Identification	**Subject**	Physics 1, 6 ECTS	
	Department	Physics and Electronics	
	Program	Undergraduate	
	Term	Spring 2021	
	Instructor	**Nasim Fazli**	
	E-mail:	Nasim.fazli@khazar.org	
	Phone:		
	Classroom/hours		
	Office hours		
Prerequisites	no		
Language	English		
Compulsory/Elective	Compulsory		
Description	This course covers the principles of mechanics, heat, fluids, oscillations, waves and sound. Emphasis is on conceptual development and numerical problem solving. A detailed schedule of topics can be found later in this syllabus.		
Required textbooks and course materials	*Fundamentals of Physics, Halliday and Resnick, 9th edition*		
Course website			
Course outline	This course provides a conceptually-based exposure to the fundamental principles and processes of the physical world. Lectures include basic concepts of motion, forces, energy, heat, Newton's laws, fluids thermodynamics, thermal physics, work and energy, power. Upon completion, students should be able to describe examples and applications of the principles studied.		
Course objectives	This course will help students to receive idea of the main physical phenomena and the major physical laws. The course of the general physics will give the chance to students to study motion laws, movement of a solid body, surface phenomena, will be able to analyze the types of motion, Newton's laws. At the end of course the students will be able to understand fundamentals of classical physics, to solve physical problems of mechanics and molecular physics.		
Learning outcomes	• What students should know by the end of the course: • Velocity, acceleration, types of motions, fields, Gravitation filed, harmonic oscillations, pendulum, temperature, pressure, work and quantity of heat, fluids, the Carnot cycle, entropy, viscosity, Stokes formula, turbulence, Hook's law, simple harmonic oscillator, Doppler effect.		
Teaching methods	**Lecture**		x
	Experiential exercise		x
	Assisted work		x
	Assisted lab work		
	Others		
Evaluation	**Methods**	**Date/deadlines**	**Percentage (%)**
	Midterm Exam		30
	Class Participation and Attendance	At each lesson	5
	Quizzes	During the semester, total 3 quizzes, for each 5 point	15
	Lab Exercises		-
	Final Exam		50
	Total		100
Policy	• No late assignments will be accepted without prior arrangement with the instructor for acceptable excuses. Medical and family emergency will be considered on case-by-casebasis. • No late homework will be accepted. Homework is to be completed on an individual basis. Students may discuss homework with classmates,but students are responsible for your own work. If students have consulted		

	classmates, please note the individuals name on the top of students' assignment. • Quizzes may be given unannounced throughout the term and will countas one homework. There will be no make-upquizzes. • No make-up exams. If students miss an exam, a zero score willbe assigned to the missedexam. • If students should miss class due to personal emergency ormedical reasons, please notify the instructor by email immediately. A doctor's note will be required for make-up work. • Students are responsible for completing the reading assigned from the textbook related to the covered topics and for checking email regularlyfor important information and announcements related to thecourse. • University policy on academic honesty concerning exams and individual work will be strictlyenforced. • BE ON TIME!

Tentative Schedule

Week	Date/Day (Tentative)	Topics	Textbook/Assignments
1	10.02.2021 12.02.2021	Measurement	*(Fundamentals of Physics, Halliday and Resnick, 9th edition)* *Chapter 1*
2	17.02.2021 19.02.2021	Motion along straight line	Chapter 2
3	24.02.2021 26.02.2021	Vectors	Chapter 3
4	3.03.2021 5.03.2021	Motion in two and three dimension	Chapter 4
5	10.03.2021 12.03.2021	Motion in two and three dimension	Chapter 4
6	17.03.2021 19.03.2021	Force and motion 1	*Chapter 5*
7	31.03.2021 02.04.2021	Some application of Newton's laws	Chapter5
8	07.04.2021 09.04.2021	Force and motion 2	Chapter 6
9	14.04.2021 16.04.2021	Midterm Exam,	_
10	21.04.2021 23.04.2021	Kinetic Energy and Work	Chapter 7
11	28.04.2021 30.04.2021	Kinetic Energy and Work	Chapter 7
12	05.05.2021 07.05.2021	Pontential Energy and Consevation of Energy	Chapter 8
13	12.05.2021 14.05.2021	Potential Energy and Conservation of Energy	Chapter 8
14	19.05.2021 21.05.2021	Center of Mass and linear momentum	Chapter 9
15	26.05.2021 28.05.2021	Rotation	Chapter 10
		Final Exam