Course Syllabus

Code - Course Title	**HZT115 - Mathematical Reasoning I**
Course Type	
Laboratory + Practice	3+0
ECTS	**3.0**
Language of Instruction	Türkçe
Course Type	Basic Intensive Turkish Language Courses
Course Instructor(s)	ÖĞR. GÖR. DR. EMRAH ÜNLÜER

Mode of Delivery	This lecture is given face to face.
Place of Delivery	On Campus
Used Educational Platforms	Face-to-face
Prerequisites	None
Courses Recomended	None
Recommended Resources	None
Work Placement	Not application.
Aims of the Course	The aim of this course is to develop students' conceptual understanding of number systems, basic arithmetic operations, the coordinate plane, and basic geometry, and to examine the developmental processes of basic mathematical concepts in hearing and hearing-impaired individuals. Within the scope of the course, it is aimed to provide mathematical thinking and reasoning skills for daily life situations (measurement, time, money, estimation, orientation, and data interpretation) by recognizing relationships between objects, shapes, and events, establishing cause-and-effect links, and utilizing problem-solving steps.

Course Syllabus

Weeks	Learning Outcomes	Topics	Teaching Methods
Week - 1	**LO-1**	Sets of numbers	Lecture, Question & Answer, Problem Solving
Week - 2	**LO-1**	Reading and writing numbers	Lecture, Question & Answer, Problem Solving
Week - 3	**LO-1**	Ordering numbers	Lecture, Question & Answer, Problem Solving
Week - 4	**LO-2**	Arithmetic operations with natural numbers	Lecture, Question & Answer, Problem Solving
Week - 5	**LO-2**	Arithmetic operations with natural numbers	Lecture, Question & Answer, Problem Solving
Week - 6	**LO-3**	arithmetic operations with integers	Lecture, Question & Answer, Problem Solving

Course Syllabus

Weeks	Learning Outcomes	Topics	Teaching Methods
Week - 7	**LO-3**	Arithmetic operations with integers	Lecture, Question & Answer, Problem Solving
Week - 8	**LO-4**	Arithmetic problems	Lecture, Question & Answer, Problem Solving
Week - 9	**LO-4**	Arithmetic problems	Lecture, Question & Answer, Problem Solving
Week - 10	**LO-5**	Number line	Lecture, Question & Answer, Problem Solving
Week - 11	**LO-5**	Rectangular coordinate system	Lecture, Question & Answer, Problem Solving
Week - 12	**LO-5**	Rectangular coordinate system	Lecture, Question & Answer, Problem Solving
Week - 13	**LO-6**	Square root and exponential expressions	Lecture, Question & Answer, Problem Solving
Week - 14	**LO-6**	Square root and exponential expressions	Lecture, Question & Answer, Problem Solving

Learning Outcomes

#	Learning Outcome
1	Distinguishes between sets of numbers; expresses the reading and writing of numbers, as well as the ordering relationships between numbers.
2	Performs arithmetic operations with natural numbers.
3	Performs arithmetic operations with integers.
4	Solves problems involving basic arithmetic operations.
5	Represents the coordinates of points on the number line and the Cartesian coordinate system.
6	Performs basic operations involving square roots and exponential expressions.

Sustainable Development Goals

✓ Quality Education ✓ Reducing Inequalities

Course Theme

✓ Educational Sciences and Educational Technologies ✓ Society, Law and Communication ✓ Innovation Skills

AKTS Workload

Activity	Duration (Hour)	Count	Workload
Teorik Derse Katılım	3.00	14	42
Sınıf Dışı Çalışma (Ön Hazırlık & Pekiştirme Amaçlı)	0.50	14	0
Ödevler	2.00	6	12
Proje - Rapor - Sunum Hazırlama	0.00	0	0
Ara Sınav Hazırlığı (sınav süresi dahil)	7.00	1	7
Final Sınavı Hazırlığı (sınav süresi dahil)	10.00	1	10
Uygulama (Laboratuvar, Müzik/Enstrüman Uygulaması, Atölye/Saha Çalışması vb.)	0.00	0	0
Staj Uygulaması	0.00	0	0
		Calculated ECTS	**3.0**

Assessment Method and Passing Requirements

✓ Open-Ended Test ✓ Multiple Choice Test ✓ True-False Test ✓ Homework