Tsuyama College		Year	Year 2021			C	ourse Title Mechanics II		inics II	
Course Information										
Course Code 0060					Course Cate	jory	General /	General / Compulsory		
Class Format	Lecture	Lecture				Credits		School Credit: 1		
Department	Department of Integrated Scier Technology Communication and Informations System Program			ce and I	Student Grade		3rd			
Term	First Semester				Classes per \	Veek	2			
Textbook and/or Teaching Materials	Textbooks : "Kougyo Rikigaku" (Morikita Syuppan), Distribution prints, Reference books : "Kougyo Rikiga Reidai Ensyu" (Korona)								ooks : "Kougyo Rikigaku	
Instructor  YAMAMUTU Yoshinori,SAEKI Fumihiro										
Course Objectives										
Learning purposes : The students develop their ability to analyze basic force and length of industrial products mainly with a focus on statics. Course Objectives : 1. To understand and calculate how to show force, moment and force acting on objects. 2. To understand center of mass and calculate center of mass of plain plate and solids.										
Dubric			DOUY.	•						
RUDIC	Eveelle	nt		Cood		Accorto	blo		Not accontable	
	Tho stu	The student can		Guu		Acceptable				
Achievement 1 actii figu		erstand how to show e and moment, solve blems about force ng on object by law, re and graph.		The student can understand how to show force and moment, solve problems about force acting on object.		The student can understand how to show force, moment and force acting on object.		o show d force	The student has not achieved the level described in the column to the left.	
Achievement 2	The stu unders center calcula of mas	Ident can T tand concept of u of mass, and r te point of center a s. c		The student can understand concept of regular center of mass, and calculate point of center of mass.		The student can calculate regular point of center of mass.		alculate enter of	The student has not achieved the level described in the column to the left.	
Achievement 3 ex pr		The student can understand motion of various rigid bodies, express the motion in equation by law of motion and solve problems.		The student can understand motion of simple rigid body, express the motion in equation by law of motion and solve problems.		The student can calculate motion of simple rigid body by law of motion.		alculate rigid otion.	The student has not achieved the level described in the column to the left.	
Assigned Departr	nent Obje	ctives								
Teaching Method										
	General or Specialized : General Field of learning : Natural Sciences Common and Basic Foundational academic disciplines : Engineering / Mechanical Engineering									
	This class is equivalent to "(2) Acquire basic science and technical knowledge".									
Outline	Relationship with JABEE programs : The main goal of learning / education in this class is "(A)" is involved.									
	Course outline : Industrial dynamics is a subject mainly about aplication of basic dynamics. Though student learn a little about law and principle of dynamics, it is difficult for them. In this subject static dynamics(balance of force) is explained about method of analyzing of engineering phenomena.									
Chulo	Course method : The subject is mainly conducted by writing on the blackboard. Grade evaluation method :									
Style	Regular exams (70%) + Mini tests • Practice • Report (30%). Retaking exams will be carried out for the students who get under 60% in total score. The retaken exams are equivalent to the term exam. Students can use writing materials and calculator.									
	Precautions on the enrollment : Students must take this class(no more than one-third of the required number of class hours may be missed) .									
	Course advice : This subject is based on Physics and Mathematics, and basic level Physics and Mathematics are very important. As preparatory study to be done in advance, review the contents of Physics I and Physics II, which are the basic subjects.									
Notice	Foundational subjects : Physics I (1st year), Physics II (2nd) Related subjects : Mechanics I, III (3rd year)									
	Attendance advice : This subject is one of the basic subjects of integrated engineering. The students are advised to solve the problems in textbooks of dynamics. You should prepare and review continually. Reports should be submitted by the deadline. Arriving (leaving) more than 20 minutes late (early) result in one absence, and arriving (leaving) more than 65 minutes late (early) result in two absences.									
Characteristics of Class / Division in Learning										
							ote Class	🗆 Ins	structor Professionally	
							Exper	Experienced,		

Must complete subjects											
Course Plan											
			1	heme			Goals				
1st Semeste r	1st Quarter		1st C	Guidance, Outline, esolution of forces	Force, Composit	ion and	The students can describe composition and resolution of forces at one point, and culculate composition and resolution force.				
			2nd f	Noment, Couple of orce, Composition points	f force, Displacer of forces differe	nent of of nt of operating	The students can understand moment, and culculate. The students can explain codition of balance of force different of operating points.				
			3rd f	Balance of forces, ulcrum point	Foce at contact p	point and	The students can explain codition of balance of force at one points.				
		er _	4th C	Composition of for	ces different of o	perating points	The students can explain composition of forces different of operating points.				
			5th C	Center of mass and	d figure		The students can understand the meaning of center of mass, and culculate the point of center of mass and figure.				
			6th F	Rotating body, Sta	bility		The students can understand rotating body and stability.				
			7th C	Aotion of point, Lin Circle motion	near motion, Plar	ne motion,	The students can understand velocity and acceleration.				
			8th N	1id-term exam							
	2nd Quarter	,	9th r	Return and comme notion, Force of ir entrifugal force	entary of exam a nertia, Centripeta	nswers, Law of I force and	The students can understand law of motion, and culculate centripetal force and centrifugal force.				
			10th f	Rotary motion and heorem, Inertia o	inertia of rigid b f simple objects	ody, Inertia	The students can understand angular motion equation, and culculate torque acting on rigid body and inertia.				
			11th F	Plane motion of rig	jid body, Motion	equation	The studens can how to show equation of translational motion and rotary motion.				
		er	12th L	Iomentum and im aw of conservatio	npulse, Angular n on of momentum	nomentum, , Collision	The students can explain momentum and law of conservation of momentum.				
			13th V	Vork, Energy, Pov	ver.		The students can understand work and energy, and culculate power.				
			14th S	olide friction, Rollir	ng friction		The students can understand slide friction, and explain relation of frictional force and coefficient of friction.				
			15th (	Final exam)							
			16th F	Return and comme	entary of exam a	nswers					
Evaluati	ion Me	etho	od and W	eight (%)	1			1			
	Examination		Presentation	Mutual Evaluations between students	Self review	Report	Mini test	Total			
Subtotal		70		0	0	0	30	0	100		
Basic Proficiency		70		0	0	0	30	0	100		
Specialized Proficiency		0		0	0	0	0	0	0		
Cross Area Proficiency		0		0	0	0	0	0	0		