COURSE INFORMATION FORM

	Course Information					
Year of Curriculum	**Course Title**	*Code*	*Semester*	*L+P Hour*	*Credits*	*ECTS*
	Biomechanical Analysis	5055008	I-II	3+0	3	7

Language of Instruction	Turkish
Course Level	Postgraduate
Department/Program	Department of Physiotherapy and Rehabilitation / Master's Degree with Thesis
Education Type	Formal
Course Type	Elective
Prerequisites	-
Department/Program Coordinator	Asst. Prof. Çağtay MADEN
Instructors	
Assistants	-
Objectives of the Course	It aims to teach biomechanical principles, body biomechanics, biomechanical analysis methods in physiotherapy and rehabilitation.
Course Content	Bone-muscle-tendon-ligament-cartilage tissue biomechanics, mechanical evaluation and biomechanical analysis methods will be covered in the course.
Teaching-Learning Methods and Techniques Used in the Course	Expression Discussion Question & Answer Preparing and / or Presenting a Report Drill & Practice Case Study Problem / Problem Solving Brainstorming
Internship of the Course (If there is)	-

Learning Outcomes
1. Understands the importance of biomechanics in physiotherapy.
2. Knows body tissue biomechanics.
3. Analyze the factors affecting biomechanical conditions.
4. Can analyze biomechanical force.
5. Can use biomechanical analysis methods in the clinic.

COURSE CONTENT	
Week	**Topics**
1	Intoduction to the course
2	Biomechanics and Physiotherapy
3	Mechanical Laws and Dynamics
4	Bone Tissue Biomechanics
5	Muscle Tissue Biomechanics
6	Ligament and Tendon Tissue Biomechanics
7	Cartilage Tissue Biomechanics
8	Midterm Exam
9	Factors Affecting Biomechanics: Strength, Balance, Posture, Proprioception
10	Factors Affecting Biomechanics: Strength, Balance, Posture, Proprioception
11	Force Analysis in Mechanical Evaluation
12	Biomechanical Analysis Methods
13	Biomechanical Analysis Methods
14	General Review
15	Final Exam

RECOMMENDED SOURCES
Kinesiology and Biomechanics, Gül Şener, Fatih Erbahçeci, Hipokrat Publishing House, Ankara, 2019.

ASSESSMENT		
IN-TERM STUDIES	**QUANTITY**	**PERCENTAGE**
Mid-terms	1	40
Quizzes		
Homework		
Attendance		
Practice		
Seminar		
Internship of the Course		
Project		
Field Survey		
Workshop		
Laboratory		
Presentation		
Final examination	1	60
Total	2	100
Contribution of Semester Studies to the Success Grade		
Contribution of the Final Exam to the Success Grade		
Total		

ECTS/WORKLOAD TABLE			
Activities	**Quantity**	**Duration (Hour)**	**Total Workload (Hour)**

Course Duration (Including the exam week: 15x Total course hours)	*15*	*3*	*45*
Hours for off-the-classroom study (Pre-study, practice)	*15*	*3*	*45*
Homework	*15*	*3*	*45*
Seminar			
Presentation	*14*	*3*	*42*
Practice			
Laboratory			
Internship of the Course			
Project			
Field Survey			
Workshop			
Others (……)	*1*	*1*	*1*
Mid-terms	*1*	*1*	*1*
Quizzes	2	1	*2*
Homework(s)/Seminar(s)			
Final examination	*1*	*1*	*1*
Total Work Load			*210*
Total Work Load / 30 (h)			*210/30*
ECTS Credit of the Course			*7*

ASSOCIATING THE LEARNING OUTCOMES OF THE COURSE WITH THE PROGRAM OUTCOMES

Course Learning Outcomes	**PO1**	**PO2**	**PO3**	**PO4**	**PO5**	**PO6**
CLO1	**5**	**3**	**5**	**2**	**4**	**4**
CLO2	**5**	**3**	**5**	**2**	**4**	**4**
CLO3	**5**	**3**	**5**	**2**	**4**	**4**
CLO4	**5**	**3**	**5**	**2**	**4**	**4**
CLO5	**5**	**3**	**5**	**2**	**4**	**4**

CLO: Course Learning Outcomes PO: Programe Outcomes					
Contribution level	1. Very low	2. Low	3. Medium	4. High	5. Very High