

## **FACULTY OF HEALTH SCIENCES**

### **DEPARTMENT OF PHYSIOTHERAPY AND REHABILITATION**

#### **QUALIFICATION AWARDED**

Upon successful completion of this program, students are awarded with the qualification of bachelor's degree in Physiotherapy and Rehabilitation.

#### **LEVEL OF QUALIFICATION**

This program offers education at the undergraduate level.

#### **SPECIFIC ADMISSION REQUIREMENTS**

Admission of the national students to the Physical therapy and rehabilitation program is conditioned by the success on the nationally centralized Student Selection Examination (ÖSYS) conducted by the Student Selection and Placement Centre (OSYM)- process regulated by the Higher Education Council (YOK ).

Students who are enrolled in a higher education institution in accordance with the provisions of the relevant legislation, maintain their right to continue their education at the same level in case they opt for an horizontal transfer to another degree program within the same or a different higher education institution.

The above regulation does not apply for the students enrolled in the pre-university preparatory education, the students enrolled in the first and fourth semester of their vocation programme education as well as the students enrolled in the first and fourth semester of their bachelor`s degree programme.

The graduate students of an associate programme willing to continue their bachelor`s studies must enter and obtain enough points from the yearly vertical transfer exam (DGS) administered by the Student Selection and Placement Centre (OSYM)- process regulated by the Higher Education Council (YOK ). The students fulfilling the above conditions, will be placed by to the Student Selection and Placement Centre (OSYM) to the bachelor programs available, according to their DGS exam results and the order of their choices.

The acceptance of the exchange students is conditioned by the existence of signed bilateral agreements within the framework of the Erasmus Programme, between Yeni Yüzyıl University and its partner universities.

## **QUALIFICATION REQUIREMENTS AND REGULATIONS**

The Qualification of Physical therapy and rehabilitation bachelor`s programme is obtained upon graduation from the programme Physical therapy and rehabilitation, which requires;

- Completion with passing grades of all the courses designated within the curriculum of the programme, including the work placements and the graduation project having a total of 240 ECTS Credits, and
- Achievement of a cumulative grade point average (CGPA) of at least 2.00 out of 4.00.

## **RECOGNITION OF PREVIOUS EDUCATION**

Students who went to another university before enrolling via OSYM at Yeni Yüzyıl University and passed some of the courses therein can be exempt from the same courses at Yeni Yüzyıl University provided that the content of the courses taken previously is appropriate to the content of the course delivered at Yeni Yüzyıl University. Decision for the course exemption is taken by the Faculty of Health Sciences committee.

## **DEFINITION OF PROGRAMME**

The aim of the physiotherapy and rehabilitation department bachelor's program is to: Physiotherapy and Rehabilitation Department will provide future physiotherapists with the knowledge and skills to come to the position of providing quality health care service in the developing health system. To prepare graduates as entrepreneurs, experts and researchers / academicians in the private and public sectors in the field of health; physiotherapy centers, special education centers, sports clubs and other private sector organizations, as well as to provide information and skills to work in public institutions.

## **PROGRAM OUTCOMES**

- Having basic knowledge in physiotherapy and rehabilitation and knowing solving problem in the field, having an analytical and holistic point of view and making strategic thinking a principle.
- To know and apply quality, ethics and performance principles in business life
- To have access to scientific knowledge in the field of physiotherapy and rehabilitation, to follow current literature, to evaluate and apply them
- To learn and apply laws, regulations, legislation and professional codes of ethics regarding duties, rights and responsibilities as individuals
- To acquire and successfully implement leadership and teamwork qualifications

- Act in accordance with quality management and processes and participate in these processes
- Taking responsibility for the work as a team member in cooperation with other occupational groups working on this field by carrying out a study independently using the knowledge gained in the field of physiotherapy and rehabilitation
- Taking responsibility as individual and team members, being open-minded, open to criticism, having constructive and self-confidence, working effectively and productively
- Know the sources of information well and follow the sources in the field
- To think creatively and innovative, to apply learned knowledge not only to similar situations but also to new and unfamiliar environments.

### Total Course-Programme LOs Relationship

	YYU Department of Physiotherapy and Rehabilitation. Programme Outcomes*									
	PC1	PC2	PC3	PC4	PC5	PC6	PC7	PC8	PC9	PC10
<b>TYYÇ Department of Physiotherapy and Rehabilitation.</b> Basic Areas of Competence										
<b>INFORMATION</b>										
1) Offers and supports advanced theoretical and practical knowledge, basic and current information in the field of health, related textbooks, application tools and multimedia training tools and other resources.	√		√						√	√
2) Is familiar with the nature of the sources, limits, accuracy, reliability, and validity of the evaluation.	√	√	√							
3) Has access to scientific knowledge in the health field, the current literature, monitors, evaluates and is able to apply gained knowledge	√		√							
4) Has the knowledge related to the field of study, to the teaching strategies, assessment and evaluation methods and techniques	√									
5) Has information about students' development, learning characteristics and challenges	√								√	
6) Uses and understands the interaction between the field of study of health and the associated disciplines with it.	√					√		√		
<b>SKILLS</b>										
1) The graduate of the health care management programme has acquired advanced knowledge and skills and uses them TO scientifically prove, interpret data and evaluate, identify problems, analyze, research and apply professional and ethical values, develop solutions, shares information and can be a good team member.	√		√							
2) Uses to research the information technologies related to the Physiotherapy and Rehabilitation.	√									

3) Uses the acquired advanced theoretical and practical knowledge related to the Physiotherapy and Rehabilitation for himself/herself, for family and the community.						√	√			
4) Can provide solutions to problems in accordance with the scientific data / evidence specific to the area of Physiotherapy and Rehabilitation.	√	√						√		√
5) Develops materials to suit the requirements of students In the field of Physiotherapy and Rehabilitation.	√									
6) The student is able to evaluate his/her acquisition by using different methods.	√									
<b>COMPETENCIES</b>										
<b>Working independently and taking the responsibility</b>										
1) Has knowledge about healthcare management and use it independently to carry out research and takes the responsibility of being a team member when it comes to using their knowledge in collaboration with other professional groups working in the field.						√			√	
2) Takes the responsibility of solving the complex and unpredictable situations encountered in the field of health practices as individual or as a team member.				√		√	√			
3) Assumes responsibility over his employees in terms of project development, plans, manages and evaluates the process' follow up.				√		√	√			
4) Produces practical research results for his/her area of responsibility.			√							
<b>Learning Competencies</b>										
1) Uses critical evaluation with regard to the advanced knowledge and skills acquired in the field of health care management.	√	√	√							
2) Sets the learning objectives and proves that he/she reached them	√	√	√							
3) Determines the most efficient and fast access to learning resources.	√	√	√							
4) Adopts the lifelong learning behavior and is constantly seeking ways to self-improvement.	√		√							
5) Decides upon ways to access information and how to apply it.										
<b>Communication and Social Competences</b>										
1) In matters of health care: issues and shares information with the people/institutions concerned; is able to express fluently his ideas and proposals both verbally and in writing; is able to listen the expectations and wishes of the concerned people/institutions.			√							
2) Is able to provide suggestions backed up by qualitative and quantitative data to solve the problems of experts and non-experts both as a team member and as individual in matters of health care management							√			
3) Gets involved in social responsibility projects in collaboration with other professional groups and organizes activities to implement them.		√				√				
4) When facing issues, is able to inform the relevant people and institutions.							√			
5) Is able to provide suggestions backed up by qualitative and quantitative data to solve the problems of experts and non-experts.								√		√

6) Is globally aware of the latest news and information related to the field of health care management and is able to monitor and analyze the information										√	
7) Communicate effectively orally and in writing				√						√	
<b>Field-Specific Competences</b>											
1) Is an example in matters of external appearance, attitude, demeanor and behavior in society					√			√			
1) Is an example in matters of external appearance, attitude, demeanor and behavior in society			√						√		
2) Acts accordingly to the human rights, to social, scientific and professional ethics.		√					√	√			√
3) Acts in accordance with quality management and process.			√								
4) Possesses knowledge and acts according to the environmental protection and occupational safety issues.		√	√	√					√		
5) Respects and behaves according to the rules and regulations of his/her environment performing his/her responsibilities.											

## Course & Program Outcomes Matrix

ISTANBUL YENİ YÜZYIL UNIVERSITY FACULTY OF HEALTH SCIENCES  
DEPARTMENT OF PHYSIOTHERAPY AND REHABILITATION BACHELOR'S PROGRAMME  
2017-2018 ACADEMIC YEAR

### Programme Competencies

I. Year					1	2	3	4	5	6	7	8	9	10
<b>FALL SEMESTER</b>														
CODE	COURSE	T	U	AKTS										
PHYS 101	Pyhsics I	2	0	3	—	3	—	—	—	—	—	—	—	—
PTR 107	Introduction to Physiotherapy and Rehabilitation	2	0	2	—	—	—	—	—	—	—	—	5	—
HSF 113	Anatomy I	3	2	5	5	—	—	—	—	—	—	—	—	—
HSF 117	Physiology I	3	2	5	5	—	—	—	—	—	—	—	—	—
ENG 151	English I	3	0	3	—	—	—	—	—	—	—	—	5	—
ATA 151	Ataturk Principles and Revolutions I	2	0	2	—	—	—	—	—	—	—	—	—	—
TL 151	Turkish Language I	2	0	2										
<b>Elective Lessons</b>														
PTR 105	Medical Terminology	2	0	2	5	—	—	—	—	—	—	—	—	—
HSF 171	Biochemistry	2	0	3	—	—	—	—	—	—	—	—	5	—
FTR157	Project I	1	1	2	—	—	—	—	—	—	—	—	—	—
SBF165	Extracurricular Optional-University Culture I	1	1	2	—	—	—	—	—	—	—	—	5	—
CA 150	Computer Applications	1	2	2	—	—	—	—	—	—	—	—	—	—
<b>SPRING SEMESTER</b>														
CODE	COURSE	T	U	AKTS										
PHYS 102	Pyhsics II	2	0	3										
HSF 164	Preventive Medicine and Hygiene	2	0	2	—	3	—	—	—	—	—	—	—	—
HSF 120	Anatomy II	3	2	5	—	—	—	—	—	—	—	—	5	—

HSF 118	Physiology	3	2	5	5	—	—	—	—	—	—	—	—	—
ENG 152	English II	3	0	3	5	—	—	—	—	—	—	—	—	—
ATA152	Ataturk Principles and Revolutions II	2	0	2	—	—	—	—	—	—	—	—	5	—
TL 152	Turkish Language II	2	0	2	—	—	—	—	—	—	—	—	—	—
<b>Elective Lessons</b>														
HSF 112	Psychology in Health	2	0	3	—	—	—	—	—	—	—	—	5	5
PTR 162	Biostatistics	2	0	3	—	—	—	—	—	—	—	—	5	—
PTR 158	Project II	1	1	2	—	—	4	—	—	—	—	—	—	—
HSF 160	Extracurricular Optional-University Culture II	1	1	2	—	—	—	—	—	—	—	—	—	—
HSF 158	Extracurricular Optional- Physical Education and Sports	1	1	2	—	—	—	—	—	—	—	—	5	—
<b>II. YEAR</b>														

**FALL SEMESTER**

CODE	COURSE	T	U	AKTS										
PTR 201	Electro Physical Diagnosis and Treatment Methods I	1	2	4	5	—	—	—	—	—	—	—	—	—
PTR 203	Clinical Orthopedic	2	0	3	—	—	4	—	—	—	—	—	—	—
PTR 205	Neuroanatomy	2	0	3	—	—	—	—	—	—	—	—	5	—
PTR 209	Evaluation and Analysis in Physiotherapy and Rehabilitation I	1	2	4	—	—	—	—	5	—	5	—	—	—
PTR 225	Exercise Physiology	2	1	3	—	—	—	—	5	—	5	—	—	—
PTR 227	Kinesiology-Biomechanics	2	1	3	—	—	—	4	—	—	—	—	—	—
<b>Elective Lessons</b>														
PTR 261	Normal Development and Healthy Living	2	0	2	—	—	—	—	—	—	—	—	5	5
HSF 271	Histology	2	0	2	—	—	—	—	—	—	—	—	5	5
HSF 281	Microbiology	2	0	2	—	—	4	—	—	—	—	—	—	—
NUT 251	Introduction to Nutrition	2	0	2	—	—	4	—	—	—	—	—	—	—
YOG100	Yoga	1	0	2	—	—	—	—	—	—	—	—	—	—
HSF 255	Extracurricular Optional - Rational Drug Use	2	0	2										

**SPRING SEMESTER**

CODE	COURSE	T	U	AKTS										
PTR 226	Electro Physical Diagnosis and Treatment Methods II	2	2	4	—	—	4	—	—	—	—	—	—	—
PTR 218	Manipulation Mobilization Techniques- I	1	3	4	—	5	4	4	—	—	—	—	—	—
PTR 222	Clinical Neurology and Neurosurgery	1	1	2	—	—	—	—	5	—	5	—	—	—
PTR 228	Evaluation and Analysis in Physiotherapy and Rehabilitation II	1	2	4	—	—	4	—	—	—	—	—	—	—
PTR 216	Therapeutic Exercise Methods	2	2	4	—	—	—	—	—	—	—	—	5	—
PTR 212	Athlete's Health	2	1	3	—	—	—	—	—	—	—	—	5	—
PTR 214	Neurophysiology	2	0	3	—	—	—	—	—	—	—	—	5	—
PTR 230	Physiotherapy and Rehabilitation Clinical Internship		10	2	5	—	5	5	5	—	—	—	5	—
<b>Elective Lessons</b>														
PTR262	Medical First Aid	2	0	2	—	—	—	—	—	—	—	—	5	5
HSF 262	Medical Communication Skills	2	0	2	—	—	4	—	—	—	—	—	—	—

HSF 264	Pathology	2	0	2	—	—	4	—	—	—	—	—	—	—
HSF 208	Structural Approaches	2	0	2	—	—	—	—	—	—	—	—	—	—
HSF 250	Extracurricular Optional - Sociology in Health	2	0	2										
<b>III. YEAR</b>														

**FALL SEMESTER**

CODE	COURSE	T	U	AKTS										
PTR 313	Physiotherapy and Rehabilitation Practices- I	2	3	5	5	—	4	—	4	5	4	—	—	—
PTR 303	Orthopedics and Rehabilitation	2	1	4	—	—	5	—	—	—	—	—	—	—
PTR 305	Rehabilitation in Pediatric Diseases	1	2	4	5	3	4	—	—	—	—	—	—	—
PTR 307	Orthopedic Rehabilitation	2	1	4	—	—	5	—	—	—	—	—	5	—
PTR 309	Manipulation Mobilization Techniques II	1	3	4	—	—	5	—	—	—	—	—	5	—
<b>Elective Lessons</b>														
PTR 361	Sports Injuries and Physiotherapy	2	2	4	—	—	5	—	—	—	—	—	5	—
HSF 353	Management and Organization I	2	0	2	—	—	2	—	—	—	—	—	—	—
HSF 357	Entrepreneurship I	3	0	3										
PTR 363	Ergotherapy	2	0	3	—	—	—	—	—	—	—	—	5	—
HSF 377	Extracurricular Optional - Sign Language - I	2	0	2	5	—	—	—	—	—	—	—	—	—

**SPRING SEMESTER**

CODE	COURSE	T	U	AKTS										
PTR 328	Physiotherapy and Rehabilitation Practices- II	2	3	5	—	3	2	—	—	—	—	—	—	—
PTR 304	Prosthesis Principles and Rehabilitation	2	1	4	4	—	—	—	—	—	—	—	—	—
PTR 312	Cardiopulmonary Rehabilitation	2	2	4	—	3	1	—	—	—	—	—	—	—
PTR 326	Rehabilitation in Rheumatologic Diseases	1	2	3	—	3	—	—	—	—	—	—	—	—
PTR 310	Rehabilitation in Neurological Diseases	1	2	4	—	—	2	—	—	—	—	—	—	—
PTR 316	Ethical Issues in Rehabilitation	1	0	2	5	—	5	5	5	—	—	—	5	—
PTR 322	Physiotherapy and Rehabilitation Clinical Internship	0	10	2										
<b>Elective Lessons</b>														
HSF 354	Management and Organization II	2	0	2	—	—	—	—	—	—	—	—	5	—
HSF 358	Entrepreneurship II	3	0	3	—	—	—	—	—	—	—	—	5	—
PTR 324	Assessment Methods	2	1	3	—	—	—	—	—	—	—	—	—	—
HSF 378	Extracurricular Optional - Sign Language - II	2	0	2	—	—	—	—	—	—	—	—	5	—
<b>IV. YEAR</b>														

**FALL SEMESTER**

CODE	COURSE	T	U	AKTS										
PTR 415	Neurological Rehabilitation(Clinical Rotation)	0	32	6	5	—	5	5	5	—	—	—	5	—
PTR 417	Evidence Based Practices in Physiotherapy - I	1	1	2	—	5	—	4	—	—	—	—	—	—
PTR 419	Final Project- I	1	3	4	—	—	5	—	—	—	—	—	5	—
PTR 407	Case Study- I	2	0	3	—	—	—	—	—	—	—	—	5	—

PTR 409	Orthopedic Rehabilitation(Clinical Rotation)	0	32	6	5	—	5	5	5	—	—	—	5	—
PTR 411	Pediatric Rehabilitation(Clinical Rotation)	0	32	6	5	—	5	5	5	—	—	—	5	—
PTR 413	Rehabilitation in Sports Injuries(Clinical Rotation)	0	32	3	—	—	5	—	—	—	—	—	5	—
SBF 455	Statistical System Analysis I	2	0	2	5	—	5	5	5	—	—	—	5	—

#### SPRING SEMESTER

CODE	COURSE	T	U	AKTS										
PTR 418	General Physical Therapy and Rehabilitation(Clinical Rotation)	0	32	6	5	—	5	5	5	—	—	—	5	—
PTR 404	Evidence Based Practices in Physiotherapy - II	1	0	2	—	5	—	4	—	—	—	—	—	—
PTR 420	Final Project- II	1	3	4	—	—	5	—	—	—	—	—	5	—
PTR 408	Case Study- II	2	0	3	—	—	—	—	—	—	—	—	5	—
PTR 410	Cardiopulmonary Rehabilitation(Clinical Rotation)	0	32	6										
PTR 412	Hand Surgery and Rehabilitation in Rheumatic Diseases(Clinical Rotation)	0	32	6	—	—	—	—	—	—	—	—	—	—
PTR 414	Reanimation(Clinical Rotation)	0	32	3										
PTR 418	General Physical Therapy and Rehabilitation(Clinical Rotation)	0	32	6	—	5	—	4	—	—	—	—	—	—
PTR 404	Evidence Based Practices in Physiotherapy - II	1	0	2										
PTR 420	Final Project- II	1	3	4	—	—	5	—	—	—	—	—	—	—

## OCCUPATIONAL PROFILES OF GRADUATES

After the graduation, a large field of study is expected. Physiotherapists are used in hospitals (cardiology, rheumatology, neurology, neurosurgery, plastic and reconstructive surgery, hand surgery, general surgery, gynecology, chest cardiovascular surgery, pediatric surgery, emergency surgery, burns, organ transplantation, otorhinolaryngology, orthopedics, traumatology, pediatrics, geriatrics, physiotherapy rehabilitation, hydroclimatology, underwater rehabilitation, brain and mental disability education, athletic health, leprosy); in factories to prevent occupational diseases and protect workers' health; to protect athletes' health and to implement a more conscious work program; they are able to work in normal and special education schools, retirement homes, care and rehabilitation centers, home care practices and community based rehabilitation to obtain more successful results from physical and mental aspects. They can also become post-graduate researchers or academicians at universities and research institutions.

## ACCESS TO FURTHER STUDIES

Upon successful completion of this programme, students may apply for postgraduate programmes.

## COURSE STRUCTURE AND CREDITS



YENİ YUZYIL UNIVERSITY FACULTY OF HEALTH SCIENCE

PROGRAM OF STUDY IN PHYSIOTHERAPY AND REHABILITATION

1st YEAR										
FALL					SPRING					
CODE	COURSE	T	U	ECTS	CODE	COURSE	T	U	ECTS	
PHYS 101	Pyhsics I	2	0	3	PHYS 102	Pyhsics II	2	0	3	
PTR 107	Introduction to Physiotherapy and Rehabilitation	2	0	2	HSF 164	Preventive Medicine and Hygiene	2	0	2	
HSF 113	Anatomy I	3	2	5	HSF 120	Anatomy II	3	2	5	
HSF 117	Physiology I	3	2	5	HSF 118	Physiology	3	2	5	
ENG 151	English I	3	0	3	ENG 152	English II	3	0	3	
ATA 151	Ataturk Principles and Revolutions I	2	0	2	ATA152	Ataturk Principles and Revolutions II	2	0	2	
TL 151	Turkish Language I	2	0	2	TL 152	Turkish Language II	2	0	2	
Total		17	4	22	Total		17	4	22	
<b>Elective Lessons*</b>					<b>Elective Lessons*</b>					
PTR 105	Medical Terminology	2	0	2	HSF 112	Psychology in Health	2	0	3	
HSF 171	Biochemistry	2	0	3	PTR 162	Biostatistics	2	0	3	
FTR157	Project I	1	1	2	PTR 158	Project II	1	1	2	
SBF165	Extracurricular Optional-University Culture I	1	1	2	HSF 160	Extracurricular Optional-University Culture II	1	1	2	
CA 150	Computer Applications	1	2	2	HSF 158	Extracurricular Optional-Physical Education and Sports	1	1	2	
Total		25	6	33	Total		25	6	34	
II. YIL										
Fall					Spring					
CODE	COURSE	T	U	ECTS	CODE	COURSE	T	U	ECTS	
PTR 201	Electro Physical Diagnosis and Treatment Methods I	1	2	4	PTR 226	Electro Physical Diagnosis and Treatment Methods II	2	2	4	
PTR 203	Clinical Orthopedic	2	0	3	PTR 218	Manipulation Mobilization Techniques- I	1	3	4	
PTR 205	Neuroanatomy	2	0	3	PTR 222	Clinical Neurology and Neurosurgery	1	1	2	
PTR 209	Evaluation and Analysis in Physiotherapy and Rehabilitation I	1	2	4	PTR 228	Evaluation and Analysis in Physiotherapy and Rehabilitation II	1	2	4	
PTR 225	Exercise Physiology	2	1	3	PTR 216	Therapeutic Exercise Methods	2	2	4	
PTR 227	Kinesiology-Biomechanics	2	1	3	PTR 212	Athlete's Health	2	1	3	
					PTR 214	Neurophysiology	2	0	3	

					PTR 230	Physiotherapy and Rehabilitation Clinical Internship		10	2
<b>Total</b>		10	6	20	<b>Total</b>		11	21	26
<b>Elective Lessons*</b>					<b>Elective Lessons*</b>				
PTR 261	Normal Development and Healthy Living	2	0	2	PTR262	Medical First Aid	2	0	2
HSF 271	Histology	2	0	2	HSF 262	Medical Communication Skills	2	0	2
HSF 281	Microbiology	2	0	2	HSF 264	Pathology	2	0	2
NUT 251	Introduction to Nutrition	2	0	2	HSF 208	Structural Approaches	2	0	2
YOG100	Yoga	1	0	2	HSF 250	Extracurricular Optional - Sociology in Health	2	0	2
HSF 255	Extracurricular Optional - Rational Drug Use	2	0	2					
<b>Total</b>		<b>21</b>	<b>7</b>	<b>32</b>	<b>Total</b>		<b>21</b>	<b>19</b>	<b>36</b>
<b>III. YIL</b>									
<b>Fall</b>					<b>Spring</b>				
<b>CODE</b>	<b>COURSE</b>	<b>T</b>	<b>U</b>	<b>ECTS</b>	<b>CODE</b>	<b>COURSE</b>	<b>T</b>	<b>U</b>	<b>ECTS</b>
PTR 313	Physiotherapy and Rehabilitation Practices- I	2	3	5	PTR 328	Physiotherapy and Rehabilitation Practices- II	2	3	5
PTR 303	Orthopedics and Rehabilitation	2	1	4	PTR 304	Prosthesis Principles and Rehabilitation	2	1	4
PTR 305	Rehabilitation in Pediatric Diseases	1	2	4	PTR 312	Cardiopulmonary Rehabilitation	2	2	4
PTR 307	Orthopedic Rehabilitation	2	1	4	PTR 326	Rehabilitation in Rheumatologic Diseases	1	2	3
PTR 309	Manipulation Mobilization Techniques II	1	3	4	PTR 310	Rehabilitation in Neurological Diseases	1	2	4
					PTR 316	Ethical Issues in Rehabilitation	1	0	2
					PTR 322	Physiotherapy and Rehabilitation Clinical Internship	0	10	2
<b>Total</b>		8	10	21	<b>Total</b>		9	20	24
<b>Elective Lessons*</b>					<b>Elective Lessons*</b>				
PTR 361	Sports Injuries and Physiotherapy	2	2	4					
HSF 353	Management and Organization I	2	0	2	HSF 354	Management and Organization II	2	0	2
HSF 357	Entrepreneurship I	3	0	3	HSF 358	Entrepreneurship II	3	0	3
PTR 363	Ergotherapy	2	0	3	PTR 324	Assessment Methods	2	1	3

HSF 377	Extracurricular Optional - Sign Language - I	2	0	2		HSF 378	Extracurricular Optional - Sign Language - II	2	0	2
<b>Total</b>		<b>16</b>	<b>12</b>	<b>35</b>		<b>Total</b>		<b>15</b>	<b>21</b>	<b>34</b>
<b>IV. YIL</b>										
<b>Fall</b>					<b>Spring</b>					
<b>CODE</b>	<b>COURSE</b>	<b>T</b>	<b>U</b>	<b>ECTS</b>	<b>CODE</b>	<b>COURSE</b>	<b>T</b>	<b>U</b>	<b>ECTS</b>	
PTR 415	Neurological Rehabilitation(Clinical Rotation)	0	32	6	PTR 418	General Physical Therapy and Rehabilitation(Clinical Rotation)	0	32	6	
PTR 417	Evidence Based Practices in Physiotherapy - I	1	1	2	PTR 404	Evidence Based Practices in Physiotherapy - II	1	0	2	
PTR 419	Final Project- I	1	3	4	PTR 420	Final Project- II	1	3	4	
PTR 407	Case Study- I	2	0	3	PTR 408	Case Study- II	2	0	3	
PTR 409	Orthopedic Rehabilitation(Clinical Rotation)	0	32	6	PTR 410	Cardiopulmonary Rehabilitation(Clinical Rotation)	0	32	6	
PTR 411	Pediatric Rehabilitation(Clinical Rotation)	0	32	6	PTR 412	Hand Surgery and Rehabilitation in Rheumatic Diseases(Clinical Rotation)	0	32	6	
PTR 413	Rehabilitation in Sports Injuries(Clinical Rotation)	0	32	3	PTR 414	Reanimation(Clinical Rotation)	0	32	3	
SBF 455	Statistical System Analysis I	2	0	2						
<b>Total</b>		<b>6</b>	<b>88</b>	<b>32</b>	<b>Total</b>		<b>4</b>	<b>88</b>	<b>30</b>	
<b>Total Course Hour</b>							<b>254</b>			
<b>Total ECTS</b>							<b>260</b>			
T: Weekly Theoretical Hours , U: Weekly Practice Hours, ECTS:European Credit Transfer System.										

## PROGRAMME STRUCTURE

- Within the Physiotherapy and Rehabilitation bachelor's degree program, there are no less than 52 courses consisting of a total of 240 ECTS.
- There is a maximum of 8 courses in each semester except for the compulsory and second foreign language courses.
- In each program, there are Common Compulsory Courses, Second Foreign Language Courses and other common courses determined by the University Senate in the Law on Higher Education.
- In every semester elective courses should be chosen.
- There should be at least 5 elective courses.

## STRUCTURE OF THE PROGRAMME

COMMON COURSES OF UNIVERSITY		
Common Courses of University/Faculty	<ul style="list-style-type: none"> <li>• PYHSICS I</li> <li>• PYHSICS II</li> <li>• BIostatISTICS AND RESEARCH TECHNIQUES</li> <li>• ENTREPRENEURSHIP I</li> <li>• ENTREPRENEURSHIP II</li> </ul>	
	<ul style="list-style-type: none"> <li>• UNIVERSITY CULTURE I</li> <li>• UNIVERSITY CULTURE II</li> </ul>	It is a common course that students must take during the fall semester of the first year.
	<ul style="list-style-type: none"> <li>• INTERNSHIP</li> </ul>	It is compulsory in the end of the spring semester of the 3rd year as 30 working days.
Common Compulsory Courses	<ul style="list-style-type: none"> <li>• TURKISH I-II</li> <li>• HISTORY OF TURKISH REVOLUTION I-II</li> </ul>	Compulsory courses to be studied as part of the undergraduate and post-graduate programs according to the legislation governing the Turkish Higher Education.

## ASSESSMENT AND GRADING OF EXAMS

Midterm exams, exam dates and exam topics are pre-announced exams. The number and time of the midterm exams will be announced to the students at the beginning of the year / semester / course committee by the instructor or the course coordinator. Midterm exams are held within the hours shown in the weekly course schedule for that course. Instructors can also do quizzes that they have not announced in advance in a semester.

Examinations may be written, oral or written and oral. The Faculty may decide to carry out homework, project or research instead of the midterm exam with the decision of its board of directors.

Year / semester exams are examinations in which the student's knowledge of the year / semester is examined and the student's success is assessed. At the end of the semester or year,

the students who have the right to take the final exam or the students who fail to take the final exam are eligible to take the makeup exam at the end of the academic year.

Year / semester final and make-up exams can be written, oral or both written and oral. The success rules that apply in the final exam are also valid in the make-up exams and the make-up exam grade is replaced by the final exam grade.

## **GRADES**

The success of a student for each assessment (quiz, research project /similar study, final and make-up) defined for each course unit is evaluated by the instructor. As a result of the instructor`s evaluation, the student will obtain one of the below grades:

Grades and Coefficients:

<b>YYU Grades</b>	<b>Coefficient</b>
AA	4.00
BA	3.50
BB	3.00
CB	2.50
CC	2.00
DC	1.50
DD	1.00
FF	0.00
DZ	0.00

According to the Law No: 2547 article 5, all the departments of the university are offering as general education courses ATATÜRK'S PRINCIPLES AND REVOLUTION HISTORY, TURKISH LANGUAGE and Foreign Languages. In order to a student to have successfully completed the course, the student must obtain one of the following grades (AA), (BA), (BB), (CB), (CC), (DC) and (DD). (FF) is given for failing students. Even if the CGPA of a student who has received a (FF) grade is sufficient for success, this course is repeated.

### **Students With CGPA Lower Than 2.00**

At the end of the fourth semester students with a CGPA of less than 2.00 are not entitled to enroll for courses in the upper years of study. In the same manner, unsuccessful students can not enroll for courses in the upper years of study.

### **Successful Students**

The success of the students is followed by GPA and CGPA. A student with a minimum of 2.00 GPA is considered successful.

Students graduating with a CGPA of 3.00-3.49 will graduate as honors students while those with 3.50 and above CPGA shall be awarded with the title of high honors students; and these titles shall be mentioned in their diplomas.

## **GRADUATION REQUIREMENTS**

In order for a student to graduate from the Physiotherapy and Rehabilitation program, student must meet the completion of all the courses designated within the curriculum of the programme, having a total of 240 ECTS Credits, with passing grade. Also students must have the achievement of a cumulative grade point average (CGPA) of at least 2.00 out of 4.00, mentioned in the bachelor`s diploma offered to the programme`s graduates. A Bachelor's Degree is awarded to a graduation of a department or program.

## **MODE OF EDUCATION**

Physiotherapy and Rehabilitation is a full time programme.

### **Head of the Department**

Prof.Dr.Mehmet Unal

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Faculty of Health Sciences  
Department of Physiotherapy and Rehabilitation

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**TC**  
**İSTANBUL YENİ YUZYIL UNIVERSITY**  
**FACULTY OF HEALTH SCIENCE**  
**DEPARTMENT OF PHYSICAL THERAPY AND REHABILITATION COURSE**  
**DESCRIPTIONS AND SYLLABUS**

### **GRADUATE YEAR 1**

#### **SEMESTER 1 – FALL**

**PHYS 101 PHYSICS I (2,0) 3**

The purpose of this course is to understand the physical quantities, standards, units, vectors, motion in one and two dimension, dynamic, work energy and power, energy conservation, linear momentum and collisions, rotational kinematics, angular momentum, rotational dynamic, static balance and elasticity, simple harmonic motion.

### **PTR 107 INTRODUCTION TO PHYSIOTHERAPY AND REHABILITATION (2,0) 2**

Objective of this course is to acquire basic knowledge for definition, content, development, area of practice in physiotherapy and rehabilitation, legal regulations, team work and communication.

### **HSF 113 ANATOMY I (3,2) 5**

The purpose of this course is to provide a detailed introduction to anatomy of the human body, and the functional ramifications of that anatomy to human motion. This will include study employing lecture and laboratory sessions involving regional cadaveric dissection of the upper extremity under the supervision of instructors, and information on joint structure and function, forces that effect motion and the resultant kinematics. Emphasis is on the neuromuscular and musculoskeletal anatomy.

### **HSF 117 PHYSIOLOGY I (3,2) 5**

The main objective of the course is to ensure that students getting basic knowledge of medical physiology topics then to use this information in order to master in literature and preparing lectures, seminars, manuscripts and research planning.

### **ENG 151 ENGLISH I (3,0) 3**

Students will practice using the following structures and expressions to promote themselves and others until the end of the semester:

1. The verb “to be” with I, you, he, she, it, they;
2. This is .....
3. The questions where are you from?, What is your name? and How are you?
4. The numbers 1-20 to talk about people’s ages
5. Singular and plural nouns (focusing on the use of ‘a’ with singular nouns)
6. Practised talking about places using the structure ‘There is/There are a, some/any the questions; Is there a ...? Are there any ....? How many ....?’
7. Focused on object pronouns (me, you, him, her, us, them)
8. Practised talking about their families focusing on possessive adjectives my, your, his, her, our, their
9. Practised making enquiries questions with who, what and where
10. Practised talking about habits, likes and dislikes
11. Practised talking about abilities and inabilities
12. Practised talking about events happening at the time of speaking
13. Focused on the difference between continuous and simple present forms

### **ATA 151 ATATURK'S PRINCIPLES AND HISTORY OF TURKISH REVOLUTION I (2,0) 2**

This course aims to provide information about concepts, definitions, definition of teaching methods and resources, the Industrial Revolution and the French Revolution, Distribution of Ottoman Empire (XIX. Century), administrative reforms, I. and II. Monarchy, Tripoli and the Balkan Wars, World War I, Armistice Armistice, Wilson's Principles, Paris Conference, M. Kemal landed at Samsun and Situation of Anatolia, Amasya Circular Order, the National Congress, Opening of the Assembly of Deputies, Parliament Foundation and Uprisings, Programming Languages Act, Structured, I. Inonu, II. Inonu, Kutahya-Eskisehir, Sakarya War and The Great Raid, Treaties during the War of Independence, the Treaty of Lausanne, abolition of the sultanate.

### **TL 151 TURKISH LANGUAGE I (2,0) 2**

Language and its specialities; world languages; spoken and written languages; history of turkish written languages; voice, voice harmony; voice movements; structure of the word; root and its suffix; kind of sentences; orders of writings; punctuation; description styles; distortions of description .

### **PTR 105 MEDICAL TERMINOLOGY (2,0) 2**

The aim of this course is to teach students general medical terminology, the medical profession occupational term that was originally used in the spelling, learn the meaning and the reading, and intended to enable the register in case of need.

### **HSF 171 BIYOCEMISTRY (2,0) 3**

The structural and functional organization of the cell; organelles and their functions; lipids, carbohydrates, amino acids, proteins; enzymes, enzymatic catalysis, enzyme kinetics, coenzymes; structure and function of the nucleic acids; biological membranes and transport mechanisms; bioenergetics; glycolysis; citric acid (TCA) cycle and its regulation.

### **PTR 157 PROJECT I (1,1) 2**

The aim of the course is to acquaint the student with the knowledge of the differences between knowledge and scientific knowledge, to learn the necessary conditions for scientific research, presentation techniques and presentation skills in body language rules. It is aimed to present the presentation prepared with appropriate techniques in a calm manner in front of the community.

### **HSF 165 UNIVERSITY CULTURE I (1,1) 2**

Aim of this course is provide the students understand the issues below; describe project development and management, developing tools and techniques related to project management, correctly sorts project goals and objectives, decide on a project study and method based on their individual observations, efficiency, cost and quality plans of the Project, implement the project work, evaluate the results of the study, writing project reports, preparing creative posters, and making presentations

### **CA 150 COMPUTER APPLICATIONS (1,2) 2**



Health Management division is a IT-based so target of this course is which students will be required both personal and business life gives theoretical and practical skills in computer information.

### **HSF 161 GUIDED RESEARCH PROJECT I (0,4) 4**

This course is designed to prepare the students for solving problems, evaluating and finding solutions, using interactive teaching and learning methods and benefiting from literature.

## **SEMESTER 2 – SPRING**

### **PTR 102 PHYSICS II (2,0) 3**

The main objective of the course is to ensure measurements and units; vectors; motion in one dimension and in plane; particle dynamics and newton's laws; work and energy; conservation of energy; dynamics of particle systems; charge and matter, coulomb's law; gauss law and electrical potential; capacitors and dielectrics; current and resistance; magnetic fields.

### **HSF 164 PREVENTIVE MEDICINE AND HYGIENE (2,0) 2**

The mission is to equip the population that is responsible for the health information with health and medicine, the prevention of a preventable health problem with the possibilities of medicine before it is yet to appear, what is necessary for it to be done, the concept of medicine.

### **HSF 120 ANATOMY II (3,2) 5**

Explains, especially the functional and the clinical properties of the human anatomy, mainly the locomotor and the nervous system, neuroanatomy, endocrine, cardiovascular, respiratory, digestive, excretory and reproductive systems.

### **HSF 118 PHYSIOLOGY II (3,2) 5**

The main objective of the course is to ensure that students getting basic knowledge of medical physiology topics then to use this information in order to master in literature and preparing lectures, seminars, manuscripts and research planning. To have basic knowledge of respiratory physiology, digestion physiology, energy metabolism and physiology, excretory and endocrine physiology, of sensory physiology, blood physiolog.

### **ENG 152 ENGLISH II (3,0) 3**

Students will practice using the following structures and expressions until the end of the semester.

1. Usage of adjectives with comparative and superlative forms
2. Past form of “to be” (was, were)

3. Expressing past events showing date, place or other details
4. Expressing necessity and obligation
5. Talking about future intentions and plans.
6. Talking and giving details about an event taking place in a certain place and time in the past
7. Giving connection between a present situation and beginning in the past

### **ATA 152 ATATURK'S PRINCIPLES AND HISTORY OF TURKISH REVOLUTION II (2,0) 2**

This course include information about political revolutions, political parties and political transition to multi-party, revolutions in law, regulation of social life, the innovations in the economic sphere. Period of 1923 and 1938, the Turkish foreign policy, Turkey's foreign policy after Ataturk, the Turkish Revolution Principles: (Republicanism, populism, secularism, reformism, statism, nationalism). Supplementary principles.

### **TL 152 TURKISH LANGUAGE II (2,0) 2**

Teaching correct grammar to learners and using correct pronunciation and grammar in writing and spoken language.

### **HSF 112 PSYCHOLOGY IN HEALTHY (2,0) 3**

Psychology as a science, critical thinking, research and method techniques, psychological development, perception, learning, motivation, emotion-excitement, personality development and social psychology comprehension. Scientific basis of psychology, basic concepts, scientific method in psychology, basic processes in psychology, application areas.

### **PTR 162 BIOSTATISTIC (2,0) 3**

Basic statistical definitions, types of data, descriptive statistics: classification of data, measures of central tendency, measures of dispersion. Tables and graphics: single dimensional table (marginal table) and graphics: histogram, bar graph, stem & leaf graph, box-plots, error graphs etc. Two/Multi-dimensional tables and graphs; cross tables, multivariate applications of basic graphics, scatter plots etc. Theoretical distributions: Normal distribution, binomial distribution, poisson distribution. Tests and graphs of normality. Sampling, sampling distributions and confidence intervals: sampling distribution of mean and ratio, confidence intervals. Introduction to hypothesis tests: Definition and stages of hypothesis tests, possible types of errors, p and alpha values, decision making process, parametric and nonparametric hypothesis tests. Hypothesis tests (single sample tests, two dependent/independent samples tests, k dependent/independent samples tests.) Correlations and regression analysis. Multiple linear regression.

### **PTR 158 PROJECT I (1,1) 2**

In order to prepare a scientific study (project / homework / dissertation), the student is expected to complete the scientific research results in a systematic sequence, to present them, to present them as a report / dissertation.

### **HSF 160 UNIVERSITY CULTURE II (1,1) 2**

Aim of this course is provide the students understand the issues below; describe project development and management, developing tools and techniques related to project management, correctly sorts project goals and objectives, decide on a project study and method based on their individual observations, efficiency, cost and quality plans of the Project, implement the project work, evaluate the results of the study, writing project reports, preparing creative posters, and making presentations.

### **HSF 158 PHYSICAL EDUCATION AND SPORT (1,1) 2**

The aim of this course is to teach the basic concepts of physical education and sport, the place and function of physical education and sport in education and training, its function, aims, philosophy, relation with other sciences, future of physical education and sports profession fields and its place and function in Turkish Education and Sports institutions.

### **HSF 162 GUIDED PROJE (1,0) 1**

The purpose of this course is to aim the students participate in a study group and conduct research on the subject in the presence of the advisor lecturer from the students. At the end of the research students are asked to prepare presentations.

## **GRADUATE YEAR 2**

### **SEMESTER 3 – FALL**

### **PTR 201 ELECTRO PHYSICAL DIAGNOSIS AND TREATMENT METHODS I (1,2) 4**

This course is an introduction to the management of pain and dysfunction using thermal, electrical and mechanical modalities used by Physical Therapists in general practice. Lectures will highlight basic scientific rationale for approaches discussed while laboratory experience, and problem solving using patient case studies should enhance the student's understanding relative to direct patient care

### **PTR 203 CLINICAL ORTHOPEDIA (2,0) 3**

The purpose of this course to give information about the progress and clinical findings of orthopedic diseases. Introduction to orthopedics and traumatology, evaluation and diagnosis methods, information about imaging methods, first aid training, fracture, dislocation, soft tissue injuries, congenital orthopedic diseases, bone development disorders, torticollis, musculoskeletal pathologies, infections and tumors, , spinal pathologies, scoliosis, brachial plexus injuries, diagnosis and treatment methods.

### **PTR 205 NEUROANATOMY (2,0) 3**

The purpose of this course to teach neuroanatomical structures to students, to show pathological and clinical symptoms, to introduce neurological diseases. Introduction to neuroanatomy, pyramidal system, extrapyramidal system, cerebellum, 2nd motor neuron, segmental and peripheral innervation, medulla spinalis, membranes of central nervous system, cerebrospinal fluid, brain venules and ventricles, functional areas of brain cortex, medulla oblongata, pons, mesencephalon, cranial nerves, afferent and efferent pathways, sensory, autonomic nervous system, neurological inspiration, cerebrovascular diseases, central nervous system infections, brain tumors, demyelination diseases.

#### **PTR 209 EVALUATION AND ANALYSIS IN PHYSIOTHERAPY AND REHABILITATION I (1,2) 4**

Introduction to evaluation of musculoskeletal system; muscle function and evaluation of joint motion. Apply basic assessment tools and methods (goniometer, anthropometric measurements, manual muscle testing and posture assessment, etc.). Taking of patient's story, patient assessment principles and methods, posture and posture analysis, shortness tests, flexibility, flexibility assessment, anthropometric measurements, normal range of motion and muscle strength measurements.

#### **PTR 225 EXERCISE PHYSIOLOGY (2,1) 4**

The aim of the course is to teach the students the effects of exercise in different environmental conditions on different body systems, to assess the problems occurring during exercise, to provide understanding of exercise prescription and reflecting to basic practice. Learning outcomes are defines acute and chronic responses to exercise in musculoskeletal and neural systems, explains body energy transfer, resting, physical activity and exercise energy expenditure, determines aerobic and anaerobic exercise training principles and basic concepts, defines impacts of exercise on individual and environmental factors, learns basic physiologic responses after exercise, measures acute and chronic responses to exercise, plans exercise prescription.

#### **PTR 227 KINESIOLOGY AND BIOMECHANIA (2,0) 3**

Course objective is to define basic terms and principles of biomechanics and present a biomechanical point of view to physiotherapists for clinical situations, and discuss examples of clinic and everyday life. Learning outcomes are describes fundamentals of biomechanics, learns how to apply biomechanical principles to human movement, posture and locomotion, understands the force, its application, mechanisms of injury and prevention strategies. By the end of the course the students are expected to be fully aware of the relationship between the contents of the course and clinical work. The course aims to give basic knowledge on mechanics/pathomechanics of movement, how to use the knowledge of mechanics to assess the movement, joint-bone-muscle-cartilage and collagen tissues, equilibrium, gravity, coordinates and orientation planes. The course aims to give sufficient knowledge on normal gait, determinants of gait and gait analysis. A student who successfully finishes the course is expected to have acquired the competency to relate clinical situations to movement science.

#### **PTR 261 NORMAL DEVELOPMENT HEALTHY LIFE (2,0) 2**

A review of normal motor development throughout life. Understanding of the basic structure of the movements of all ages. This information will be used in future to determine movement disorders. Emphasis on family, nutrition, environmental factors contributing to optimal development. Nutritional requirements for growth and development. Aging. Principles and methods of rehabilitation in the elderly. Identification of the normal developmental period from the birth of the healthy newborn child to the adolescent age. The first examination of newborn, premature baby, birth trauma, resuscitation, congenital deformities, newborn diseases, growth and development, late newborn and child's examination, role of family in growth and development. Principles of nutrition, nutrition and development, nutrition in old age. Assessing the effect of aging on the body and quality of life, the goals and results of rehabilitation of older persons, and the rehabilitation of older people.

### **PTR 271 HISTOLOGY (2,0) 2**

The aim of the course is to describe the main types of tissues in the human body and the main subgroups of each of them; showing the location of different tissue types in the body; to address the general functions and structural characteristics of each of the four major types of tissue. Microscopic human body study involving normal structure, function and life cycle relationships throughout theoretical and laboratory lessons.

### **PTR 281 MICROBIOLOGY (2,0) 2**

This course include information about disease, medical test, life-style issues will be processed as a clinical case. Examination of structure and function of biological macromolecules –

### **ND 251 INTRODUCTION TO NUTRITION (2,0) 2**

Contents of subject are related to main principles of nutrition. Biochemical reactions and nutrients are described. The nutrients used and the effects on exercises are discussed.

### **YOG100 YOGA (1,0) 2**

Students who successfully complete the course will be able to explain the scope of Yoga, the method of Yoga practice studies, the basic concepts of Yoga and Yoga therapy. At the same time, by understanding the importance of Yoga in scientific research, they will have an idea of how scientific work can be done in the field of Yoga Therapy.

### **HSF 255 RATIONAL DRUG USE (2,0) 2**

The aim of this course is to provide students with information about the use of rational drug use and non-rational drug therapies, learning about the causes and consequences of unethical drug use, prevention of unreasonable drug use, and implementation guidelines for rational drug therapy.

## **SEMESTER 4 – SPRING**

### **PTR 226 ELECTRO PHYSICAL DIAGNOSIS AND TREATMENT METHODS II (2,2) 4**

Course objective is to provide knowledge of thermal principles of electrotherapy modalities, tissue responses to modalities, and mechanisms and application techniques of high frequency currents. Learning outcomes improves their understanding of fundamentals and learns effects and application techniques of high frequency currents.

### **PTR 218 MANIPULATION-MOBILIZATION TECHNIQUES I (1,3)**

This course aims to provide information about the theoretical and practical knowledge of soft tissue massage, deep transverse massage, mobilization of the upper extremity. The mechanical and physiological effects of specific massage and mobility techniques and their practical applications.

### **PTR 222 CLINICAL NEUROLOGY AND NEUROSURGERY (1,0) 2**

This course aims to provide physiotherapy and rehabilitation students learn basic knowledge of clinical neurology, especially topics related to specific clinical neurology and neurosurgery.

### **PTR 228 EVALUATION AND ANALYSIS IN PHYSIOTHERAPY AND REHABILITATION II (1,2) 4**

Introduction to evaluation of musculoskeletal system; muscle function and evaluation of joint motion. Apply basic assessment tools and methods (goniometer, anthropometric measurements, manual muscle testing and posture assessment, etc.). Taking of patient's story, patient assessment principles and methods, posture and posture analysis, shortness tests, flexibility, flexibility assessment, anthropometric measurements, normal range of motion and muscle strength measurements.

### **PTR 216 THERAPEUTIC EXERCISE METHODS (1,2) 4**

This course aims to teach advantages and benefits of exercise training, indications in exercise training, contraindications and risks, exercise training principles. Exercise training methods, specific exercises and target groups. Appropriate exercise and sports for healthy life. Exercise types, stretching, strengthening, endurance and aerobic exercises, basic pre-exercise evaluations and basic physical fitness measures, exercise practices related to lifestyle health problems such as obesity and diabetes.

### **PTR 212 ATHLETE'S HEALTH (2,1) 3**

This course aims to give information about health in sport. It is expected that the theoretical knowledge of the learner who takes the course can be carried to the clinic. Spine, scoliosis,

pelvis, hip, knee, foot, shoulder - arm complex, elbow, wrist and elbow space and pathomechanism.

### **PTR 214 NEUROPHYSIOLOGY (2,0) 3**

This course include information about sensory processes, reflexes, muscle tone, posture, and muscular mechanisms. Normal and abnormal functions of muscle receptors, spinal reflexes, cerebellum, basal ganglia, and motor areas of the cerebral cortex. Neurophysiology entry. Central nervous system organization, sleep physiology, cerebrospinal fluid, blood brain barrier, thalamus, hypothalamus, reticular formation, basal ganglia, cerebellum, sensory processing. Motor cortex, control of voluntary movement. Teaching of speaking, learning, memory, pain mechanisms.

### **PTR 262 MEDICINE FIRST AID (2,0) 2**

The aim of the course is to teach the first aid principles and methods made by the existing materials to prevent sudden illness or accidents from getting worse to the situation until they reach the doctor.

### **HSF 262 MEDICAL COMMUNICATION SKILLS (2,0)2**

Communication among patients, management and healthcare team is handled

### **HSF 264 PATHOLOGY (2,0) 2**

The aim of the course is to teach pathological processes of diseases: 1) etiology 2) pathogenesis 3) morphological changes (structural changes in cells and organs of the body) 4) functional consequences of morphological changes (clinical significance). Cellular pathology can be used to treat a variety of conditions including acute and chronic inflammation, tissue repair, hemodynamic, genetic, immunological system disorders, neoplasia, infectious diseases, environmental and nutritional disorders, childhood diseases, blood vessels, red cells and bleeding diseases, Bones, joints and soft tissue disorders.

### **HSF 208 STRUCTURAL APPROACHES (2,0) 2**

The aim of the course is teach systematic approach to musculoskeletal disorders with regard to their anatomic, kinesiological, neurologic and orthopaedic aspects.

### **HSF 250 SOCIOLOGY IN HEALTH (2,0) 2**

The content of this course is to recognize the field of sociology, the effects of social factors on health, health and culture interaction, to improve the health of the people and the community, use of sociology, definition of health sociology, basic topics, disease description model, sociocultural factors in psychiatric diseases

## **PTR 230 PHYSIOTHERAPY AND REHABILITATION CLINICAL INTERNSHIP (0, 10) 2**

The aim of the course is to teach students apply their theoretical knowledge and practical skills in related fields. Participating in studies in the field of orthopedics, neurology, rheumatology, and community health in the control of physiotherapist observers at various clinics during the 4-week summer clinical practice period. Observer physiotherapists present the ability applying evaluation, information and physiotherapy methods of the learner in the clinic environment and in the field of practice to the responsible lecturer in a report by evaluating their work in the clinical environment and professional attitude.

### **GRADUATE YEAR 3**

#### **SEMESTER 5 FALL**

### **PTR 313 APPLICATION OF PHYSIOTHERAPY AND REHABILITATION I (2,3) 6**

Patients with neurological and musculoskeletal problems may experience proprioceptive neuromuscular facilitation (PNF) learning the theoretical knowledge and application skills of the students. Proprioceptive neuromuscular facilitation (PNF) techniques.

### **PTR 303 PRINCIPLES AND REHABILITATION OF ORTHOSIS (2,1) 4**

Introduction to the analysis of underlying mechanical principles and principles of orthosis, appropriate orthosis study of materials, orthosis design. The student who finishes the course successfully decide to use indications; Selection of appropriate orthosis; Pre and post orthotic evaluation Doing; Know different orthosis practices; Suitable for providing effective orthosis and rehabilitation.

Physiotherapy and rehabilitation program needs to be planned and implemented. Static and dynamic hand make splints with different materials, upper and lower extremity orthotics, shoes and modifications, spine and scoliosis devices.

### **PTR 305 REHABILITATION OF PEDIATRIC DISEASES (1,2) 4**

To give detailed information about the theoretical knowledge and treatment strategies of the pediatric physical disorders.

As a result of the evaluation procedures, the student should be able to plan the appropriate treatment program and ensuring that Cerebral palsy, spina bifida, Down syndrome, mental retardation, neuromuscular diseases, Rett syndrome, autism and their rehabilitation, hippotherapy.

### **PTR 307 ORTHOPEDIC REHABILITATION (2,1) 4**

Orthopedic; Diseases, basic measurement and diagnostic information, conservative and surgical techniques and to teach basic theoretical knowledge and practical skills about rehabilitation approaches. Orthopedics and definition of traumatology, measurement and diagnostic methods, imaging methods, first and emergency aid training. Subluxations,



fractures, soft tissue injuries, congenital diseases, torticollis, bone and joint infections and their tuberculosis, metabolic bone diseases, osteochondrosis, hand and foot deformities, brachial plexus injuries, scoliosis, bone development disorders, spinal diseases and tumors, extremity problems, hand injuries, tendon injuries, orthopedic diagnosis, evaluation, treatment and rehabilitation approaches of disorders.

Hand rehabilitation: Evaluation, acute hand injuries and rehabilitation, splint and elevator tendon injuries and rehabilitation, peripheral nerve injuries and rehabilitation, carpal tunnel syndrome and rehabilitation, Dupuytren's disease and rehabilitation, skin graft and rehabilitation, tendon transfer and rehabilitation, tendon and nerve slip exercises.

### **PTR309 MANIPULATION AND MOBILIZATION TECHNIQUES II (1,3) 4**

To give basic theoretical and practical knowledge about connective tissue massage and peripheral mobilization. Period therapeutic mobilizations in musculoskeletal disorders of the student at the end of to make it happen. Connective tissue massage, peripheral mobilization, functional massage techniques.

### **PTR 361 SPORT INJURIES AND PHYSIOTHERAPY (2,2) 4**

The aim of the lesson; Physical fitness, to give information about performance, the role of sports physiotherapists their responsibilities and their functions in organizations. Successfully complete the course the student should be able to evaluate sports injuries, early intervention, treatment and determine and implement rehabilitation programs. Evaluation, physical performance tests, physical fitness testing, various approaches for disabled athletes, sports injuries prevention, first aid, early intervention, treatment, rehabilitation principles, soft tissue and sub extremity injuries, taping and bandage practices.

### **HSF 353 MANAGEMENT AND ORGANIZATION I**

The aim of the course is to develop a well-equipped human resource for the private and public sector that has the basic principles of modern business, its strategies and techniques, its infrastructure capable of analyzing, interpreting and interpreting the problems and needs in the management and organizational system.

### **HSF 357 ENTREPRENEURSHIP I (3,0) 3**

In this course, students are gain knowledge and skills to use different approaches and methods, innovation and creativity techniques, leadership behaviors and methods, different aspects of entrepreneurship at local, national, international and sectoral level in entrepreneurship.

### **PTR 363 ERGOTHERAPY (2.0) 3**

To introduce ergotherapy approaches and to acquire necessary knowledge and skills for physiotherapists.

Introduction to ergotherapy, functional re-education and activities of daily living; Activity analysis; sensory evaluation and therapy; Auxiliary tools; Home adaptation; Chores; For hand, upper and lower extremities occupational therapy.

### **HSF377 SIGN LANGUAGE – I (2,0)2**

The student is given general information about this derste Turkish sign. The students learn the TID alphabet, basic sentence structures, evolved questions, positive and negative sentences, questions related to time and time, numbers, question words and verbs, and at the end of the courses related to these, 15-20 minutes sample exercises are made. The student learns to communicate with the hearing impaired by translating the sign language and the basic language at this level.

## **SEMESTER 6 SPRING**

### **PTR 328 APPLICATIONS OF PHYSIOTHERAPY AND REHABILITATION II (2,3) 6**

Patients with neurological and musculoskeletal problems may experience proprioceptive neuromuscular facial (PNF) learning the theoretical knowledge and application skills of the students win. Proprioceptive neuromuscular facilitation (PNF) techniques.

### **PTR 304 PRINCIPLES AND REHABILITATION OF PROSTHESIS (2,1) 4**

Introduction to prosthesis principles, introduction of prosthesis exercises and training of prosthesis use. Lesson area appropriate prosthesis decision for the student with amputee or congenital limb disorders giving information about the parts of the prosthesis and the construction process, amputation and prosthesis and to determine the appropriate treatment program and be practiced clinically. Amputation causes and levels, congenital extremity disorders, partial hand and foot prostheses, upper and lower limbs amputation level different prosthesis models according to, static and dynamic arraying pyrenics, control mechanisms, myoelectric prostheses and amputee rehabilitation.

### **PTR 312 CARDIOPULMONARY REHABILITATION (2,2) 5**

Theoretical knowledge of patients with respiratory and cardiac diseases and evaluation of patients, physiotherapy and the ability to organize and implement the rehabilitation program. Definition and applications of cardiopulmonary rehabilitation, pathophysiology and rehabilitation, evaluation of patients, treatment methods (respiratory exercises, coughing, huffing, dyspnoea appropriate position to relieve, postural drainage, percussion, shaking, vibration, thoracic surgical rehabilitation, obstructive and restricting lung diseases, congenital heart diseases, coronary artery disease risk factors, exercise tests, MI rehabilitation).

### **PTR 326 REHABILITATION OF RHEUMATIC DISEASES (1,1) 3**

Clinical and theoretical knowledge of rehabilitation of rheumatic diseases. Rheumatic classification of diseases, clinical findings, pain, inflammation, major laboratory findings, evaluation, general principles in treatment and rehabilitation, important exercises in rheumatic diseases. Romatoid arthritis, juvenile idiopathic arthritis, systemic lupus erythematosus, scleroderma, polymyositis, dermatomyositis, seronegative polyarthritis (ankylosing spondylitis, Reiter's syndrome), psoriatic arthritis, Jaccoud syndrome, Tietze syndrome, polyarteritis nodosa, Sjögren's syndrome and osteoarthritis physiotherapy rehabilitation program. Drugs used in rheumatology.

### **PTR 310 REHABILITATION OF NEUROLOGIC DISEASES (1,2) 4**

To give necessary information in neurological rehabilitation and to increase the application skills of the student. Spinal cord injuries, multiple sclerosis, cerebellar dysfunction, head trauma, polyneuropathy, extrapyramidal system diseases, disc hernias, facial paralysis, motor neuron diseases, aphasia, dysarthria rehabilitation.

### **PTR 316 ETHICAL ISSUES IN REHABILITATION (1,0)2**

Synthesis of information about health services and especially rehabilitation approaches within the social structure. Handling of health care delivery system with rehabilitation date, fees and reimbursement status. Examination of legislations on chronic diseases and disabilities and their scope. Focusing on ethical issues related to health care disabled, handicapped, patient with long term disease and under examination. Basic ethical principles; history and concept of physiotherapy and rehabilitation; position of patient, treatment, national and international laws and rules related to duties and responsibilities of the physiotherapist; the importance of team work in physiotherapy and rehabilitation.

### **HSF 354 MANAGEMENT AND ORGANIZATION II**

The aim of the course is to develop a well-equipped human resource for the private and public sector that has the basic principles of modern business, its strategies and techniques, its infrastructure capable of analyzing, interpreting and interpreting the problems and needs in the management and organizational system.

### **HSF 358 ENTREPRENEURSHIP II (3,0) 3**

In this course, students gain ability to analysis business analysis, business plans, projecting activities.

### **PTR 324 ASSESSMENT METHODS (2,0) 3**

To give information about diagnostic methods used in modern physiotherapy and rehabilitation. Diagnosis overview of methods, special diagnostic methods, regional manual and mechanical diagnostic methods applications.

### **HSF 378 SIGN LANGUAGE – II (2,0)2**

The student is given general information about this derste Turkish sign. The students learn the TID alphabet, basic sentence structures, evolved questions, positive and negative sentences, questions related to time and time, numbers, question words and verbs, and at the end of the courses related to these, 15-20 minutes sample exercises are made. The student learns to communicate with the hearing impaired by translating the sign language and the basic language at this level.

## **PTR 322 PHYSIOTHERAPY AND REHABILITATION CLINIC SUMMER PRACTISE**

To enable students to apply their theoretical knowledge and practical skills in related fields. During the 3-week summer clinical practice period, physiotherapist observers (Such as orthopedics, neurology, rheumatology) and community health join. Observer physiotherapists should be aware of the evaluation, knowledge and practice of physiotherapy methods, their work in the clinical setting, evaluating the attitude and presenting it to the responsible instructor in a report. Students also clinic the applications are sent to the responsible instructor filled in the final internship files.

The score of the assessor in the notes of the physician observator physiotherapists in the reports and it is determined by considering the internship file that the student prepared.

## **GRADUATE YEAR 4**

### **SEMESTER 7 FALL**

#### **PTR 415 NEUROLOGIC REHABILITATION(CLINICAL ROTATION) (0,32) 6**

The aim of this semester is to give students the opportunity to practice theoretical knowledge and practical skills. To be able to make evaluation about physiotherapy and rehabilitation practices of the student; physiotherapy and rehabilitation program. During clinical practice the success and use of the student's professional knowledge and skills; During all applications it is expected that it will fulfill its professional behaviors and attitude with success. Hospital, rest homes, rehabilitation centers, sports clubs, factories, disabled organizations, home practices, education physiotherapy and rehabilitation applications in institutions and other related fields.

The clinical work of the student assessed by the supervisors, knowledge, skills and Professional attitude, theoretical examination, practical examination

#### **PTR 417 EVIDENCE BASED MEDICINE İN PHYSIOTHERAPY 1 (1,0) 2**

To be able to decide on blood-based practice in the field of physiotherapy and rehabilitation enforce literature review in the fields of physiotherapy and rehabilitation decision based on application. Conformity of the literature investigated by the student and presentation of the student.

#### **PTR 419 FINAL PROJECT 1 (0,3) 4**

Developing the researcher's knowledge and skill. Theoretic and practical courses, case studies and clinical studies, the field of interest in the direction of the information obtained from the seminars a research topic should determine the hypothesis of choice and disregard the method of research. Literature search is made and a research proposal form is prepared. The thesis proposal is oral and the consultant is presented to the client. The thesis proposal presented by the lecturer in writing and verbally is evaluated.

**PTR 407 CASE STUDY I (2,0) 3**

It is the responsibility of the students to be informed during clinical practice and evaluation of the complicated cases they have prepared with blood-based methods, physiotherapy and planning and implementation of a rehabilitation program. The lesson is to analyze the case evaluation and treatment approaches, taking literary support, it is expected that the case presentation that he prepared will be realized. Patient is selected, evaluated, the treatment schedule is determined and presented in front of the case class.

**PTR 409 ORTHOPEDIC REHABILITATION (CLINICAL ROTATION) (0,32) 6**

**PTR 411 PEDIATRIC REHABILITATION (CLINICAL ROTATION) (0,32) 6**

**PTR 413 REHABILITATION IN SPORT INJURES (CLINICAL ROTATION) (0,32) 6**

**SEMESTER 8 SPRING**

**PTR 418 PHYSICAL THERAPY AND REHABILITATION (CLINICAL ROTATION) (0,32) 6**

The aim of this semester is to give students the opportunity to practice theoretical knowledge and practical skills.

To be able to make evaluation about physiotherapy and rehabilitation practices of the student; physiotherapy and rehabilitation program. During clinical practice the success and use of the student's professional knowledge and skills; During all applications, it is expected that it will fulfill its professional behaviors and attitude with success. Hospital, rest homes, rehabilitation centers, sports clubs, factories, disabled organizations, home practices, education physiotherapy and rehabilitation applications in institutions and other related fields. Instructors and the clinical work of the student assessed by the supervisors, knowledge, skills and Professional attitude, theoretical examination, practical examination.

**PTR 404 EVIDENCE BASED MEDICINE IN PHYSIOTHERAPY - II (1,0) 2**

To be able to decide on blood-based practice in the field of physiotherapy and rehabilitation enforce Literature review in the fields of physiotherapy and rehabilitation decision based on application. Conformity of the literature investigated by the student and presentation of the student.

**PTR 420 FINAL PROJECT 2 (0,2) 4**

The student carries out the research proposal he / she has prepared under the FTR 407 Final Project I. Research the result should be written according to the thesis writing rules. The realization of the research, the result of the research writing according to thesis writing rules and oral presentation of the results of the research.

**PTR 408 CASE STUDY II (2,0) 3**

It is the responsibility of the students to be informed during clinical practice and /Evaluation of the complicated cases they have prepared with blood-based methods, physiotherapy and planning and implementation of a rehabilitation program. The lesson is to analyze the case evaluation and treatment approaches, taking literary support the case presentation is prepared. The patient is selected, evaluated, the findings are recorded, the treatment program is identified and presented in front of the case class.

**PTR 410 CARDIOPULMONER REHABILITATION (CLINICAL ROTATION) (0,32) 6**

**PTR 412 HAND SURGERY AND REHABILITATION IN RHEUMATOLOGIC DISEASE (CLINICAL ROTATION) (0,32) 6**

**PTR 414 REANIMATION(CLINICAL ROTATION) (0,32) 6**