Course Information

COURSE INFORMATION

Course Title	Code	Semester	L+U Hour	Credits	ECTS
Practical Astronomy II	FZK338	6. Semester	2 + 2	3.0	7.0

Prerequisites	None

Language of Instruction	Turkish
Course Level	Bacheclor's Degree (First Cycle)
Course Type	Elective
Mode of delivery	Face to face
Course Coordinator	Assoc. Prof. Dr. Faruk SOYDUGAN
Instructors	
Assistants	
Course Objectives	Main aim of the course is to have knowledge about Astrometric Times, Time Transformations, Astrometric Coordinates, Coordinate Transformations, Photometric Astronomy, Astrometric Measurments.
Course Content	Introduction to time concepts in astronomy, Julian Date, Heliocentric Julian Date, Universal Time, Local Time, Sideral Time, Time Transformations, Application, Coordinate Systems, Horizantal, Equatorial Coordinates, Coordinates of stars – some basic calculations, Ecliptic, Galactic Coordinates, Coordinate Tranformations, Application, The term of Paralax, Geocenteric Paralax Measurement, The term of Angular Distance and its applications.
Course Learning Outcomes	1) Have knowledge about astrometric time transformations 2) Interpret astronomical measurement methods. 3) Have knowledge about spherical astronomy. 4) Perform the transformations of celestial objects coordinates to various systems.

WEEKLY COURSE CONTENT

Week	Topics	Teaching and Learning Methods and Techniques	Study Materials
1. Week	Time in Astronomy	Lecture, Homework, Discussion	
2. Week	Julian Date	Lecture, Homework, Discussion	
3. Week	Universal and Local Time, Sideral Time	Lecture, Homework,	

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

		Discussion	
4. Week	Time Conversions I	Lecture, Homework, Discussion	
5. Week	Time Conversions II	Lecture, Homework, Discussion	
6. Week	Coordinate Systems	Lecture, Homework, Discussion	
7. Week	Equatorial coordinates.	Lecture, Homework, Discussion	
8. Week	Midterm exam	Written exam	
9. Week	Stellar coordinates - some basic calculations	Lecture, Homework, Applications	
10. Week	Ecliptic and Galactic Coordinates	Lecture, Homework, Discussion	
11. Week	Cooridinate Conversions	Lecture, Homework, Discussions	
12. Week	Cooridinate Conversions II	Lecture, Homework, Discussions	
13. Week	Paralax	Lecture, Homework, Discussions	
14. Week	Paralax measurements from the Earth	Lecture, Homework, Discussions	
15. Week	Angular Distance and Applications	Lecture, Homework, Discussions	
16. Week	Final exam	Written exam	

RESOURCES

Recommended Sources
Astronomy: Principles and Practice, Fourth Edition, A. E. Roy and D Clarke,2003, Institude of Physics Publishing Bristol and Philadelphia.

ASSESSMENT

Measurement and Evaluation Methods and Techniques
Mid-term exam (40 percent) and final exam (60 percent).

COURSE CATEGORY

Course Category	Percentage
Core Courses	% 100

CONTRIBUTION OF COURSE LEARNING OUTCOMES TO PROGRAMME OUTCOMES

Programme Outcomes	Contribution Level	DK1	DK2	DK3	DK4
PY1	5	5	4	4	5

PY2	5	5	5	4	4
PY3	5	4	5	5	4
PY4	5	5	5	5	5
PY5	5	5	5	5	5
PY6	5	5	5	5	5
PY7	5	4	5	5	5
PY8	4	4	4	4	4
PY9	4	4	4	4	4
PY10	4	4	4	4	4
PY11	5	5	5	5	4
PY12	3	3	3	3	4
PY13	4	4	4	4	4
PY14	4	4	4	4	4
PY15	4	4	4	4	4

*DK = Course's Contrubution.

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

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ECTS CREDITS AND COURSE WORKLOAD

Event	Quantity	Duration (Hour)	Total Workload (Hour)
Class Hours (14 weeks)	14	4	56
Final Exam Preparation	1	32	32
Mid Term Exam Preparation	1	26	26
Final Exam	1	2	2
Mid Term Exam 1	1	2	2
Laboratory	2	10	20
Preliminary Study	14	3	42
		Total Workload	180
		Total Workload / 25.5 (s)	7.06
		ECTS Credit of the Course	7