

جامعة أم القرى
كلية العلوم الطبية التطبيقية
برامج الماجستير في قسم العلاج الطبيعي
(٨ تخصصات)

ماجستير العلاج الطبيعي – مسار الطب الرياضي Master of Physical Therapy- Sports Medicine Track
ماجستير العلاج الطبيعي – مسار الأطفال Master of Physical Therapy- Pediatric Track
ماجستير العلاج الطبيعي – مسار العظام Master of Physical Therapy- Sports Medicine Track
ماجستير العلاج الطبيعي – مسار الاعصاب Master of Physical Therapy- Neurological Track
ماجستير العلاج الطبيعي – مسار صحة المرأة Master of Physical Therapy- Women's Health Track
ماجستير العلاج الطبيعي – مسار القلب الرئوي Master of Physical Therapy- Cardiopulmonary Track
ماجستير العلاج الطبيعي – مسار الجراحة والاورام Master of Physical Therapy- Surgery and Oncology Track
ماجستير العلاج الطبيعي – مسار الفسيولوجيا الكهربائية السريرية Master of Physical Therapy- Clinical Electrophysiology Track

Kingdom of Saudi Arabia
Ministry of Education
Umm Al-Qura University
Deanship of Graduate Studies



المملكة العربية السعودية
وزارة التعليم
جامعة أم القرى
عمادة الدراسات العليا

ماجستير العلاج الطبيعي – مسار الطب الرياضي
Master of Physical Therapy- Sports Medicine Track

الخطة الدراسية لبرنامج ماجستير العلاج الطبيعي – مسار الطب الرياضي
Plan of Study for Sports Medicine Track

الساعات المعتمدة Credit Hours	رمز المقرر Course Code	اسم المقرر Course Name	المستوى Level
3	1704601	الممارسة القائمة على الأدلة في العلاج الطبيعي Evidence Based Practice in Physical Therapy	الأول Level 1
3	1704602	مقرر متقدم في علم الميكانيكا الحيوية والحركة Advanced Biomechanics and Kinesiology	
3	1704603	التشريح الوظيفي Functional Anatomy	
3	1704604	فسيولوجيا الممارسة السريرية Clinical Exercise Physiology	
4	1704611	الطب الرياضي السريري Clinical Sports Medicine	الثاني Level 2
4	1704612	الوقاية من الإصابات الرياضية Sports Injury Prevention	
4	1704613	تأهيل الإصابات الرياضية Sports Injury Rehabilitation	
3	1704605	منهجية البحث في العلاج الطبيعي Research Methodology in Physical Therapy	الثالث Level 3
2	1704606	الإحصاء الحيوي Biostatistics and Experimental Design	
5	1704614	الممارسة السريرية المتقدمة للطب الرياضي 1 Advanced Clinical Practice (Sports) I	
5	1704615	الممارسة السريرية المتقدمة- للطب الرياضي 2 Advanced Clinical Practice (Sports) II	الرابع Level 4
5	1704607	مشروع التخرج Research Project	
44	مجموع الساعات Total Credit Hours		

نبذة عن مقررات مسار الطب الرياضي

Course Overview for Sports Medicine Track

	Course Name	Description
Level 1	Evidence-Based Practice in Physical Therapy (1704601)	This course will commence with a critical review of the forms of evidence that underpin professional practice in physical therapy and rehabilitation sciences. The concept of evidence-based practice will be analyzed and its impact on practice evaluated, including an examination of the barriers to using evidence in practice. The course is focused on finding, appraising, and applying evidence into own clinical practice. The course provides students with practical skills in creating clinical question and searching online databases to find research articles. The course is then concentrated on examining different research designs: (1) Randomized Controlled Trails; (2) Prognostic Studies; (3) Diagnostic studies; (4) Systematic Reviews and Meta analyses; (5) Clinical Practice Guidelines; (6) Outcome Measures; (7) Alternative designs. The course finally reiterate the importance of shared decision making and research ethics in the context of evidence-based practice.
	Advanced Biomechanics and Kinesiology(1704602)	This course is designed to provide the students to with sufficient advanced theoretical and academic knowledge in laws of mechanics and kinesiology related to physical therapy applications as well as various aspects of mechanics which affect the human body. Also to enable the student to comprehend and apply this knowledge at various clinical and practical situations, like analysis of normal and pathological posture and gait, discuss the different force systems with anatomical examples from the human body, state Newton's laws and apply them on the human body, identify biomechanics of fracture fixation, applying biomechanics in sports medicine and rehabilitation, fluid mechanics, applying biomechanics in physical education finally to analyze factors affecting joint mechanics.
	Functional Anatomy (1704603)	Physical Therapist postgraduates' students are introduced to organized guided topics to develop advanced skills in the understanding and application of the Functional Anatomy of different human systems in diagnosis and treatment of different pathological conditions. The program endeavors to encourage these students to participate in research and education related to this method and to provide an understanding of the physical deficits encountered by persons with different pathological disorders.
	Clinical Exercise Physiology (1704604)	This course aims to introduce the Physiological concepts of neuromuscular, cardiovascular, respiratory, endocrine and reproductive physiology to the post graduate students as a continuation of their knowledge in the undergraduate and an implementation to other pre-requisite courses in the Master of Science in Physical Therapy.

	Course Name	Description
Level 2	Clinical Sports Medicine (1704611)	This course is designed to prepare student to become professional with the medical information concerning Clinical Sports Medicine and to provide an understanding of the application of appropriate assessment and treatment technique used in management of soft tissue and musculoskeletal disorders that athletes suffered from. This course will further develop the student's understanding of the effect of physical training with regard to preparation before and after training, and the importance of appropriate rehabilitative exercises. Risk factors for injuries will also been discussed as well as preventive measures.
	Sports Injury Prevention (1704612)	This course will provide an opportunity for post graduate students to be aware the basic principles of injury prevention; have an awareness of the different injury-prevention strategies which can be used in football; be able to implement the FIFA 11+ injury-prevention program, including the referee and kids' versions; have an understanding regarding the efficacy of the FIFA11+ injury-prevention program; be able to advocate injury-prevention programs to players and coaches; understand the importance of compliance; have an awareness of the financial impact of injury-prevention programs; have an understanding of the extrinsic risk factors for injury and how these may be mitigated.
	Sports Injury Rehabilitation (1704613)	This course will enable the students to manage the injured sportsperson and active individual and to develop injury prevention strategies with cognizance of all potential roles involved. This will be considered in the light of the involvement of the sportsperson from the recreational participant to the elite competitor. The students will also develop an understanding of sport and exercise participation in various social and geographic environments as well as in able-bodied and disabled sports participants. In the lab component of the course the students will practice sport injury assessment. Students will practice on each other; additionally patients with various sport injury will be brought to the lab for demonstration purposes

	Course Name	Description
Level 3	Research Methodology in Physical Therapy (1704605)	Research Methodology course will provide an opportunity for post graduate students to establish or advance their understanding of research through critical exploration of research language, ethics, and approaches. The course introduces the language of research, ethical principles and challenges, and the elements of the research process within quantitative, qualitative and mixed method approaches. Research students will use these theoretical underpinnings to begin to critically review literature relevant to their field or interests and determine how research findings are useful in forming their understanding of their work, local and global environment.
	Biostatistics and Experimental Design (1704606)	To provide students with the knowledge and skills about basic biostatistical concepts and applications to be utilized in research projects. The course provides overview of basic theoretical concepts (e.g. sampling error, confidence intervals) and applications of descriptive and inferential statistical analyses for different study designs.
	Advanced Clinical Practice (Sports) I (1704614)	This course is designed to advance the students' expertise in the examination, evaluation, diagnosis, prognosis, intervention, and management of patients. It is expected that the student will gain an in-depth understanding of the science underlying clinical techniques and evidence-based practice. Students are also expected to perform re-examinations, measure patient outcomes, and modify interventions accordingly. It allows students to apply knowledge and skills learned in the classroom to real-life situations in their chosen specialty. A one-on-one model of expert instructor to student is proposed for 30% of the time, using carefully selected sites and clinical instructors to facilitate the achievement of the goals. The rest of the time the student is expected to carry a full load and to be supervised as needed. The student is expected to attend physician rounds and conferences and to do at least one case presentation.

	Course Name	Description
Level 4	Research Project (1704607)	This course provides the principles of scientific methods of research and its application to physical therapy to enable students to develop their skills in selecting and defining research problems for developing criteria for scientific research. Students will critically evaluate selected articles and they will be divided into groups for supervised and directed research project. This course also offers students the opportunity to develop their clinical or practical experience in special areas of interest to physical therapy, design, perform, and present a related research project. The work involved in this course will be supervised and guided by faculty.
	Advanced Clinical Practice (Sports) II (1704615)	This course is designed to advance the students' expertise in the examination, evaluation, diagnosis, prognosis, intervention, and management of patients. It is expected that the student will gain an in-depth understanding of the science underlying clinical techniques and evidence-based practice. Students are also expected to perform re-examinations, measure patient outcomes, and modify interventions accordingly. It allows students to apply knowledge and skills learned in the classroom to real-life situations in their chosen specialty. A one-on-one model of expert instructor to student is proposed for 30% of the time, using carefully selected sites and clinical instructors to facilitate the achievement of the goals. The rest of the time the student is expected to carry a full load and to be supervised as needed. The student is expected to attend physician rounds and conferences and to do at least one case presentation

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عمادة الدراسات العليا

ماجستير العلاج الطبيعي – مسار الأطفال

Master of Physical Therapy- Pediatric Track

الخطة الدراسية لبرنامج ماجستير العلاج الطبيعي – مسار الأطفال Plan of Study for Pediatric Track

الساعات المعتمدة Credit Hours	رمز المقرر Course Code	اسم المقرر Course Name	المستوى Level
3	1704601	الممارسة القائمة على الأدلة في العلاج الطبيعي Evidence Based Practice in Physical Therapy	الأول Level 1
3	1704602	مقرر متقدم في علم الميكانيكا الحيوية والحركة Advanced Biomechanics and Kinesiology	
3	1704603	التشريح الوظيفي Functional Anatomy	
3	1704604	فسيولوجيا الممارسة السريرية Clinical Exercise Physiology	
4	1704621	العلاج الطبيعي المتقدم للأطفال Advanced Pediatric Physical Therapy	الثاني Level 2
4	1704622	القياس والتقييم في تأهيل الأطفال Assessment and Evaluation in Pediatric Rehabilitation	
4	1704623	العلاج الوظيفي للأطفال Pediatric Occupational Therapy	
3	1704605	منهجية البحث في العلاج الطبيعي Research Methodology in Physical Therapy	الثالث Level 3
2	1704606	الاحصاء الحيوي Biostatistics and Experimental Design	
5	1704624	الممارسة السريرية المتقدمة للأطفال 1 Advanced Clinical Practice (Pediatric) I	
5	1704625	الممارسة السريرية المتقدمة للأطفال 2 Advanced Clinical Practice (Pediatric) II	الرابع Level 4
5	1704607	مشروع التخرج Research Project	
44		مجموع الساعات Total Credit Hours	

نبذة عن مقررات مسار الأطفال

Course Overview for Pediatric Track

	Course Name	Description
Level 1	Evidence-Based Practice in Physical Therapy (1704601)	This course will commence with a critical review of the forms of evidence that underpin professional practice in physical therapy and rehabilitation sciences. The concept of evidence-based practice will be analyzed and its impact on practice evaluated, including an examination of the barriers to using evidence in practice. The course is focused on finding, appraising, and applying evidence into own clinical practice. The course provides students with practical skills in creating clinical question and searching online databases to find research articles. The course is then concentrated on examining different research designs: (1) Randomized Controlled Trails; (2) Prognostic Studies; (3) Diagnostic studies; (4) Systematic Reviews and Meta analyses; (5) Clinical Practice Guidelines; (6) Outcome Measures; (7) Alternative designs. The course finally reiterate the importance of shared decision making and research ethics in the context of evidence-based practice.
	Advanced Biomechanics and Kinesiology(1704602)	This course is designed to provide the students to with sufficient advanced theoretical and academic knowledge in laws of mechanics and kinesiology related to physical therapy applications as well as various aspects of mechanics which affect the human body. Also to enable the student to comprehend and apply this knowledge at various clinical and practical situations, like analysis of normal and pathological posture and gait, discuss the different force systems with anatomical examples from the human body, state Newton's laws and apply them on the human body, identify biomechanics of fracture fixation, applying biomechanics in sports medicine and rehabilitation, fluid mechanics, applying biomechanics in physical education finally to analyze factors affecting joint mechanics.
	Functional Anatomy (1704603)	Physical Therapist postgraduates' students are introduced to organized guided topics to develop advanced skills in the understanding and application of the Functional Anatomy of different human systems in diagnosis and treatment of different pathological conditions. The program endeavors to encourage these students to participate in research and education related to this method and to provide an understanding of the physical deficits encountered by persons with different pathological disorders.
	Clinical Exercise Physiology (1704604)	This course aims to introduce the Physiological concepts of neuromuscular, cardiovascular, respiratory, endocrine and reproductive physiology to the post graduate students as a continuation of their knowledge in the undergraduate and an implementation to other pre-requisite courses in the Master of Science in Physical Therapy.

	Course Name	Description
Level 2	Advanced Pediatric Physical Therapy (1704621)	This course provides in-depth exploration of the assessment and intervention procedures used with children suffering from neurological, musculoskeletal, and cardiopulmonary pathologies. The students will apply the relevant knowledge of anatomy, physiology, genetics, pharmacology, pathology, applied biomechanics, and child psychology to evaluation and treatment planning for the children with such pathologies. Emphasis is placed on activity-based, task-specific exercise, functional and progressive strength training, and treadmill and balance training. Various treatment and intervention approaches developed by Rood, Bobaths, Votja, Peto, Temple Fay, Jean Ayres, Sophie Levitt, and PNF will be discussed. The course focuses on evidence-based examination and intervention of children with disabilities within the context of child, family, and environmental factors. The importance of family centered care; parent, child interactions, group therapy, and play are explored. This course includes laboratory sessions that will focus on hands-on evaluation/management techniques for the conditions related to the practice of pediatric physical therapy. Clinical practice in pediatrics will run in parallel to this course which will give the students the opportunity to practice both examination and intervention skills taught in this course.
	Assessment and Evaluation in Pediatric Rehabilitation (1704622)	This course is designed to provide students with background information on measurement principles and psychometrics that guide students to the effective use of tests and measures in pediatric physical therapy practice. Assessment tools will be discussed in the light of International Classification of Functioning, Disability, and Health (ICF) framework. Selective standardized tests will be discussed in details. The main purposes of this course are to: 1) provide students with the foundational knowledge of measurement theory in rehabilitation science; and 2) to expose students to common assessment tools used in pediatric physical therapy that can be used in clinical practice.
	Pediatric Occupational Therapy (1704623)	This course is designed to prepare the post-graduate student to be able to have sufficient base of theoretical and practical knowledge in the field of occupational therapy for the common Pediatric and neuro-developmental disorders cases as well as surgical conditions in children. This Course will also help them to understand the meanings of occupations and the use of occupation to affect human performance and improve the effects of diseases and disability. Through this course, the post-graduate student will learn to work with disabled children and children with occupational problems to help them participate more fully in life by focusing on their strengths and enable them to achieve maximum level of function and independence in everyday activities. This course will help graduate to efficiently collaborate with family and careers where needed and typically work in teams with other healthcare professionals. This course will cover a wide range of topics including theories of what people do in daily life and why; knowledge of the development of child 'capabilities (e.g. motor, sensory, perceptual, cognitive, psychosocial) from prenatal life through childhood and the ways in which injury and illness typically disrupt them; activity and environmental analysis; and theories and techniques for promoting participation in daily life.

	Course Name	Description
Level 3	Research Methodology in Physical Therapy (1704605)	Research Methodology course will provide an opportunity for post graduate students to establish or advance their understanding of research through critical exploration of research language, ethics, and approaches. The course introduces the language of research, ethical principles and challenges, and the elements of the research process within quantitative, qualitative and mixed method approaches. Research students will use these theoretical underpinnings to begin to critically review literature relevant to their field or interests and determine how research findings are useful in forming their understanding of their work, local and global environment.
	Biostatistics and Experimental Design (1704606)	To provide students with the knowledge and skills about basic biostatistical concepts and applications to be utilized in research projects. The course provides overview of basic theoretical concepts (e.g. sampling error, confidence intervals) and applications of descriptive and inferential statistical analyses for different study designs.
	Advanced Clinical Practice (Pediatric) I (1704624)	This course is designed to provide postgraduate hands-on experiences with real patients and situations in pediatric physical therapy under the supervision and guidance of experts in such areas. To obtain mastery of advanced clinical skills and professional behaviors that will prepare the student to become a specialist in pediatric physical therapy. To examine and evaluate children, and design, implement, and analyze a physical therapy plan of care as a specialist-level practitioner. To augment the academic curriculum by providing a variety of clinical learning experiences to facilitate the formation of knowledge, skills, professional judgment and behaviors, and values necessary for students to provide safe, professional, ethical and quality physical therapy care. To extend and deepen clinical reasoning in the development and monitoring of management plans based on assessment findings and best available evidence, which are responsive to the service delivery models and the culture of the patient and the organization.

	Course Name	Description
Level 4	Research Project (1704607)	This course provides the principles of scientific methods of research and its application to physical therapy to enable students to develop their skills in selecting and defining research problems for developing criteria for scientific research. Students will critically evaluate selected articles and they will be divided into groups for supervised and directed research project. This course also offers students the opportunity to develop their clinical or practical experience in special areas of interest to physical therapy, design, perform, and present a related research project. The work involved in this course will be supervised and guided by faculty.
	Advanced Clinical Practice (Pediatric) II (1704625)	This course is designed to provide postgraduate hands-on experiences with real patients and situations in pediatric physical therapy under the supervision and guidance of experts in such areas. To obtain mastery of advanced clinical skills and professional behaviors that will prepare the student to become a specialist in pediatric physical therapy. To examine and evaluate children, and design, implement, and analyze a physical therapy plan of care as a specialist-level practitioner. To augment the academic curriculum by providing a variety of clinical learning experiences to facilitate the formation of knowledge, skills, professional judgment and behaviors, and values necessary for students to provide safe, professional, ethical and quality physical therapy care.

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ماجستير العلاج الطبيعي – مسار العظام

Master of Physical Therapy- Orthopedic Track

الخطة الدراسية لبرنامج ماجستير العلاج الطبيعي – مسار العظام Plan of Study for Orthopedic Track

الساعات المعتمدة Credit Hours	رمز المقرر Course Code	اسم المقرر Course Name	المستوى Level
3	1704601	الممارسة القائمة على الأدلة في العلاج الطبيعي Evidence Based Practice in Physical Therapy	الأول Level 1
3	1704602	مقرر متقدم في علم الميكانيكا الحيوية والحركة Advanced Biomechanics and Kinesiology	
3	1704603	التشريح الوظيفي Functional Anatomy	
3	1704604	فسيولوجيا الممارسة السريرية Clinical Exercise Physiology	
4	1704631	جراحة العظام والتصوير التشخيصي Orthopedics and Diagnostic Imaging	الثاني Level 2
4	1704632	الممارسة المتقدمة للعظام و العضلات 1 Advanced Musculoskeletal Practice I	
4	1704633	الممارسة المتقدمة للعظام و العضلات 2 Advanced Musculoskeletal Practice II	
3	1704605	منهجية البحث في العلاج الطبيعي Research Methodology in Physical Therapy	الثالث Level 3
2	1704606	الاحصاء الحيوي Biostatistics and Experimental Design	
5	1704634	الممارسة السريرية المتقدمة للعظام 1 Advanced Clinical Practice (Orthopedic) I	
5	1704635	الممارسة السريرية المتقدمة للعظام 2 Advanced Clinical Practice (Orthopedic) II	الرابع Level 4
5	1704607	مشروع التخرج Research Project	
44		مجموع الساعات Total Credit Hours	

نبذة عن مقررات مسار العظام

Course Overview for Orthopedic Track

	Course Name	Description
Level 1	Evidence-Based Practice in Physical Therapy (1704601)	This course will commence with a critical review of the forms of evidence that underpin professional practice in physical therapy and rehabilitation sciences. The concept of evidence-based practice will be analyzed and its impact on practice evaluated, including an examination of the barriers to using evidence in practice. The course is focused on finding, appraising, and applying evidence into own clinical practice. The course provides students with practical skills in creating clinical question and searching online databases to find research articles. The course is then concentrated on examining different research designs: (1) Randomized Controlled Trails; (2) Prognostic Studies; (3) Diagnostic studies; (4) Systematic Reviews and Meta analyses; (5) Clinical Practice Guidelines; (6) Outcome Measures; (7) Alternative designs. The course finally reiterate the importance of shared decision making and research ethics in the context of evidence-based practice.
	Advanced Biomechanics and Kinesiology(1704602)	This course is designed to provide the students to with sufficient advanced theoretical and academic knowledge in laws of mechanics and kinesiology related to physical therapy applications as well as various aspects of mechanics which affect the human body. Also to enable the student to comprehend and apply this knowledge at various clinical and practical situations, like analysis of normal and pathological posture and gait, discuss the different force systems with anatomical examples from the human body, state Newton's laws and apply them on the human body, identify biomechanics of fracture fixation, applying biomechanics in sports medicine and rehabilitation, fluid mechanics, applying biomechanics in physical education finally to analyze factors affecting joint mechanics.
	Functional Anatomy (1704603)	Physical Therapist postgraduates' students are introduced to organized guided topics to develop advanced skills in the understanding and application of the Functional Anatomy of different human systems in diagnosis and treatment of different pathological conditions. The program endeavors to encourage these students to participate in research and education related to this method and to provide an understanding of the physical deficits encountered by persons with different pathological disorders.
	Clinical Exercise Physiology (1704604)	This course aims to introduce the Physiological concepts of neuromuscular, cardiovascular, respiratory, endocrine and reproductive physiology to the post graduate students as a continuation of their knowledge in the undergraduate and an implementation to other pre-requisite courses in the Master of Science in Physical Therapy.

	Course Name	Description
Level 2	Orthopedics and Diagnostic Imaging (1704631)	This course is designed to prepare graduate students to become professional at medical information concerning traumatology, orthopedics and imaging to provide an understanding of the physical deficits encountered by persons with musculoskeletal disorders. Also; This course is designed to cover basic principles, procedures and interpretation of diagnostic imaging modalities. The emphasis is on plain film radiographs, contrast films, magnetic resonance imaging (MRI), and computed tomography (CT). Other types of imaging diagnostic techniques will also be introduced e.g. nuclear medicine and diagnostic ultrasound.
	Advanced Musculoskeletal Practice I (1704632)	This course will is designed to provide postgraduate students advanced knowledge and practice in musculoskeletal physical therapy of cervical spine and upper quadrant. It will cover musculoskeletal mechanical and pathological dysfunctions involving these structures, and advanced physical therapy interventions pertinent to these dysfunctions to be covered theoretically and practically. These interventions will cover all possible therapeutic interventions as indicated by recent literature in an evidence-based approach, including modalities, and exercise therapy, as well as understanding of the physical deficits encountered by persons with musculoskeletal disorders as well as the proper physical therapy treatment especially in upper quadrant conditions.
	Advanced Musculoskeletal Practice II (1704633)	This course will is designed to provide postgraduate students advanced knowledge and practice in musculoskeletal physical therapy of Lumbar spine and Lower quadrant. It will cover musculoskeletal mechanical and pathological dysfunctions involving these structures, and advanced physical therapy interventions pertinent to these dysfunctions to be covered theoretically and practically. These interventions will cover all possible therapeutic interventions as indicated by recent literature in an evidence-based approach, including modalities, and exercise therapy, as well as understanding of the physical deficits encountered by persons with musculoskeletal disorders as well as the proper physical therapy treatment especially in Lower quadrant conditions.

Level 3	Course Name	Description
	Research Methodology in Physical Therapy (1704605)	Research Methodology course will provide an opportunity for post graduate students to establish or advance their understanding of research through critical exploration of research language, ethics, and approaches. The course introduces the language of research, ethical principles and challenges, and the elements of the research process within quantitative, qualitative and mixed method approaches. Research students will use these theoretical underpinnings to begin to critically review literature relevant to their field or interests and determine how research findings are useful in forming their understanding of their work, local and global environment.
	Biostatistics and Experimental Design (1704606)	To provide students with the knowledge and skills about basic biostatistical concepts and applications to be utilized in research projects. The course provides overview of basic theoretical concepts (e.g. sampling error, confidence intervals) and applications of descriptive and inferential statistical analyses for different study designs.
	Advanced Clinical Practice (Orthopedic) I (1704634)	In this course, students are introduced to organized guided topics to develop advanced skills in the understanding and application of the field of musculoskeletal physical Therapy in diagnosis and therapy, using the case-based problem solving approach. The program endeavors to encourage these students to participate in research and education related to this method and be experienced in the clinical application.

Level 4	Course Name	Description
	Research Project (1704607)	This course provides the principles of scientific methods of research and its application to physical therapy to enable students to develop their skills in selecting and defining research problems for developing criteria for scientific research. Students will critically evaluate selected articles and they will be divided into groups for supervised and directed research project. This course also offers students the opportunity to develop their clinical or practical experience in special areas of interest to physical therapy, design, perform, and present a related research project. The work involved in this course will be supervised and guided by faculty.
	Advanced Clinical Practice (Orthopedic) II (1704635)	In this course, students are introduced to organized guided topics to develop advanced skills in the understanding and application of the field of musculoskeletal physical Therapy in diagnosis and therapy, using the case-based problem solving approach. The program endeavors to encourage these students to participate in research and education related to this method and be experienced in the clinical application.

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ماجستير العلاج الطبيعي – مسار الاعصاب

Master of Physical Therapy- Neurological Track

الخطة الدراسية لبرنامج ماجستير العلاج الطبيعي – مسار الأعصاب Plan of Study for Neurology Track

الساعات المعتمدة Credit Hours	رمز المقرر Course Code	اسم المقرر Course Name	المستوى Level
3	1704601	الممارسة القائمة على الأدلة في العلاج الطبيعي Evidence Based Practice in Physical Therapy	الأول Level 1
3	1704602	مقرر متقدم في علم الميكانيكا الحيوية والحركة Advanced Biomechanics and Kinesiology	
3	1704603	التشريح الوظيفي Functional Anatomy	
3	1704604	فسيولوجيا الممارسة السريرية Clinical Exercise Physiology	
4	1704641	العلاج الطبيعي لأمراض الأعصاب وجراحتها Physical Therapy of Neurological and Neurosurgical Disorders	الثاني Level 2
4	1704642	التشخيص الكهربائي و التقييم بالأشعة Electro Diagnosis and Imaging Evaluation	
4	1704643	التعلم الحركي و مداواة الألم Motor Learning and Pain Management	
3	1704605	منهجية البحث في العلاج الطبيعي Research Methodology in Physical Therapy	الثالث Level 3
2	1704606	الإحصاء الحيوي Biostatistics and Experimental Design	
5	1704644	الممارسة السريرية المتقدمة للأعصاب 1 Advanced Clinical Practice (Neurological) I	
5	1704645	الممارسة السريرية المتقدمة للأعصاب 2 Advanced Clinical Practice (Neurological) II	الرابع Level 4
5	1704607	مشروع التخرج Research Project	
44		مجموع الساعات Total Credit Hours	

نبذة عن مقررات مسار الاعصاب

Course Overview for Neurological Track

	Course Name	Description
Level 1	Evidence-Based Practice in Physical Therapy (1704601)	This course will commence with a critical review of the forms of evidence that underpin professional practice in physical therapy and rehabilitation sciences. The concept of evidence-based practice will be analyzed and its impact on practice evaluated, including an examination of the barriers to using evidence in practice. The course is focused on finding, appraising, and applying evidence into own clinical practice. The course provides students with practical skills in creating clinical question and searching online databases to find research articles. The course is then concentrated on examining different research designs: (1) Randomized Controlled Trails; (2) Prognostic Studies; (3) Diagnostic studies; (4) Systematic Reviews and Meta analyses; (5) Clinical Practice Guidelines; (6) Outcome Measures; (7) Alternative designs. The course finally reiterate the importance of shared decision making and research ethics in the context of evidence-based practice.
	Advanced Biomechanics and Kinesiology(1704602)	This course is designed to provide the students to with sufficient advanced theoretical and academic knowledge in laws of mechanics and kinesiology related to physical therapy applications as well as various aspects of mechanics which affect the human body. Also to enable the student to comprehend and apply this knowledge at various clinical and practical situations, like analysis of normal and pathological posture and gait, discuss the different force systems with anatomical examples from the human body, state Newton's laws and apply them on the human body, identify biomechanics of fracture fixation, applying biomechanics in sports medicine and rehabilitation, fluid mechanics, applying biomechanics in physical education finally to analyze factors affecting joint mechanics.
	Functional Anatomy (1704603)	Physical Therapist postgraduates' students are introduced to organized guided topics to develop advanced skills in the understanding and application of the Functional Anatomy of different human systems in diagnosis and treatment of different pathological conditions. The program endeavors to encourage these students to participate in research and education related to this method and to provide an understanding of the physical deficits encountered by persons with different pathological disorders.
	Clinical Exercise Physiology (1704604)	This course aims to introduce the Physiological concepts of neuromuscular, cardiovascular, respiratory, endocrine and reproductive physiology to the post graduate students as a continuation of their knowledge in the undergraduate and an implementation to other pre-requisite courses in the Master of Science in Physical Therapy.

	Course Name	Description
Level 2	Physical Therapy of Neurological and Neurosurgical Disorders (1704641)	This course is designed to provide opportunities, by which the post graduate develop a level of integration of theoretical knowledge, practical and clinical skills in assessing and treating different neurological and neurosurgical disorders. The postgraduate will acquire advanced skills and clinical practice based on the theoretical and academic knowledge in the field of physical therapy for neurology and neurosurgery that enables the candidate to deal with any patient referred from the physician to be able to obtain the advanced manual skills necessary for evaluation of different health problems; in order to design the optimal treatment plan for any patients suffering from any neurological and/ or neurosurgical problems, as well as communicate professionally with other medical team caring for this patient.
	Electro diagnosis and Imaging Evaluation (1704642)	This course will describe the fundamentals of physiological and anatomical basis for electromyography and nerve conduction studies. Its aims to improve the students' knowledge, skills and attitudes of electro-diagnostic examinations of electromyography, nerve conduction studies and late responses to evaluate different neuromuscular disorders as well as provide physical therapist the nature and scope of essential knowledge and skills needed to practice electro-diagnostic techniques for different neuromuscular disorders. It also give students the ability to understand & recognize different neurological lesion for both brain & spinal cord through different imaging techniques(computerized tomography, and Magnetic resonance imaging)
	Motor Learning and Pain Management (1704643)	This course will emphasis on understanding the followings: Theoretical and applied perspectives of motor control and learning, and their implications on physical therapy and also on understanding pain and how to manage it. It also discusses the Behavioral, biomechanical and different neural control of learning and mechanisms of pain control theories. Understanding of both normal and pathological human motor behavior and their Implications on treatment of patients and most common causes of pain and how to interfere with it. Neurophysiologic control of posture and movement as the base for applying evaluation and treatment procedures for abnormalities of, movement, muscle tone, postural adaptation, and its function. Updated techniques in evaluating and treating neuropathic pain and how physical therapy can interfere with these approaches. The effects of cognition, vision, vestibular, auditory, input in the acquisition of motor skills.

	Course Name	Description
Level 3	Research Methodology in Physical Therapy (1704605)	Research Methodology course will provide an opportunity for post graduate students to establish or advance their understanding of research through critical exploration of research language, ethics, and approaches. The course introduces the language of research, ethical principles and challenges, and the elements of the research process within quantitative, qualitative and mixed method approaches. Research students will use these theoretical underpinnings to begin to critically review literature relevant to their field or interests and determine how research findings are useful in forming their understanding of their work, local and global environment.
	Biostatistics and Experimental Design (1704606)	To provide students with the knowledge and skills about basic biostatistical concepts and applications to be utilized in research projects. The course provides overview of basic theoretical concepts (e.g. sampling error, confidence intervals) and applications of descriptive and inferential statistical analyses for different study designs.
	Advanced Clinical Practice (Neurological) I (1704644)	This course is designed to provide opportunities by which the postgraduate develops a level of integration between theoretical knowledge and skills in physical therapy evaluation and treatment of actual patients with neurological and neurosurgical disorders in out-patient's physical therapy departments as well as in-patient's neurological and neurosurgical departments. The student will acquire advanced skills and experiences in clinical practice based on the theoretical and academic knowledge in the field of physical therapy for the common neurological and neurosurgical conditions that enables the candidate to deal with any patient referred from neurologist or neurosurgeon to apply advanced manual skills necessary for evaluation of different problems; in order to design the optimal physical therapy plan for patients suffering from any neurological or neurosurgical problems, as well as communicate professionally with other medical team caring for this patient.

	Course Name	Description
Level 4	Research Project (1704607)	This course provides the principles of scientific methods of research and its application to physical therapy to enable students to develop their skills in selecting and defining research problems for developing criteria for scientific research. Students will critically evaluate selected articles and they will be divided into groups for supervised and directed research project. This course also offers students the opportunity to develop their clinical or practical experience in special areas of interest to physical therapy, design, perform, and present a related research project. The work involved in this course will be supervised and guided by faculty.
	Advanced Clinical Practice (Neurological) II (1704645)	This course is designed to provide opportunities by which the postgraduate develops a level of integration between theoretical knowledge and skills in physical therapy evaluation and treatment of actual patients with neurological and neurosurgical disorders in out-patient's physical therapy departments as well as in-patient's neurological and neurosurgical departments. The student will acquire advanced skills and experiences in clinical practice based on the theoretical and academic knowledge in the field of physical therapy for the common neurological and neurosurgical conditions that enables the candidate to deal with any patient referred from neurologist or neurosurgeon to apply advanced manual skills necessary for evaluation & treatment of different problems.

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المملكة العربية السعودية
وزارة التعليم
جامعة أم القرى
عمادة الدراسات العليا

ماجستير العلاج الطبيعي – مسار صحة المرأة

Master of Physical Therapy- Women's Health Track

الخطة الدراسية لبرنامج ماجستير العلاج الطبيعي – مسار صحة المرأة Plan of Study for Women's Health Track

الساعات المعتمدة Credit Hours	رمز المقرر Course Code	اسم المقرر Course Name	المستوى Level
3	1704601	الممارسة القائمة على الأدلة في العلاج الطبيعي Evidence Based Practice in Physical Therapy	الأول Level 1
3	1704602	مقرر متقدم في علم الميكانيكا الحيوية والحركة Advanced Biomechanics and Kinesiology	
3	1704603	التشريح الوظيفي Functional Anatomy	
3	1704604	فسيولوجيا الممارسة السريرية Clinical Exercise Physiology	
4	1704651	العلاج الطبيعي لصحة المرأة 1 Physical Therapy for Women's Health I	الثاني Level 2
4	1704652	- العلاج الطبيعي لصحة المرأة 2 Physical Therapy for Women's Health II	
4	1704653	العلاج الطبيعي لقاع الحوض Physical Therapy for Pelvic Floor	
3	1704605	منهجية البحث في العلاج الطبيعي Research Methodology in Physical Therapy	الثالث Level 3
2	1704606	الإحصاء الحيوي Biostatistics and Experimental Design	
5	1704654	الممارسة السريرية المتقدمة لصحة المرأة 1 Advanced Clinical Practice (Women's health) I	
5	1704655	الممارسة السريرية المتقدمة لصحة المرأة 2 Advanced Clinical Practice (Women's health) II	الرابع Level 4
5	1704607	مشروع التخرج Research Project	
44		مجموع الساعات Total Credit Hours	

نبذة عن مقررات مسار صحة المرأة

Course Overview for Women's Health Track

	Course Name	Description
Level 1	Evidence-Based Practice in Physical Therapy (1704601)	This course will commence with a critical review of the forms of evidence that underpin professional practice in physical therapy and rehabilitation sciences. The concept of evidence-based practice will be analyzed and its impact on practice evaluated, including an examination of the barriers to using evidence in practice. The course is focused on finding, appraising, and applying evidence into own clinical practice. The course provides students with practical skills in creating clinical question and searching online databases to find research articles. The course is then concentrated on examining different research designs: (1) Randomized Controlled Trails; (2) Prognostic Studies; (3) Diagnostic studies; (4) Systematic Reviews and Meta analyses; (5) Clinical Practice Guidelines; (6) Outcome Measures; (7) Alternative designs. The course finally reiterate the importance of shared decision making and research ethics in the context of evidence-based practice.
	Advanced Biomechanics and Kinesiology(1704602)	This course is designed to provide the students to with sufficient advanced theoretical and academic knowledge in laws of mechanics and kinesiology related to physical therapy applications as well as various aspects of mechanics which affect the human body. Also to enable the student to comprehend and apply this knowledge at various clinical and practical situations, like analysis of normal and pathological posture and gait, discuss the different force systems with anatomical examples from the human body, state Newton's laws and apply them on the human body, identify biomechanics of fracture fixation, applying biomechanics in sports medicine and rehabilitation, fluid mechanics, applying biomechanics in physical education finally to analyze factors affecting joint mechanics.
	Functional Anatomy (1704603)	Physical Therapist postgraduates' students are introduced to organized guided topics to develop advanced skills in the understanding and application of the Functional Anatomy of different human systems in diagnosis and treatment of different pathological conditions. The program endeavors to encourage these students to participate in research and education related to this method and to provide an understanding of the physical deficits encountered by persons with different pathological disorders.
	Clinical Exercise Physiology (1704604)	This course aims to introduce the Physiological concepts of neuromuscular, cardiovascular, respiratory, endocrine and reproductive physiology to the post graduate students as a continuation of their knowledge in the undergraduate and an implementation to other pre-requisite courses in the Master of Science in Physical Therapy.

	Course Name	Description
Level 2	Physical Therapy for Women's Health I (1704651)	This course will enable the student to explore recent advances, knowledge and current physical therapy practice applicable to women's health in a variety of Obstetrical healthcare settings
	Physical Therapy for Women's Health I (1704652)	This course will enable the student to explore recent advances, knowledge and current physical therapy practice applicable to women's health in a variety of Gynecological healthcare settings
	Physical Therapy for Pelvic Floor (1704653)	This course will enable the student to explore recent advances, knowledge and current physical therapy practice applicable to pelvic floor with focus on epidemiology and prevalence of the pelvic floor dysfunction, diagnostic measures for pelvic floor dysfunction, and physical therapy strategies to manage dysfunctions.

	Course Name	Description
Level 3	Research Methodology in Physical Therapy (1704605)	Research Methodology course will provide an opportunity for post graduate students to establish or advance their understanding of research through critical exploration of research language, ethics, and approaches. The course introduces the language of research, ethical principles and challenges, and the elements of the research process within quantitative, qualitative and mixed method approaches. Research students will use these theoretical underpinnings to begin to critically review literature relevant to their field or interests and determine how research findings are useful in forming their understanding of their work, local and global environment.
	Biostatistics and Experimental Design (1704606)	To provide students with the knowledge and skills about basic biostatistical concepts and applications to be utilized in research projects. The course provides overview of basic theoretical concepts (e.g. sampling error, confidence intervals) and applications of descriptive and inferential statistical analyses for different study designs.
	Advanced Clinical Practice (Women's Health) I (1704654)	This course will enable the student to reflect on and analyze recent advances, knowledge and current physical therapy practice applicable to women's health in a clinical setting.

	Course Name	Description
Level 4	Research Project (1704607)	This course provides the principles of scientific methods of research and its application to physical therapy to enable students to develop their skills in selecting and defining research problems for developing criteria for scientific research. Students will critically evaluate selected articles and they will be divided into groups for supervised and directed research project. This course also offers students the opportunity to develop their clinical or practical experience in special areas of interest to physical therapy, design, perform, and present a related research project. The work involved in this course will be supervised and guided by faculty.
	Advanced Clinical Practice (Women's Health) II (1704655)	This course will enable the student to reflect on and analyze recent advances, knowledge and current physical therapy practice applicable to women's health in a clinical setting.

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ماجستير العلاج الطبيعي – مسار القلب الرئوي

Master of Physical Therapy- Cardiopulmonary Track

الخطة الدراسية لبرنامج ماجستير العلاج الطبيعي – مسار القلب الرئوي Plan of Study for Cardiopulmonary Track

الساعات المعتمدة Credit Hours	رمز المقرر Course Code	اسم المقرر Course Name	المستوى Level
3	1704601	الممارسة القائمة على الأدلة في العلاج الطبيعي Evidence Based Practice in Physical Therapy	الأول Level 1
3	1704602	مقرر متقدم في علم الميكانيكا الحيوية والحركة Advanced Biomechanics and Kinesiology	
3	1704603	التشريح الوظيفي Functional Anatomy	
3	1704604	فسيولوجيا الممارسة السريرية Clinical Exercise Physiology	
4	1704661	نظريات متقدمة في العلاج الطبيعي القلب الرئوي Advanced Theories in Cardiopulmonary Physical Therapy	الثاني Level 2
4	1704662	تقييمات متقدمة في العلاج الطبيعي القلب الرئوي Advanced Evaluations in Cardiopulmonary physical Therapy	
4	1704663	حلقات بحثية واتخاذ القرارات السريرية في العلاج الطبيعي القلب الرئوي Research Seminars and Clinical Decision Making in Cardiopulmonary Physical Therapy	
3	1704605	منهجية البحث في العلاج الطبيعي Research Methodology in Physical Therapy	الثالث Level 3
2	1704606	الاحصاء الحيوي Biostatistics and Experimental Design	
5	1704664	الممارسة السريرية المتقدمة -القلبي-الرئوي 1 Advanced Clinical Practice (Cardiopulmonary) I	
5	1704665	الممارسة السريرية المتقدمة -القلبي-الرئوي 2 Advanced Clinical Practice (Cardiopulmonary) II	الرابع Level 4
5	1704607	مشروع التخرج Research Project	
44		مجموع الساعات Total Credit Hours	

نبذة عن مقررات مسار القلبى الرئوى

Course Overview for Cardiopulmonary Track

	Course Name	Description
Level 1	Evidence-Based Practice in Physical Therapy (1704601)	This course will commence with a critical review of the forms of evidence that underpin professional practice in physical therapy and rehabilitation sciences. The concept of evidence-based practice will be analyzed and its impact on practice evaluated, including an examination of the barriers to using evidence in practice. The course is focused on finding, appraising, and applying evidence into own clinical practice. The course provides students with practical skills in creating clinical question and searching online databases to find research articles. The course is then concentrated on examining different research designs: (1) Randomized Controlled Trails; (2) Prognostic Studies; (3) Diagnostic studies; (4) Systematic Reviews and Meta analyses; (5) Clinical Practice Guidelines; (6) Outcome Measures; (7) Alternative designs. The course finally reiterate the importance of shared decision making and research ethics in the context of evidence-based practice.
	Advanced Biomechanics and Kinesiology(1704602)	This course is designed to provide the students to with sufficient advanced theoretical and academic knowledge in laws of mechanics and kinesiology related to physical therapy applications as well as various aspects of mechanics which affect the human body. Also to enable the student to comprehend and apply this knowledge at various clinical and practical situations, like analysis of normal and pathological posture and gait, discuss the different force systems with anatomical examples from the human body, state Newton's laws and apply them on the human body, identify biomechanics of fracture fixation, applying biomechanics in sports medicine and rehabilitation, fluid mechanics, applying biomechanics in physical education finally to analyze factors affecting joint mechanics.
	Functional Anatomy (1704603)	Physical Therapist postgraduates' students are introduced to organized guided topics to develop advanced skills in the understanding and application of the Functional Anatomy of different human systems in diagnosis and treatment of different pathological conditions. The program endeavors to encourage these students to participate in research and education related to this method and to provide an understanding of the physical deficits encountered by persons with different pathological disorders.
	Clinical Exercise Physiology (1704604)	This course aims to introduce the Physiological concepts of neuromuscular, cardiovascular, respiratory, endocrine and reproductive physiology to the post graduate students as a continuation of their knowledge in the undergraduate and an implementation to other pre-requisite courses in the Master of Science in Physical Therapy.

	Course Name	Description
Level 2	Advanced Theories in Cardiopulmonary Physical Therapy (1704661)	<p>This course will enable the student to</p> <ul style="list-style-type: none"> - Understand and recognize new strategies and advancements in physical therapy utilized for the management of pulmonary, cardiac and some metabolic disorders and its surgeries. - Develop a far reaching and a compelling helpful and rehabilitative projects for cardiopulmonary field - Identify advanced physiological basis in using of different treatment methods. - Determine suitable exercise based on physiologic mechanism for patients experiencing chest diseases, cardiovascular or metabolic disorders for treatment. - Modify the treatment plan as needed for ICU patients and re-arrange problems' solving priorities according to surrounding modifiable events during treatment.
	Advanced Evaluations in Cardiopulmonary Physical Therapy (1704662)	<p>This course aims to develop an advanced approach in the area of physical therapy management of cardiopulmonary and peripheral vascular conditions across lifespan and in different work settings. It builds on the foundation in cardiopulmonary physical therapy acquired through undergrad education, and facilitates lifelong learning to develop advanced knowledge, skills and attitudes in cardiopulmonary physical therapy practice. This course is designed to provide opportunities, by which the students develop an advanced level of integration of theoretical knowledge, practical and clinical skills in the evaluation of patients with cardiopulmonary and peripheral vascular disorders.</p>
	Research Seminars and Clinical Decision Making in Cardiopulmonary Physical Therapy (1704663)	<p>This course is intended to gets physical therapist ready to differentiate between appropriate treatments modalities concerning rehabilitation for workers. Also, This course explains different new chest physical therapy techniques and how to prescribe exercises in cardiovascular/respiratory disorders.</p>

	Course Name	Description
Level 3	Research Methodology in Physical Therapy (1704605)	Research Methodology course will provide an opportunity for post graduate students to establish or advance their understanding of research through critical exploration of research language, ethics, and approaches. The course introduces the language of research, ethical principles and challenges, and the elements of the research process within quantitative, qualitative and mixed method approaches. Research students will use these theoretical underpinnings to begin to critically review literature relevant to their field or interests and determine how research findings are useful in forming their understanding of their work, local and global environment.
	Biostatistics and Experimental Design (1704606)	To provide students with the knowledge and skills about basic biostatistical concepts and applications to be utilized in research projects. The course provides overview of basic theoretical concepts (e.g. sampling error, confidence intervals) and applications of descriptive and inferential statistical analyses for different study designs.
	Advanced Clinical Practice (Cardiopulmonary) I (1704664)	This course aims to develop an advanced approach in the area of evidence-based physical therapy clinical practice in cardiopulmonary and peripheral vascular conditions across lifespan and in different work settings. It builds on the foundation in cardiopulmonary physical therapy acquired through undergraduate education. This course is designed to provide opportunities, by which the students develop an advanced level of integration of evidence-based practical knowledge and clinical skills in the management of patients with cardiopulmonary and peripheral vascular disorders. The student will acquire advanced skills and clinical practice based on the updated theoretical and academic knowledge in the field of physical therapy for cardiopulmonary and peripheral vascular disorders.

	Course Name	Description
Level 4	Research Project (1704607)	This course provides the principles of scientific methods of research and its application to physical therapy to enable students to develop their skills in selecting and defining research problems for developing criteria for scientific research. Students will critically evaluate selected articles and they will be divided into groups for supervised and directed research project. This course also offers students the opportunity to develop their clinical or practical experience in special areas of interest to physical therapy, design, perform, and present a related research project. The work involved in this course will be supervised and guided by faculty.
	Advanced Clinical Practice (Cardiopulmonary Health) II (1704665)	This course aims to develop an advanced approach in the area of evidence-based physical therapy clinical practice in cardiopulmonary and peripheral vascular conditions across lifespan and in different work settings. It builds on the foundation in cardiopulmonary physical therapy acquired through undergraduate education. This course is designed to provide opportunities, by which the students develop an advanced level of integration of evidence-based practical knowledge and clinical skills in the management of patients with cardiopulmonary and peripheral vascular disorders. The student will acquire advanced skills and clinical practice based on the updated theoretical and academic knowledge in the field of physical therapy for cardiopulmonary and peripheral vascular disorders.

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المملكة العربية السعودية
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عمادة الدراسات العليا

ماجستير العلاج الطبيعي – مسار الجراحة والاورام
Master of Physical Therapy- Surgery and Oncology Track

الخطة الدراسية لبرنامج ماجستير العلاج الطبيعي – مسار الجراحة الأورام Plan of Study for Surgery and Oncology Track

الساعات المعتمدة Credit Hours	رمز المقرر Course Code	اسم المقرر Course Name	المستوى Level
3	1704601	الممارسة القائمة على الأدلة في العلاج الطبيعي Evidence Based Practice in Physical Therapy	الأول Level 1
3	1704602	مقرر متقدم في علم الميكانيكا الحيوية والحركة Advanced Biomechanics and Kinesiology	
3	1704603	التشريح الوظيفي Functional Anatomy	
3	1704604	فسيولوجيا الممارسة السريرية Clinical Exercise Physiology	
4	1704671	تأهيل الحروق وجراحة التجميل Burn and Plastic Surgery Rehabilitation	الثاني Level 2
4	1704672	علاج الجروح Wound Management	
4	1704673	التأهيل للجراحة العامة وجراحة الأورام General and Oncological Surgery Rehabilitation	
3	1704605	منهجية البحث في العلاج الطبيعي Research Methodology in Physical Therapy	الثالث Level 3
2	1704606	الإحصاء الحيوي Biostatistics and Experimental Design	
5	1704674	الممارسة السريرية المتقدمة - جراحة 1 Advanced Clinical Practice (Surgery) I	
5	1704675	الممارسة السريرية المتقدمة - جراحة 2 Advanced Clinical Practice (Surgery) II	الرابع Level 4
5	1704607	مشروع التخرج Research Project	
44		مجموع الساعات Total Credit Hours	

نبذة عن مقررات مسار الجراحة الأورام

Course Overview for Surgery and Oncology Track

	Course Name	Description
Level 1	Evidence-Based Practice in Physical Therapy (1704601)	This course will commence with a critical review of the forms of evidence that underpin professional practice in physical therapy and rehabilitation sciences. The concept of evidence-based practice will be analyzed and its impact on practice evaluated, including an examination of the barriers to using evidence in practice. The course is focused on finding, appraising, and applying evidence into own clinical practice. The course provides students with practical skills in creating clinical question and searching online databases to find research articles. The course is then concentrated on examining different research designs: (1) Randomized Controlled Trails; (2) Prognostic Studies; (3) Diagnostic studies; (4) Systematic Reviews and Meta analyses; (5) Clinical Practice Guidelines; (6) Outcome Measures; (7) Alternative designs. The course finally reiterate the importance of shared decision making and research ethics in the context of evidence-based practice.
	Advanced Biomechanics and Kinesiology(1704602)	This course is designed to provide the students to with sufficient advanced theoretical and academic knowledge in laws of mechanics and kinesiology related to physical therapy applications as well as various aspects of mechanics which affect the human body. Also to enable the student to comprehend and apply this knowledge at various clinical and practical situations, like analysis of normal and pathological posture and gait, discuss the different force systems with anatomical examples from the human body, state Newton's laws and apply them on the human body, identify biomechanics of fracture fixation, applying biomechanics in sports medicine and rehabilitation, fluid mechanics, applying biomechanics in physical education finally to analyze factors affecting joint mechanics.
	Functional Anatomy (1704603)	Physical Therapist postgraduates' students are introduced to organized guided topics to develop advanced skills in the understanding and application of the Functional Anatomy of different human systems in diagnosis and treatment of different pathological conditions. The program endeavors to encourage these students to participate in research and education related to this method and to provide an understanding of the physical deficits encountered by persons with different pathological disorders.
	Clinical Exercise Physiology (1704604)	This course aims to introduce the Physiological concepts of neuromuscular, cardiovascular, respiratory, endocrine and reproductive physiology to the post graduate students as a continuation of their knowledge in the undergraduate and an implementation to other pre-requisite courses in the Master of Science in Physical Therapy.

	Course Name	Description
Level 2	Burn and Plastic Surgery Rehabilitation (1704671)	<p>This course will enable the student to</p> <ul style="list-style-type: none"> - Describe the pathology associated with skin and soft tissue burns. - Examine a patient with burns considering specific factors related to burn injury such as burn etiology, burn depth, and burn size. - Evaluate a patient with burns in preparation for planning interventions. - Understand and perform functional assessment for burn patients. - Use traditional and new tools of assessment for burn patients - Explain interventions for patients with burn injuries, including those directed at wound healing and rehabilitation management. - Describe the consequences of and interventions for scarring after burn injury. - Presented with a clinical case, analyze the clinical findings, propose goals of treatment, and develop a plan of care.
	Wound Management (1704672)	<p>This course will enable the student to</p> <ul style="list-style-type: none"> - Interpret biological sequences of wound healing. - Evaluate different wound dimensions with traditional and new methods of measurement techniques. - Explain management for wound exudation as well as infected necrotic wounds, including those directed at wound healing and rehabilitation management. - Describe the traditional and advanced ways for management of patient with wounds - Determine and apply new trends methods for assessment and treatment of wound. - Discuss the physical therapy role in rehabilitation of different wounds. - Select the appropriate and, the applicable modalities convenient to patients with wounds, taking in account the cause of the injury, according to individual variations in order to achieve the predetermined goals.
	General and Oncological Surgery Rehabilitation (1704673)	<p>This course is designed to advance the students' expertise in the knowledge, examination, evaluation, diagnosis, prognosis, intervention, and management of patients in surgery physical therapy. It is expected that the student will gain an in-depth understanding of the science underlying clinical techniques and evidence based practice. Students are also expected to perform re-examinations, measure patient outcomes, and modify interventions accordingly.</p>

	Course Name	Description
Level 3	Research Methodology in Physical Therapy (1704605)	Research Methodology course will provide an opportunity for post graduate students to establish or advance their understanding of research through critical exploration of research language, ethics, and approaches. The course introduces the language of research, ethical principles and challenges, and the elements of the research process within quantitative, qualitative and mixed method approaches. Research students will use these theoretical underpinnings to begin to critically review literature relevant to their field or interests and determine how research findings are useful in forming their understanding of their work, local and global environment.
	Biostatistics and Experimental Design (1704606)	To provide students with the knowledge and skills about basic biostatistical concepts and applications to be utilized in research projects. The course provides overview of basic theoretical concepts (e.g. sampling error, confidence intervals) and applications of descriptive and inferential statistical analyses for different study designs.
	Advanced Clinical Practice (Surgery) I (1704674)	This course is designed to provide opportunities by which the students develop a level of integration between theoretical knowledge and skills in physical therapy evaluation and treatment of actual patients with Burn and General surgery in out-patient's physical therapy departments as well as in-patient's burn and general surgery department. The student will acquire sufficient skills and experiences in clinical practice based on the theoretical and academic knowledge in the field of physical therapy for the common burn injuries, skin graft , hand injuries , Mastectomy and general surgical conditions that enables the candidate to deal with any patient referred from any of the previous department to apply the basic manual skills and special electrotherapy instruments necessary for evaluation of different problems;

	Course Name	Description
Level 4	Research Project (1704607)	This course provides the principles of scientific methods of research and its application to physical therapy to enable students to develop their skills in selecting and defining research problems for developing criteria for scientific research. Students will critically evaluate selected articles and they will be divided into groups for supervised and directed research project. This course also offers students the opportunity to develop their clinical or practical experience in special areas of interest to physical therapy, design, perform, and present a related research project. The work involved in this course will be supervised and guided by faculty.
	Advanced Clinical Practice (Surgery Health) II (1704675)	This course is designed to provide opportunities by which the students develop a level of integration between theoretical knowledge and skills in physical therapy evaluation and treatment of actual patients with Burn and General surgery in out-patient's physical therapy departments as well as in-patient's burn and general surgery department. The student will acquire sufficient skills and experiences in clinical practice based on the theoretical and academic knowledge in the field of physical therapy for the common burn injuries, skin graft , hand injuries , Mastectomy and general surgical conditions that enables the candidate to deal with any patient referred from any of the previous department to apply the basic manual skills and special electrotherapy instruments necessary for evaluation & treatment of different problems

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ماجستير العلاج الطبيعي – مسار الفسيولوجيا الكهربائية السريرية
Master of Physical Therapy- Clinical Electrophysiology Track

الخطة الدراسية لبرنامج ماجستير العلاج الطبيعي – الفسيولوجيا الكهربائية السريرية
Plan of Study for Clinical Electrophysiology Track

الساعات المعتمدة Credit Hours	رمز المقرر Course Code	اسم المقرر Course Name	المستوى Level
3	1704601	الممارسة القائمة على الأدلة في العلاج الطبيعي Evidence Based Practice in Physical Therapy	الأول Level 1
3	1704602	مقرر متقدم في علم الميكانيكا الحيوية والحركة Advanced Biomechanics and Kinesiology	
3	1704603	التشريح الوظيفي Functional Anatomy	
3	1704604	فسيولوجيا الممارسة السريرية Clinical Exercise Physiology	
4	1704681	التشخيص الكهربائي Electrodiagnosis for Physical Therapists	الثاني Level 2
4	1704682	التقييم الموضوعي في العلاج الطبيعي Objective Evaluation in Physical Therapy	
4	1704683	العلاج الكهربائي الفيزيائي في إعادة التأهيل Electrophysical Agents in Rehabilitation	
3	1704605	منهجية البحث في العلاج الطبيعي Research Methodology in Physical Therapy	الثالث Level 3
2	1704606	الإحصاء الحيوي Biostatistics and Experimental Design	
5	1704684	الممارسة السريرية المتقدمة – فسيولوجيا كهرباء 1 Advanced Clinical Practice (Electrophysiology) I	
5	1704685	الممارسة السريرية المتقدمة فسيولوجيا كهرباء 2 Advanced Clinical Practice (Electrophysiology) II	الرابع Level 4
5	1704607	مشروع التخرج Research Project	
44		مجموع الساعات Total Credit Hours	

نبذة عن مقررات مسار فسيولوجيا الكهربائية السريرية

Course Overview for Clinical Electrophysiology Track

	Course Name	Description
Level 1	Evidence-Based Practice in Physical Therapy (1704601)	This course will commence with a critical review of the forms of evidence that underpin professional practice in physical therapy and rehabilitation sciences. The concept of evidence-based practice will be analyzed and its impact on practice evaluated, including an examination of the barriers to using evidence in practice. The course is focused on finding, appraising, and applying evidence into own clinical practice. The course provides students with practical skills in creating clinical question and searching online databases to find research articles. The course is then concentrated on examining different research designs: (1) Randomized Controlled Trails; (2) Prognostic Studies; (3) Diagnostic studies; (4) Systematic Reviews and Meta analyses; (5) Clinical Practice Guidelines; (6) Outcome Measures; (7) Alternative designs. The course finally reiterate the importance of shared decision making and research ethics in the context of evidence-based practice.
	Advanced Biomechanics and Kinesiology(1704602)	This course is designed to provide the students to with sufficient advanced theoretical and academic knowledge in laws of mechanics and kinesiology related to physical therapy applications as well as various aspects of mechanics which affect the human body. Also to enable the student to comprehend and apply this knowledge at various clinical and practical situations, like analysis of normal and pathological posture and gait, discuss the different force systems with anatomical examples from the human body, state Newton's laws and apply them on the human body, identify biomechanics of fracture fixation, applying biomechanics in sports medicine and rehabilitation, fluid mechanics, applying biomechanics in physical education finally to analyze factors affecting joint mechanics.
	Functional Anatomy (1704603)	Physical Therapist postgraduates' students are introduced to organized guided topics to develop advanced skills in the understanding and application of the Functional Anatomy of different human systems in diagnosis and treatment of different pathological conditions. The program endeavors to encourage these students to participate in research and education related to this method and to provide an understanding of the physical deficits encountered by persons with different pathological disorders.
	Clinical Exercise Physiology (1704604)	This course aims to introduce the Physiological concepts of neuromuscular, cardiovascular, respiratory, endocrine and reproductive physiology to the post graduate students as a continuation of their knowledge in the undergraduate and an implementation to other pre-requisite courses in the Master of Science in Physical Therapy.

	Course Name	Description
Level 2	Electrodiagnosis for Physical Therapists (1704681)	This course introduces the graduate to observe record, analyze, and interpret the bioelectric muscle and nerve potentials, detected by means of surface or needle electrodes, for the purpose of evaluating the integrity of the neuromuscular system. Electrodiagnosis encompass electrodiagnostic testing, which includes clinical needle electromyography, motor and sensory nerve conduction studies, and other evoked potential procedures. The professional education of the physical therapist provides the knowledge base for the independent performance of electrophysiologic examinations and evaluations and includes clinical reasoning, differential diagnosis, and clinical practice experience
	Objective Evaluation in Physical Therapy. (1704682)	This course is designed for the graduate student who wants to acquire an understanding of objective measurement methods and health status measurement to complement and enhance clinical practice and take research roles which involve measurement. The course introduces the graduate to the processes of data acquisition using objective ways of evaluation through instruments which provide quantitative as well as qualitative data. These objective ways evaluate the peripheral and spinal range of joint motion and muscle strength of the upper, lower and spine. In addition, it provides a way to practice innovative techniques used to evaluate the posture for the presence of any postural deformities. It helps the graduate to use a diagnostic ultrasound for the musculoskeletal system evaluation.
	Electrophysical Agents in Rehabilitation (1704683)	This course is designed to provide opportunities, by which the students develop a level of integration of theoretical knowledge of different electrophysical agents and their practical application in the rehabilitation field in order to use these agents and explain their therapeutic purposes with stress on therapeutic advantages, disadvantages, indications, contraindications, precautions and safety rules. The aim of the course is to build up knowledge and skills necessary for the utilization of electrophysical modalities and to be capable of using advanced electronic machinery in conducting different techniques of electrophysical modalities necessary for competent practice and lifelong professional development.

	Course Name	Description
Level 3	Research Methodology in Physical Therapy (1704605)	Research Methodology course will provide an opportunity for post graduate students to establish or advance their understanding of research through critical exploration of research language, ethics, and approaches. The course introduces the language of research, ethical principles and challenges, and the elements of the research process within quantitative, qualitative and mixed method approaches. Research students will use these theoretical underpinnings to begin to critically review literature relevant to their field or interests and determine how research findings are useful in forming their understanding of their work, local and global environment.
	Biostatistics and Experimental Design (1704606)	To provide students with the knowledge and skills about basic biostatistical concepts and applications to be utilized in research projects. The course provides overview of basic theoretical concepts (e.g. sampling error, confidence intervals) and applications of descriptive and inferential statistical analyses for different study designs.
	Advanced Clinical Practice (Clinical Electrophysiology) I (1704684)	These “selected topics in rehabilitation science” course is designed to allow the development of courses that cover the leading edge of thinking about specific topics/issues in rehabilitation science. The specific topics will be developed in response to needs identified by faculty, department or students. This course is designed for graduate student providing selected topics of interest within physical rehabilitation specialty areas. Particular attention is given to topics of importance on evidence-based strategies in physical therapy. The course highlights advance in knowledge in non-pharmacological management of pain and rehabilitation of different specialties in the physical therapy field. It covers assessment, treatment, outcome measurements, and basic understanding of recovery of functions.

	Course Name	Description
Level 4	Research Project (1704607)	This course provides the principles of scientific methods of research and its application to physical therapy to enable students to develop their skills in selecting and defining research problems for developing criteria for scientific research. Students will critically evaluate selected articles and they will be divided into groups for supervised and directed research project. This course also offers students the opportunity to develop their clinical or practical experience in special areas of interest to physical therapy, design, perform, and present a related research project. The work involved in this course will be supervised and guided by faculty.
	Advanced Clinical Practice (Clinical Electrophysiology) II (1704685)	These “selected topics in rehabilitation science” course is designed to allow the development of courses that cover the leading edge of thinking about specific topics/issues in rehabilitation science. The specific topics will be developed in response to needs identified by faculty, department or students. This course is designed for graduate student providing selected topics of interest within physical rehabilitation specialty areas. Particular attention is given to topics of importance on evidence-based strategies in physical therapy. The course highlights advance in knowledge in non-pharmacological management of pain and rehabilitation of different specialties in the physical therapy field. It covers assessment, treatment, outcome measurements, and basic understanding of recovery of functions.