

BALIKESIR UNIVERSITY
NECATİBEY EDUCATION FACULTY
UNIVERSITY ELECTIVE COURSE PROPOSAL FORM

Department/Program	Mathematics and Science Education/Physics Education					
Course unit title	Astronomy					
Semester	Spring					
Language of instruction	Turkish					
Credit	2					
Number of ECTS credits	3					
Mode of delivery	Face to face					
Objectives of the course	Understanding the basic concepts, laws and theories of astronomy - Recognition of the sky					
Course content	The basic concepts of astronomy are taught in the laws and theories that will give a general view of the past and the future of astronomy. In addition, telescope and sky observations provide students with the ability to recognize the sky.					
Prerequisites and co-requisites	no prerequisites					
Name of lecturer	Prof. Dr. Hüseyin KÜÇÜKÖZER			e-mail: hkucuk@balikesir.edu.tr		
Assistants				e-mail:		
Internship	---					
Resources	Astronomi ve Uzay Bilimleri, Prof Dr. Zeki Aslan ve ark. 1996 Evrenin Evrimi ve Yıldızların Oluşumu, William J. Kaufman					
Type of course unit	University Elective Course					
Planning learning activities and teaching methods	Active learning based activities, group discussion, class discussion, film screenings					
Assessment methods and criteria			ECTS allocated based on student workload			
In-term studies	Quantity	Percentage (%)	Activities	Quantity	Duration	Total work load (hours)

Mid-terms	1	40	Course duration	14	3	42
Quizzes			Hours for off-the-c.r.stud	14	3	42
Assignment	1	10	Mid-terms	1	2	2
Attendance			Final exams	1	2	2
Practice			Total work load (hours): 88			
Project			Number of ECTS credits: 3			
Final exam	1	50				
Learning outcomes						
Weekly detailed course contents						
Weeks	Topics		Prerequisites		Resources	
1	Telescopes, formation, evolution, age and form of the Universe.		--		Reference books	
2	Documentary about the Big Bang What is there at the stage, how could they have formed. Introduction to galaxies.		--		Reference books	
3	How many stars are in the galaxy, how many stars are in the galaxies. Star types		--		Reference books	
4	Star types, evolution of stars		--		Reference books	
5	Problem-based learning, Prediction-observation-explanation		--		Reference books	
6	Stars' colors and luminosity		--		Reference books	
7	Midterm		--		--	
8	Introduction to the solar system, elements of the solar system, how could the solar system be formed? Law of Kepler, Law of Gravity		--		Reference books	
9	Seasons, Eclipses, Moon phases etc. discussions on basic concepts.		--		Reference books	
10	Technological developments, recent developments in space vehicles, satellites and working principles		--		Reference books	
11	Are there other intelligent beings in the scene other than us? If so, how		--		Reference books	

	can we communicate? Discussion...		
12	History of Astronomy	--	Reference books
13	Using Astronomy as a way to love science	--	Reference books
14	Final exam	--	--
Contribution of learning outcomes to program outcome		Understanding the basic concepts, laws and theories of astronomy Be able to use the sky recognition and observation tools The mass, distance, density, radius, brightness, etc. of celestial objects. ability to specify properties Understanding the bases of space technology Ability to evaluate the sky map	