

Identification	Subject	PHSC111 - Physics 1 (6 ECTS credits)		
	Department	Physics and Electronics		
	Program	Undergraduate		
	Term	Spring 2020		
	Instructor	Nasim Fazli		
	E-mail:	Nasim.fazli@khazar.org		
	Phone:	(+994 12) 421 10 93 (ext.255)		
	Classroom/hours	41 Mehseti str. Room: 202N, Wednesday, 10:10-11:40		
	Office hours	Monday, 09:00-10:00		
Prerequisites	no			
Language	English			
Compulsory/Elective	Compulsory			
Description	Physics I is an introduction to mechanics. It includes motion in one and two dimensions, Newton's laws of motion and their applications, work and energy, linear momentum and collisions, rotational motion, and principles of conservation.			
Required textbooks and course materials	<i>Fundamentals of Physics, Halliday and Resnick, 9th edition</i>			
Course outline	Motion in one and two dimensions, Newton's laws of motion and their applications, work and energy, linear momentum and collisions, rotational motion, and principles of conservation.			
Course objectives	Students will develop a working knowledge of the principles and concepts of university-level, calculus-based physics. Students will be able to construct complete and correct solutions to physics problems beginning from concepts and ending with a labeled answer. 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. Quizzes will be provided during the classes are based on the topic covered previously.			
Learning outcomes	Understand and apply the methods of solving elementary mechanics problems that lead to the first insights into the rudiments of related fields in engineering sciences. Understand conceptually topics of mechanics and apply them to basic engineering problems. Apply and integrate the basic physical sciences and the principles of engineering sciences into a working practical knowledge. Enhance the student's ability and motivation to solve seemingly difficult problems in various fields. Provide the student with a fruitful and friendly introduction to the subject by giving them the opportunity to establish conceptual relations between mechanics and a wide range of topics in engineering disciplines.			
Teaching methods	Lecture	x		
	Experiential exercise	x		
	Assisted work	x		
	Assisted lab work			
	Others			
Evaluation	Methods	Date/deadlines	Percentage (%)	
	Midterm Exam		35	
	Class Participation and Attendance		10	
	Quizzes		20	
	Lab Exercises		-	
	Project (3 phases)		-	
	Final Exam		35	
	Total		100	
Policy	<ul style="list-style-type: none"> • NO CELL PHONES are allowed during lecture and lab sessions. PLEASE turn them off before lecture! (Not silent or vibrating mode) • 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-case basis. • 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 count as one 			

	<p>homework. There will be no make-up quizzes.</p> <ul style="list-style-type: none"> • No make-up exams. If students miss an exam, a zero score will be assigned to the missed exam. • If students should miss class due to personal emergency or medical 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 regularly for important information and announcements related to the course. • University policy on academic honesty concerning exams and individual work will be strictly enforced. • BE ON TIME!
--	---

Tentative Schedule			
Week	Date/Day (Tentative)	Topics	Textbook/Assignments
1	12/02/20	Measurement	Chapter 1
2	19/02/20	Motion along straight line	Chapter 2
3	26/02/20	Vectors	Chapter 3
4	04/03/20	Motion in two and three dimension	Chapter 4
5	11/03/20	Motion in two and three dimension	Chapter 4
6	18/03/20	Force and motion 1	Chapter 5
7	01/04/20	Some application of Newton's laws	Chapter 5
8	08/04/20	Midterm Exam,	-----
9	15/04/20	Force and motion 2	Chapter 6
10	22/04/20	Kinetic Energy and Work	Chapter 7
11	29/04/20	Kinetic Energy and Work	Chapter 7
12	06/05/20	Potential Energy and Conservation of Energy	Chapter 8
13	13/05/20	Potential Energy and Conservation of Energy	Chapter 8
14	20/05/20	Center of Mass and linear momentum	Chapter 9
15	27/05/20	Rotation	Chapter 10
		Final Exam	

This syllabus is a guide for the course and any modifications to it will be announced in advance.