020818261(3-1:2)

This course provides the basic concepts of two-dimensional radiology images of the musculoskeletal system and how to analyze and understand these images in line with the concepts and practices of physiotherapy as instructed by the specialist doctor. As well as identifying the types of X-rays, the difference between them and the uses of each of them.

Rehabilitation of General Surgery and Burns 020818271 (3-1:2)

This article is the information necessary to understand and evaluate special cases after burns and surgeries that include: chest injuries, lethality, bone tumors, fractures, tendon transfers, wounds, peripheral nerve injuries, cardiogenic shock, cancers, childbirth, and amputations. The student will rely on the theoretical knowledge and scientific skills acquired in the previous courses.

Rehabilitation of nerve and muscle diseases 020818242 020818272 (6-1:3)**

This course includes a systematic approach to neuromuscular control as it relates to normal and abnormal positions, balance and mobility, and integrated rehabilitation of the most common neurological disorders with their evaluation and treatment mechanisms and complex neurological disorders such as spinal cord injuries, multiple sclerosis, Parkinson's and head injuries, the focus will be on strengthening health care and preventing secondary complications in order to qualify them for practical and social life

Rehabilitation of heart and respiratory diseases 020818273 (2:1-3)

This course focuses on the skills of assessing the condition of the patient with cardiorespiratory disorders and how to reach the definition of the patient's clinical and functional problems, and includes an introduction to common cardiovascular and respiratory diseases in terms of causes, course of the disease and its fate, clinical and functional problems resulting from dysfunction, and focusing on methods of planning, application and design of physiotherapy and rehabilitation programs, describing therapeutic exercises used in prevention and conservative treatment, and methods of assessing vital capacity and its various applications in order to enable them to practice their normal work.

Rehabilitation of diseases of the musculoskeletal system 020818274 (6-1:3)

This course covers the principles of evaluation of the musculoskeletal system and treatment of problems of the spine in its various parts in addition to joint injuries of the upper limbs, evaluation and treatment of lower limb joints and bone fractures, their healing process and complications, treatment of various pathological conditions and injuries, motor and functional problems related to the lower and upper extremities, planning and implementation Therapeutic methods for patients

Rehabilitation of Pediatric Diseases 020818274020818275 (3-0 : 1)**

This course introduces the principles of normal development in children and discusses the motor development of minor and major functions, discusses abnormal development and the consequent functional and motor deficiencies, and focuses on the evaluation and treatment of children's pathological conditions such as cases of cerebral palsy and cases of various diseases of the nervous, muscular, cardiac and respiratory systems, the student is exposed to discuss methods of evaluation and treatment in the light of scientific evidence, as well as teaching patients and their families what are the necessary means to reduce complications as much as possible.

Prostheses, assistive devices and splints 020818276(3-1:2)

This course covers basic information about the materials used in the manufacture of prostheses, splints and assistive devices for the upper and lower limbs and the spine and methods that help to assess the patient's need for these devices according to his condition and then teach and train the patient on how to properly use them and improve performance, including types of walking aids, wheelchairs, methods of placing and dismantling types of gypsum.

Rehabilitation of Internal Diseases and Special Cases 020818277 (1: 1-0)

This course covers the principles of evaluation of internal diseases and some special cases, such as rheumatism, lupus fever, metabolic diseases, patients with hypertension, epilepsy and other internal diseases and the implementation of treatment methods for patients. Sports Injury Rehabilitation 020818281 to introduce the student to sports injuries that affect athletes, how to diagnose, treat and prevent them

Physiotherapy for the elderly 020818282 (3-0:1)

To facilitate the understanding of the elderly and their special needs. Understand the biological and functional changes due to aging, know the physiotherapy procedures for elderly patients. Understand the mechanism of evaluation and treatment planning with elderly patients.

Advanced rehabilitation training 020818283 (6-0:2)

To provide the student with advanced rehabilitation skills to deal with various pathological conditions and the ability to evaluate them, and provide the correct and appropriate physiotherapy for different types of cases.

Field Training 020818291 (3:8 weeks of training)

This course is to provide the student with the necessary skills to deal with various pathological conditions in medical centers and hospitals as a physiotherapy technician and to be able to establish a professional relationship with the patient and his family, educate them and provide them with the necessary advice and guidance to treat the condition and reduce its complications.