SYLLABUS

Basic data of the subject	
University/Faculty:	**University of Applied Sciences in Ferizaj/ Faculty of Engineering and Information Technology**
Title of the subject:	**Kinematics**
Level:	**Bachelor**
Course Status:	**Mandatory**
Year of studies:	**II**
Number of hours per week:	**4**
Value of Credits - ECTS:	**5**
Time/ location:	
Course lecturer:	**Inxh. i dipl.mak. Halit Mehmeti**
Contact details:	**Laboratory** **halit.mehmeti@ushaf.net**
Course description	*This subject will introduce students to the equation of motion, determination of the speed of movement, body movement, types of movement, spherical movement, and compound movement. Speed and velocity will be calculated for all these kinds of movements.*
Course objectives:	*The aim of this course is to introduce students to kinematics, the equation of motion, determination of speed and velocity of motion, introduction to the body motion, calculate speed and velocity, oscillation.*
Expected learning outcomes:	*Upon completion of this module students will be able to recognize problems of kinematics, speed, velocity, material point and bodies,the notion of movement, and oscillation.*

Contribution to the student load (which must correspond with learning outcomes)			
Activity	**Activity**	**Activity**	**Activity**
Lectures	2	15	30
Theoretical exercises / laboratory	2	15	30
Internship	4	1	4
Contacts with teacher / consultations	1	15	15

Field exercises	-	-	-
Midterm, seminars and projects.	2	2	4
Homework	1	15	15
Studying (at the library or at home)	2	15	30
Final preparation for the exam	1	15	15
Time spent on evaluation (tests, quiz and final exam)	1	4	4
Projects and presentations	0.5	15	7.5
Total			**154.5**

Teaching methodology:	*Lectures, seminar paper, discussion, graphic projects and visits to enterprises*
Assessment methods:	The final grade is calculated based on the attendance, graphic project, midterm test and final exam.
Literature	
Basic literature:	I. *Prof.dr.Xhevat Perjuci ,Mekanika teknike", Universiteti i Prishtinës*
Additional literature:	II. Prof.dr.Fetah Jagxhiu,, Përmbledhje detyrash nga mekanika teknike",Prishtinë III. Prof.dr.Fehmi Krasniqi ,,Detyrat nga Kinematika", Prishtinë. IV. S.M.Targ ,,Kratki kurs teoriqeske mehanike", Moska. V. Prof. Vlatko Doloqek, Hajrudin Pashiq, B.Shipovac ,,Zbirka Rjesenih zadataka iz kinematike", Sarajevo.

Designed learning plan :

Week:	**Lecture**
Week one:	*Introduction. Kinematics, movement towards point, calculation of speed and velocity (from literature I)*
Week two:	*Curved movement of the point, determination of speed and velocity (from literature I)*
Week three:	*Vector equation with coordinates, calculation of movement, speed and velocity equation. (from literature I)*
Week four:	*Analytic coordinates, calculation of velocity and speed. (from literature I)*
Week five:	*Natural coordinates, calculation of movement equation, determination of speed and velocity. (from literature I)*
Week six:	*Polar coordinates, determination of movement equation,*

	calculation of speed and velocity. (from literature I)
Week seven:	*Translational and rotary movement, calculation of speed and angular and peripheral velocity. (from literature I)*
Week eight:	*Flat body motion, calculation of speed and velocity for flat motion. (from literature IV)*
Week nine:	*Spherical movement of body, calculation of speed and body. (from literature IV)*
Week ten:	*Compound movement of the point, calculation of speed and velocity. (from literature IV)*
Week eleven:	*Practice*
Week twelve:	*Movement composed of two transactions, calculation of speed and velocity. (from literature IV)*
Week thirteen:	*Movement composed of one transaction and one rotation, calculation of speed and velocity. (fom literature IV)*
Week fourteen:	*Information on oscillatory movement. (from literature IV)*
Week fifteen:	*Review of the covered materials.*

Academic policies and rules of conduct
Attendance, appropriate behavior in class, participation in class activities, as well as visits to enterprises are mandatory.