



كلية العلاج الطبيعي

قسم العلوم الأساسية



BASIC SCIENCE DEPARTMENT

“BASIC SCIENCE COURSES TIME
TABLE 2021 - 2022”

2nd semester 2021-2022

(Electrotherapy², Therapeutic exercises¹, manual therapy,
Tests and Measurements 2, Ex. Physiology, Research, SW.)
With my best wishes,

Vice Dean and head of the department

Prof Dr. Mahmoud Ewidea

Kafer elshyk
university

Faculty of
physical therapy

Basic science
department

Department staff
Prof Dr. Mahmoud
M. Ewidea
Vice Dean faculty
of physical
therapy

Dr. Yasmeen
Mahmoud
lecture of physical
therapy

Department staff
Dr. Mohamed Abd Elaziz.
Dr Mai ezat,
Dr omnia M.

تعليمات هامة للسادة أعضاء الهيئة المعاونة للعام الدراسي (2021 – 2202)

1. يراعي اخذ غياب الطلبة في العشر دقائق الاولى من كل محاضرة عملية و ما بعد ذلك يعتبر تأخير مع مراعاة كتابه ذلك في دفتر أسماء الطلبة و ليس ورق خارجي مع تقديم تقرير كتابي عن الطلبة التي يتجاوز غيابها ثلاثة سكاشن مع اعتبار مرتين تأخير غياب.
2. تقدم نسخة دوريه من نتائج الاختبارات الشهرية للطلبة لاستاذ المادة في موعد أقصاه ميعاد المحاضره النظرية التالية.
3. تصور نسخة من نتائج الاختبارات الشهرية وتعلق في السكاشن أو توزع اليكترونيا بعد عرضها علي أستاذ المادة وموافقته.
4. يتم حصر الطلبة التي حصلت علي اقل من نصف الدرجة في الاختبارات الشهرية ويتم ترتيب ميعاد عاجل مع استاذ المادة لبحث الاسباب التي ادت الي ذلك.
5. يتم تكريم الطلبة الحاصلين علي الدرجات النهائية في المحاضرة النظرية التالية.
6. في حالة اخلال أي طالب أو طالبة بالسلوك العام داخل المحاضرة العملية, يتم كتابة مذكرة ورفعها للسيد رئيس القسم فورا وعرض الطالب عليه.
7. يتم عقد ورشه عمل للهيئة المعاونة مع أ.د. محمود عويضة يوم الاحد الأول من كل شهر في تمام الساعه العاشره صباحا أو طبقا لوقت الفراغ بجدول الكلية المعلن رسميا.

أ.د/ محمود محمد عويضة

وكيل كلية العلاج الطبيعي لشئون خدمة المجتمع وتنمية البيئة والمشرف
علي قسم العلوم الأساسية



**Kafer elshyk
university**

**Faculty of
physical therapy**

**Basic science
department**

Department staff
Dr. Yasmeen Mahmoud.

Mai ezat,
Mohamed Abd Elaziz.
Omnia M.

**FACULTY OF
PHYSICAL THERAPY**

Elgaesh street

Kaferelshiek

Therapeutic Exercise 1 (Time Table)

2021- 2022

Prof Dr. Mahmoud Ewidea.

Serial No.	Topic	No. of hours/Week		
		Theoretical	LAB	Total
1 st	Introduction To Therapeutic Exercises	2	2	4
2 nd	Positions For Starting Exercises	2	2	4
3 rd	Passive Range of Motion Exercises (quiz 1)	2	2	4
4 th	Active Range of Motion Exercises	2	2	4
5 th	Stretching	2	2	4
6 th	Joint Mobilization upper limb (quiz 2)	2	2	4
7 th	Joint Mobilization lower limb	2	2	4
8 th	Neural Mobilization	2	2	4
9 th	Neural Mobilization (Quiz 3)	2	2	4
10,11 th	Revision	2	2	4
12,13,14	Case study	2	2	4

Electrotherapy Time Table

(2nd year 2nd semester)

Course Title: Electrotherapy (2) **Theoretical and practical**

Prof Dr. Mahmoud Ewidea

Serial No.	Topic	No. of hours/Week		
		Theoretical	LAB	Total
1 st	Foundations of Electrical Stimulation	2	2	4
2 nd	Foundations of Electrical Stimulation	2	2	4
3 rd	Physiologic Response To Electrical Currents	2	2	4
4 th	Physiologic Response To Electrical Currents (Quiz 1)	2	2	4
5 th	Faradic - DD	2	2	4
6 th	HVPS	2	2	4
7 th	TENS-MENS (Quiz 2)	2	2	4
8 th	Interferential current	2	2	4
9 th	Russian current	2	2	4
10 th	Stimulation of denervated muscle	2	2	4
11 th	Stimulation of denervated muscle (quiz 3)	2	2	4
12 th	Physical Agents for Transdermal Drug	2	2	4
13 th	Decision Making In Electrotherapy (case study training)	2	2	4

1. Basic Information: Dr. Yasmeeen Mahmoud.		
Code No.: 130119	Course Title: Exercise Physiology	Academic Level: 2nd Year S2 (spring semester)
Teaching Hours: Lecture: 2 H/W LAB: - H/W Total: 2H/W		Specialization: Bachelor of Physical Therapy

Serial No.	Topic	No. of hours/Week		
		Theoretical	LAB	Total
1 st	Introduction to exercise physiology Definition- scope and importance	2	-	2
2 nd	Energy for exercise - O ₂ independent systems	2	-	2
3 rd	Energy for exercise – O ₂ dependent systems	2	-	2
4 th	Fuel at rest and during different types of exercise intensities	2	-	2
5 th	Effect of exercise on cardiovascular system (CVS)	2	-	2
6 th	Effect of exercise on cardiovascular system (CVS)	2	-	2
7 th	Effect of exercise on respiratory system	2	-	2
8 th	Mid term exam	2	-	2
9 th	Cardio-respiratory endurance	2	-	2

10 th	Effect of exercise on musculoskeletal system	2	-	2
11 th	Effect of exercise on musculoskeletal system	2	-	2
12 th	Effect of exercise on endocrine system	2	-	2
13 th	Environmental factors affecting exercise	2	-	2
14 th	Completion of unfinished materials and revision Student presentation	2	-	2
15 th	Student presentation	2	-	2

Manual Therapy Time Table

(2nd year 2nd semester) 2021 - 2022

Course Title: Manual Therapy **Theoretical and practical**

Prof Dr. Mahmoud Ewida

Serial No.	Topic	No. of hours/Week		
		Theoretical	LAB	Total
1 st	Skin and fascia	1	2	3
2 nd	Myofascial release	1	2	3
3 rd	kinisiotapping	1	2	3
4 th	<i>Soft Tissue Mobilization (quiz 1)</i>	1	2	3
5 th	<i>Medical massage</i>	1	2	3
6 th	<i>Manual lymph drainage (quiz 2)</i>	1	2	3
7 th	<i>Acupressure.</i>	1	2	3
8 th	<i>Reflexology.</i>	1	2	3
9 th	<i>Aromatherapy. (Quiz 3)</i>	1	2	3
10 th	<i>Case study</i>	1	2	3
11 th	<i>Case study</i>	1	2	3
12 th , 13 th	Revision, Proplem solving	1	2	3

1. Basic Information: Dr. Yasmeen Mahmoud		
Code No.: 130121	Course Title: Test and measurement 2	Academic Level: 2nd year S2 (spring semester)
Teaching Hours: Lecture: 2H/W Applied: 1H/W Total: 3 H/W		Specialization: Bachelor of Physical Therapy

Serial No.	Topic	No. of . hours/Week		
		Theoretical	LAB	Total
1 st	Lower limb muscle testing protocol . hip flexors – extensors – abductors – adductors .	2	2	4
2 nd	Hip ext. rotators – int. rotators – tensor fascialata – Sartorius	2	2	4
3 rd	Knee flex. – extension. – ankle plantar flexion.- dorsi flexion quiz 1	2	2	4
4 th	Ankle invertors- evertors and foot	2	2	4
5 th	HIP TILTING AND TRUNK	2	2	4
6 th	Trunk muscle	2	2	4
7 th	Facial muscle testing quiz 2	2	2	4
8 th	Anthropometric measurements	2	2	4
9 th	Balance assessment	2	2	4
10 th	Electrodiagnosis 1 quiz 3	2	2	4
11 th	Electrodiagnosis II	2	2	4
12 th	Postural assessment	2	2	4

1. Basic Information: Prof Dr. Mahmoud Ewida		
Code No.: 130133	Course Title: research and Scientific Writing	Academic Level: 5 th year S2
Teaching Hours: Lecture: 1H/W Total: 1 H/W		Specialization: Bachelor of Physical Therapy

Week	Topics
1 st week	Introduction to research • From research to writing • More reading and better writing
2 nd week	
3 rd week	Scientific writing • Definition • Why Scientific writing • Types of scientific writing: 1)Scientific Articles 2)brief or technical report 3) case report 4)Theses 5)Proposals 6)Presentation
4 th week	
5 th week	
6 th week	
7 th week	Guidelines for Writing a Scientific article • Standard structure of the scientific article (IMRAD) • Format, Content, and Style of a Scientific Paper • Citation of references • Appendix
8 th week	

9 th week	
10 th week	Visual support for the spoken word Oral presentation
11 th week	
12 th week	Writing ethics <ul style="list-style-type: none"> • Authorship • plagiarism • duplicate publication • protection of human and animal subjects • conflict of interest

SEMESTER CALENDAR

▲ **Electrotherapy 2**

♠ **Manual Therapy**

♣ **Exercise Physiology**

♥ **Test and Measurements 2**

♦ **Therapeutic Exercise 1**

March	1 st	11	12	13	14	15	
			♥ (8-10 a.m.) Lower limb muscle testing protocol . hip flexors – extensors – abductors – adductor ♠ (10-11 p.m.) Skin and fascia ♣ (11-1p.m.) Introduction to exercise physiology Definition- scope and importance	♥ (8-12 a.m.) * practical section ♦ (12- 4 p.m.) * practical section	▲ (12-4 p.m.) * practical section ♣ (12 -4 a.m.) * practical section	♦(8-10a.m.) Introduction To Therapeutic Exercises ▲(10-12p.m.) Foundations of Electrical Stimulation	♠ (8 - practi ♣ (8 - practi ♠ (12 practi ♣ (12 practi
		18	19	20	21	22	
	2 nd		♥ (8-10 a.m.) Hip ext. rotators – int. rotators – tensor fascialata – Sartorius ♠ (10-11 p.m.) Myofascial release ♣ (11-1p.m.) Energy for exercise - O2 independent systems	♥ (8-12 a.m.) * practical section ♦ (12- 4 p.m.) * practical section	▲ (12-4 p.m.) * practical section ♣ (12 -4 a.m.) * practical section	♦(8-10a.m.) Positions For Starting Exercises ▲(10-12p.m.) Foundations of Electrical Stimulation	♠ (8 - practi ♣ (8 - practi ♠ (12 practi ♣ (12 practi

	3 rd	25	26	27	28	1	
			♥ (8-10 a.m.) Knee flex. – extens. – ankle plantar flexion.- dorsi flexion quiz 1 ♠ (10-11 p.m.) kinsiotapping ♣ (11-1p.m.) Energy for exercise – O2 dependent systems	♥ (8-12 a.m.) * practical section ♦ (12- 4 p.m.) * practical section	▲ (12-4 p.m.) * practical section ♣ (12 -4 a.m.) * practical section	♦ (8-10a.m.) Passive Range of Motion Exercises (quiz 1) ▲ (10-12p.m.) Physiologic Response To Electrical Currents	♠ (8 - practi ♣ (8 - practi ♠ (12 practi ♣ (12 practi
April	4 th	4	5	6	7	8	
			♥ (8-10 a.m.) Ankle invertors- evertors and foot ♠ (10-11 p.m.) Soft Tissue Mobilization (quiz 1) ♣ (11-1p.m.) Fuel at rest and during different types of exercise intensities	♥ (8-12 a.m.) * practical section ♦ (12- 4 p.m.) * practical section	▲ (12-4 p.m.) * practical section ♣ (12 -4 a.m.) * practical section	♦ (8-10a.m.) Revision + selection of 20 students for oral quiz ▲ (10-12p.m.) Physiologic Response To Electrical Currents (Quiz 1)	♠ (8 - practi ♣ (8 - practi ♠ (12 practi ♣ (12 practi
	5 th	11	12	13	14	15	
			♥ (8-10 a.m.) Hip tilting and trunk	♥ (8-12 a.m.) * practical section	▲ (12-4 p.m.) * practical section	♦ (8-10a.m.) Active Range of Motion	♠ (8 - practi

			<p>♠ (10-11 p.m.) Medical massage</p> <p>♣ (11-1p.m.) Effect of exercise on cardiovascular system (CVS)</p>	<p>♦ (12- 4 p.m.) * practical section</p>	<p>♣ (12 -4 a.m.) * practical section</p>	<p>Exercises (assisted and free) ▲ (10-12p.m.) Faradic - DD</p>	<p>♣ (8 - practi</p> <p>♠ (12 practi</p> <p>♣ (12 practi</p>
	6 th	18	19	20	21	22	
			<p>♥ (8-10 a.m.) Trunk muscle</p> <p>♠ (10-11 p.m.) Manual lymph drainage (quiz 2)</p> <p>♣ (11-1p.m.) Effect of exercise on cardiovascular system (CVS)</p>	<p>♥ (8-12 a.m.) * practical section</p> <p>♦ (12- 4 p.m.) * practical section</p>	<p>▲ (12-4 p.m.) * practical section</p> <p>♣ (12 -4 a.m.) * practical section</p>	<p>♦ (8-10a.m.) Active resisted ex, types and importance of different active ex protocols ▲ (10-12p.m.) HVPS</p>	<p>♠ (8 - practi</p> <p>♣ (8 - practi</p> <p>♠ (12 practi</p> <p>♣ (12 practi</p>
	7 th	25	26	27	28	29	
			<p>♥ (8-10 a.m.) Facial muscle testing quiz 2</p> <p>♠ (10-11 p.m.) Acupressure</p> <p>♣ (11-1p.m.) Effect of exercise on respiratory system</p>	<p>♥ (8-12 a.m.) * practical section</p> <p>♦ (12- 4 p.m.) * practical section</p>	<p>▲ (12-4 p.m.) * practical section</p> <p>♣ (12 -4 a.m.) * practical section</p>	<p>♦ (8-10a.m.) Stretching L.L ▲ (10-12p.m.) TENS-MENS (Quiz 2)</p>	<p>♠ (8 - practi</p> <p>♣ (8 - practi</p> <p>♠ (12 practi</p> <p>♣ (12 practi</p>
may	8 th	1	2	3	4	5	

			♥ (8-10 a.m.) Anthropometric measurements ♠ (10-11 p.m.) Reflexology. ♣ (11-1p.m.) Mid term exam	♥ (8-12 a.m.) * practical section ♦ (12- 4 p.m.) * practical section	▲ (12-4 p.m.) * practical section ♣ (12 -4 a.m.) * practical section	♦(8-10a.m.) Stretching U.L. ▲(10-12p.m.) Interferential current	♠ (8 - practi ♣ (8 - practi ♠ (12 practi ♣ (12 practi
9 th	8	9	♥ (8-10 a.m.) Balance assessment ♠ (10-11 p.m.) Aromatherapy. (Quiz 3) ♣ (11-1p.m.) Cardio-respiratory endurance	♥ (8-12 a.m.) * practical section ♦ (12- 4 p.m.) * practical section	▲ (12-4 p.m.) * practical section ♣ (12 -4 a.m.) * practical section	♦(8-10a.m.) Joint Mobilization upper limb ▲(10-12p.m.) Russian current	♠ (8 - practi ♣ (8 - practi ♠ (12 practi ♣ (12 practi
10 th	15	16	♥ (8-10 a.m.) Electrodiagnosis 1 quiz 3 ♠ (10-11 p.m.) Case study ♣ (11-1p.m.) Effect of exercise on musculoskeletal system	♥ (8-12 a.m.) * practical section ♦ (12- 4 p.m.) * practical section	▲ (12-4 p.m.) * practical section ♣ (12 -4 a.m.) * practical section	♦(8-10a.m.) Joint Mobilization lower limb ▲(10-12p.m.) Stimulation of denervated muscle	♠ (8 - practi ♣ (8 - practi ♠ (12 practi ♣ (12 practi
11 th	22	23		24	25	26	

			♥ (8-10 a.m.) Electrodiagnosis II ♠ (10-11 p.m.) Case study ♣ (11-1p.m.) Effect of exercise on musculoskeletal system	♥ (8-12 a.m.) * practical section ♦ (12- 4 p.m.) * practical section	▲ (12-4 p.m.) * practical section ♣ (12 -4 a.m.) * practical section	♦ (8-10a.m.) Neural Mobilization ▲ (10-12p.m.) Stimulation of denervated muscle (quiz 3)	♠ (8 - practi ♣ (8 - practi ♠ (12 practi ♣ (12 practi
May	12 th	29	30	1	2	3	♠ (8 - practi ♣ (8 - practi ♠ (12 practi ♣ (12 practi
	13 th	5	6	7	8	9	♠ (8 - practi ♣ (8 - practi ♠ (12 practi ♣ (12 practi

						(case study training)	
14 th	12	13 ♣ (11-1p.m.) Completion of unfinished materials and revision	14	15	16		
15 th	19	20 ♣ (11-1p.m.) Student presentation	21	22	23		

Practical lab schedule:

- ▲ Electrotherapy 2
- ♠ Manual Therapy
- ♣ Exercise Physiology
- ♥ Test and Measurements 2
- ▲ Therapeutic Exercise 1

Week	▲ Electrotherapy 2	♠ Manual Therapy	♣ Exercise Physiology	♥ Test and Measurements 2	♦ Therapeutic Exercise 1
Time	Tuesday (12-4 p.m.)	Thursday (8-10a.m., 12-2p.m.)	Tuesday (12-4p.m.) Thursday (8-10a.m., 12-2p.m.)	Monday (8-12 a.m.)	Monday (12-4 a.m.)
1 st	Foundations of Electrical Stimulation	Skin and fascia	Introduction to exercise physiology Definition-scope and importance	Revision on basics of muscle test	Introduction to motion axes and planes, movements occur in different axes and planes, fundamental positions

2 nd	Foundations of Electrical Stimulation	Myofascial release	Energy for exercise - O ₂ independent systems	Hip (muscles and movements)	Fundamental and derived positions (student couples)
3 rd	Physiologic Response To Electrical Currents	Kinesiotaping	Energy for exercise – O ₂ dependent systems	Hip (muscles and movements)	Practical part of passive range of motion for upper limb
4 th	Physiologic Response To Electrical Currents	Soft Tissue Mobilization	Fuel at rest and during different types of exercise intensities	Hip (muscles and movements)	Practical part of passive range of motion for lower limb
5 th	Faradic - DD	Medical massage	Effect of exercise on cardiovascular system (CVS)	Hip (muscles and movements)	Active assisted and free ex., types and names of devices used in assisted ROM, practical application either in section or outpatient clinic
6 th	HVPS	Manual lymph drainage	Effect of exercise on cardiovascular system (CVS)	Knee (muscles and movements)	Practical part of resisted ex (student couples)+ case study
7 th	TENS-MENS	Acupressure.	Effect of exercise on respiratory system	Knee (muscles and movements)	Stretching for upper limb+ self-stretch for upper limb.(student couple)
8 th	Interferential current	Reflexology.	Midterm exam	Knee (muscles and movements)	Stretching for lower limb+ self-stretch for lower

					limp.(student couple)
9 th	Russian current	Aromatherapy.	Cardio-respiratory endurance	Knee (muscles and movements)	Practical application of Joint Mobilization upper limb
10 th	Stimulation of denervated muscle	Case study	Effect of exercise on musculoskeletal system	Ankle (muscles and movements)	Practical application of Joint Mobilization lower limb
11 th	Stimulation of denervated muscle	Case study	Effect of exercise on musculoskeletal system	Ankle (muscles and movements)	Techniques for neural mobilizations U.L
12 th	Physical Agents for Transdermal Drug	Revision, Problem solving	Effect of exercise on endocrine system	Ankle (muscles and movements)	Techniques for neural mobilizations L.L
13 th	Decision Making in Electrotherapy (case study training)	Revision, Problem solving	Environmental factors affecting exercise	Ankle (muscles and movements)	Revision + case study

Quiz schedule:

- ▲ Electrotherapy 2
- ♠ Manual Therapy
- ♣ Exercise Physiology
- ♥ Test and Measurements 2
- ▲ Therapeutic Exercise 1

Week	▲ Electrotherapy 2	♠ Manual Therapy	♣ Exercise Physiology	♥ Test and Measurements 2	♦ Therapeutic Exercise 1
Quiz 1 date	4 th week	4 th	4 th	3 rd	3 rd
Topics included	Foundations of Electrical Stimulation Physiologic Response To Electrical Currents	Skin and fascia Myofascial release kinesiotaping Soft Tissue Mobilization	Introduction to exercise physiology Definition-scope and importance Energy for exercise - O ₂ independent systems Energy for exercise – O ₂ dependent systems	Lower limb muscle testing protocol. hip flexors – extensors – abductors – adductors. Hip ext. rotators – int. rotators – tensor fascialata – Sartorius Knee flex. – extens. – ankle plantar flexion.- dorsi flexion	Introduction to Therapeutic Exercises Positions for Starting Exercises Passive Range of Motion Exercises
Quiz 2 date	7 th	6 th	8 th	7 th	8 th
Topics included	Foundations of Electrical Stimulation Physiologic Response to Electrical Currents Faradic - DD HVPS TENS-MENS	Skin and fascia Myofascial release kinesiotaping Soft Tissue Mobilization Medical massage Manual lymph drainage	Introduction to exercise physiology Definition-scope and importance Energy for exercise - O ₂ independent systems Energy for exercise – O ₂ dependent systems	Lower limb muscle testing protocol. hip flexors – extensors – abductors – adductors. Hip ext. rotators – int. rotators – tensor fascialata – Sartorius	Introduction to Therapeutic Exercises Positions for Starting Exercises Passive Range of Motion Exercises Active Range of Motion

			Fuel at rest and during different types of exercise intensities Effect of exercise on cardiovascular system (CVS) Effect of exercise on cardiovascular system (CVS) Effect of exercise on respiratory system	Knee flex. – extens. – ankle plantar flexion. - dorsi flexion Ankle invertors-evertors and foot Hip tilting and trunk Trunk muscle Facial muscle testing	Exercises (assisted and free) Active resisted ex, types and importance of different active ex protocols Stretching L.L
Quiz 3 date	11 th	9 th	13 th	10 th	12 th
Topics included	Foundations of Electrical Stimulation Physiologic Response to Electrical Currents Faradic - DD HVPS TENS-MENS Interferential current Russian current Stimulation of denervated muscle	Skin and fascia Myofascial release kinesiotapping Soft Tissue Mobilization Medical massage Manual lymph drainage Acupressure Reflexology. Aromatherapy	Introduction to exercise physiology Definition-scope and importance Energy for exercise - O2 independent systems Energy for exercise – O2 dependent systems Fuel at rest and during different types of exercise intensities Effect of exercise on cardiovascular system (CVS) Effect of exercise on	Lower limb muscle testing protocol. hip flexors – extensors – abductors – adductors. Hip ext. rotators – int. rotators – tensor fascialata – Sartorius Knee flex. – extens. – ankle plantar flexion. - dorsi flexion Ankle invertors-evertors and foot Hip tilting and trunk Trunk muscle	Introduction to Therapeutic Exercises Positions for Starting Exercises Passive Range of Motion Exercises Active Range of Motion Exercises (assisted and free) Active resisted ex, types and importance of different active ex protocols Stretching L.L

			cardiovascular system (CVS) Effect of exercise on respiratory system Cardio-respiratory endurance Effect of exercise on musculoskeletal system Effect of exercise on musculoskeletal system Effect of exercise on endocrine system Environmental factors affecting exercise	Facial muscle testing	Stretching U.L Joint Mobilization upper limb Joint Mobilization lower limb Neural Mobilization
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