



# Çanakkale Onsekiz Mart University

Education Information System

[DEGREE PROGRAMMES](#)

[BOLOGNA](#)

[THE INSTITUTION](#)

[INFO FOR STUDENTS](#)

You are here : [Home](#) [Bachelcor's Degree \(First Cycle\)](#) [Physics](#) [Optical Waves Laboratory](#) **[Course Information](#)**

## Course Information

### COURSE INFORMATION

Course Title	Code	Semester	L+U Hour	Credits	ECTS
Optical Waves Laboratory	FZK219	3. Semester	0 + 4	2.0	4.0

<b>Prerequisites</b>	None
----------------------	------

<b>Language of Instruction</b>	Turkish
<b>Course Level</b>	Bachelcor's Degree (First Cycle)
<b>Course Type</b>	Compulsory
<b>Mode of delivery</b>	Face to face
<b>Course Coordinator</b>	Assist. Prof. Dr. Mustafa KURT
<b>Instructors</b>	Assoc. Prof. Dr. Hilal GÖKTAŞ
<b>Assistants</b>	
<b>Course Objectives</b>	This course aims to do experiments about the optic and waves course
<b>Course Content</b>	Optics and Waves with the experimental results reinforce the theoretical knowledge learned in class and practice the skills.
<b>Course Learning Outcomes</b>	1) Gain a different perspective to the events of nature 2) Gain detailed study of physical systems, and analytical approach 3) explain natural phenomena and analysis 4) Able to do team-work 5) Design experiment and evaluate data

### WEEKLY COURSE CONTENT

Week	Topics	Teaching and Learning Methods and Techniques	Study Materials
1. Week	Lens rules and optical instruments	Experimental set-up, blackboard	
2. Week	Lens rules and optical instruments	Experimental set-up, blackboard	
3. Week	Diffraction and interference	Experimental set-up, blackboard	
4. Week	Diffraction and interference	Experimental set-up, blackboard	
5. Week	Michelson Interferometer	Experimental set-up, blackboard	

#### 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](#)
- [Assessment](#)
- [Course Category](#)
- [CONTRIBUTION OF COURSE LEARNING OUTCOMES TO PROGRAMME OUTCOMES](#)
- [ECTS credits and course workload](#)

6. Week	Prism Spectroscopy	Experimental set-up, blackboard	
7. Week	Prism Spectroscopy	Experimental set-up, blackboard	
8. Week	Simple Harmonic Motion and Conservation of energy	Experimental set-up, blackboard	
9. Week	Simple Harmonic Motion and Conservation of energy	Experimental set-up, blackboard	
10. Week	Damped oscillation motion	Experimental set-up, blackboard	
11. Week	Damped Harmonic Motion	Experimental set-up, blackboard	
12. Week	Polarization and Malu's Law	Experimental set-up, blackboard	
13. Week	Polarization and Malu' s law	Experimental set-up, blackboard	
14. Week	Newton rings	Experimental set-up, blackboard	
15. Week	Review of the semester	Experimental set-up, blackboard	
16. Week	Final exam	Experimental set-up, blackboard	

## RESOURCES

Recommended Sources
Optic and waves lab manual
French, A. P. (Çev.: Nazım Uçar / 2004). Vibrations and Waves. İstanbul: Aktif Yayınevi
Goca, N. (Çeviri: Celal Çakır / 2000). Optic. İstanbul: Aktif Yayınevi.

## ASSESSMENT

Measurement and Evaluation Methods and Techniques		
Final exam, quiz, report		
In-Term Studies	Quantity	Percentage
Laboratory	1	60
<b>Total</b>	1	60
End-Term Studies	Quantity	Percentage
Final Exam	1	40
<b>Total</b>	1	40
<b>Contribution Of In-Term Studies To Overall Grade</b>		60
<b>End-Term Studies</b>		40
<b>Total</b>		100

## COURSE CATEGORY

Course Category	Percentage
Core Courses	% 100

## CONTRIBUTION OF COURSE LEARNING OUTCOMES TO PROGRAMME OUTCOMES

Programme Outcomes	Contribution Level	DK1	DK2	DK3	DK4	DK5
<u>PY1</u>	4	3	5	4	4	4
<u>PY2</u>	3	5	3	4	3	4
<u>PY3</u>	4	4	4	4	5	5
<u>PY4</u>	4	4	4	4	4	4
<u>PY5</u>	0	4	4	4	4	4
<u>PY6</u>	4	4	4	4	4	5
<u>PY7</u>	5	5	4	5	4	5
<u>PY8</u>	0	4	4	4	4	4
<u>PY9</u>	0	4	4	4	4	4
<u>PY10</u>	0	3	3	3	3	3
<u>PY11</u>	0	2	2	2	2	2
<u>PY12</u>	0	2	2	2	2	2
<u>PY13</u>	0	2	2	2	2	2
<u>PY14</u>	0	3	3	3	3	3
<u>PY15</u>	0	4	4	4	4	4

\*DK = Course's Contribution.

	0	1	2	3	4	5
<b>Level of contribution</b>	None	Very Low	Low	Fair	High	Very High

## ECTS CREDITS AND COURSE WORKLOAD

Event	Quantity	Duration (Hour)	Total Workload (Hour)
Laboratory	14	4	56
Final Exam Preparation	1	28	28
Mid Term Exam Preparation	8	2	16
Final Exam	1	2	2
<b>Total Workload</b>			102
<b>Total Workload / 25.5 (s)</b>			4.00
<b>ECTS Credit of the Course</b>			4