

Course Code	Course Name	Teorical	Practice	Laboratory	Credits	ECTS
FZK-3021	Practical Astronomy I	3.00	0.00	0.00	3.00	6.00
Course Detail						
Course Language	: Turkish					
Qualification Degree	: Bachelor					
Course Type	: Optional					
Preconditions	: Not					
Objectives of the Course	: To learn the fundamental observations of astronomy and astrophysics and analyze and interpret these observation data.					
Course Contents	: This course aims to give information about determination of light speed, positional astronomy, photometric astronomy, observation of the trans-Uranian planet, determination the distance between Earth and Sun, observations of artificial satellites, atmospheres of Venus and Mars, the mass of Jupiter, the spectrum of the Sun, movement in space of Bardard star, the Mars-Voyage.					
Recommended or Required Reading	: An Introduction to Experimental Astronomy, Roger B. Culver, Printed Freeman and Company.					
Planned Learning Activities and Teaching Methods	: Lecturing, application/practice, presentation of some related slides					
Recommended Optional Programme Components	: -					
Instructors	: Res. Assist. Dr. Afşar Kabaş					
Instructor's Assistants	: -					
Presentation Of Course	: Face to face					

Course Outcomes

Upon the completion of this course a student :

- 1 Remembers the concepts of distance, speed and time in fundamental physics
- 2 Learns fundamental positional astronomy
- 3 Learns the basic uses of astrophysics
- 4 Performs applications in orbital dynamics and celestial mechanics
- 5 Gains experience on astronomical observation data

Preconditions

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Weekly Contents

	Teorical	Practice	Laboratory	Preparation Info	Teaching Methods
1.Week	*Velocity of light				
2.Week	*Basics in spherical astronomy				
3.Week	*Basic principles in astrophysics and celestial mechanics				
4.Week	*Positional Astronomy				
5.Week	*Photometric astronomy				
6.Week	*Discovery of trans-Uranus planet Neptune from Uranus observations				
7.Week	*The distance between Earth and Sun				
8.Week	*Observations of artificial satellites				
9.Week	*Midterm				
10.Week	*Atmospheres of Venus and Mars				
11.Week	*Determining the mass of Jupiter				
12.Week	*The continuous spectrum of the Sun				
13.Week	*Movement in space of Barnard star				
14.Week	*The Mars-Voyage				

Assesment Methods %

- 1 Md Term Exam 1 : 40.000
- 2 Final : 60.000

ECTS Workload

Activities	Count	Time(Hour)	Sum of Workload
Theoretical Lecturing	13	3.00	39.00

