



Çanakkale Onsekiz Mart University

Education Information System

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Course Information

COURSE INFORMATION

Course Title	Code	Semester	L+U Hour	Credits	ECTS
Observational Astronomy	FZK466	8. Semester	2 + 2	3.0	8.0

Prerequisites	None
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Language of Instruction	Turkish
Course Level	Bachelor's Degree (First Cycle)
Course Type	Elective
Mode of delivery	Face to face
Course Coordinator	Prof. Dr. Osman DEMİRKAN
Instructors	
Assistants	
Course Objectives	Using basic trigonometrical relationships in spherical astronomy, conics, conic equations, cone mechanisms (equator, ecliptic, galactic ect.). Apparent motions of the Sun and the Moon. Observation equipments and techniques (photometry, CCD cameras, spectrograph, polarimeter), star magnitudes and correction of atmospheric extinction. Conversion of star magnitudes to standard system.
Course Content	Basic trigonometrical relationships using in spherical astronomy., Conics, conic equations, Cone mechanisms (horizon), Cone mechanisms (equator), Cone mechanisms (hour), Cone mechanisms (ecliptic and galactic), Conversion formulas between cone mechanisms., Apparent motions of the Sun and the Earth, Planets, Observations equipments and techniques (photometry), Observations equipments and techniques (CCD cameras), Observations equipments and techniques (spectrograph), Observations equipments and techniques (polarimeter), Star magnitudes and correction of atmospheric extinction, Conversion of star magnitudes to standard system
Course Learning Outcomes	1) Explains what the basic trigonometric relationships using in spherical astronomy are. 2) Interprets daily motions of celestial bodies. 3) To gain ability to find where is the celestial body and to make observations. 4) Observes observations with different equipment and techniques.

WEEKLY COURSE CONTENT

Week	Topics	Teaching and Learning Methods and Techniques	Study Materials
1. Week	Basic trigonometrical relationships using in spherical astronomy.		
2. Week	Conics, conic equations.		
3. Week	Cone mechanisms (horizon)		

Quick Access

Physics

- Qualification Awarded
- Level of Qualification
- Qualification Requirements and Regulations
- Specific Admission Requirements
- Recognition of Prior Learning
- Profile of the Program
- Program Key Learning Outcomes
- Occupational Profile of Graduates
- Access to Further Studies
- Course Structure & Credits
- Exam Regulations & Assessment & Grading
- Graduation Requirements
- Mode of Study
- Programme Director(or Equivalent)
- Evaluation Questionnaire
- TYYÇ

Course Information

- Course Information
- Weekly Course Content
- Resources
- Course Category
- CONTRIBUTION OF COURSE LEARNING OUTCOMES TO PROGRAMME OUTCOMES
- ECTS credits and course workload

4. Week	Cone mechanisms (equator)		
5. Week	Cone mechanisms (hour)		
6. Week	Cone mechanisms (ecliptic and galactic)		
7. Week	Conversion formulas between cone mechanisms.		
8. Week	Apparent motions of the Sun and the Earth, Planets.		
9. Week	Midterm Exam		
10. Week	Observations equipments and thecnics (photometry)		
11. Week	Observations equipments and thecnics (CCD cameras)		
12. Week	Observations equipments and thecnics (spectrograph)		
13. Week	Observations equipments and thecnics (parimeter)		
14. Week	Star magnitudes and correcton of atmospheric extinction		
15. Week	Conversion of star magnitudes to standard system.		
16. Week	Final Exam		

RESOURCES

Recommended Sources
"Küresel Astronomi", Prof.Dr. Abdullah Kızıllırmak, Ege Üniversitesi Yayınları, 1998
"Küresel Astronomy", W. M. Smart, W. M. Smart; çev. N. Gökdoğan, İstanbul Üniversitesi Yayınları, 1984

ASSESSMENT

Measurement and Evaluation Methods and Techniques
Midterm Exam (40%), Final Exam (60%)

COURSE CATEGORY

Course Category	Percentage
Core Courses	% 100

CONTRIBUTION OF COURSE LEARNING OUTCOMES TO PROGRAMME OUTCOMES

Programme Outcomes	Contribution Level	DK1	DK2	DK3	DK4
<u>PY1</u>	3	3	3	3	3
<u>PY2</u>	3	3	3	3	3
<u>PY3</u>	4	4	4	4	4
<u>PY4</u>	3	4	3	3	3
<u>PY5</u>	4	5	4	4	4
<u>PY6</u>	4	4	4	4	4
<u>PY7</u>	3	3	3	3	4
<u>PY8</u>	3	3	3	3	3
<u>PY9</u>	2	2	3	2	2
<u>PY10</u>	4	5	4	4	4
<u>PY11</u>	3	4	3	3	3
<u>PY12</u>	3	3	3	3	3
<u>PY13</u>	3	4	3	3	3

<u>PY14</u>	2	2	2	2	3
<u>PY15</u>	2	2	2	2	2

*DK = Course's Contribution.

	0	1	2	3	4	5
Level of contribution	None	Very Low	Low	Fair	High	Very High

ECTS CREDITS AND COURSE WORKLOAD

Event	Quantity	Duration (Hour)	Total Workload (Hour)
Class Hours (14 weeks)	15	4	60
Final Exam Preparation	1	6	6
Mid Term Exam Preparation	1	5	5
Assignment 1	10	7	70
Application/Practice	12	3	36
Total Workload			177
Total Workload / 25.5 (s)			6.94
ECTS Credit of the Course			7

