

Course Number	M2795.002100	Lecture Number	001	Course Title	Dynamics			Credit	3
Instructor	Name	Kim, Ji-Hwan (Position Professor )			Homepage	http://odyssey.snu.ac.kr			
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	Consult Time and Place : Tue, Thur :11AM~Noon / 301Bldg1306								
Prerequisite	Physics, Mathematics								
* 1. Goals	One of the fundamental fields in the mechanics, Dynamics deals with the particles, system of particles and rigid bodies. In this course, methodology of modelling and analysis is systematically introduced. And then, concept of gyroscope and application field are summarized precisely								
* 2. Text	F. P. Beer, et al., "Vector Mechanics for Engineers, Dynamics," 11th Edition in SI Units, McGraw,								
* 3. Evaluations	Attendance	Assignment	Mid	Final	Quiz	Participation	Others	Total	
	5%	15%	30%	30%	10%	5%	5%	100%	
	Remark :								
*4. Lecture Plan	Contents								
	<ul style="list-style-type: none"> <li>~ Particle Dynamics</li> <li>~ Translational motion, Kinetic energy of particle</li> <li>~ Motion of particle due to central force</li> <li>~ Work and Energy, Potential energy, Conservation of energy</li> <li>~ Space dynamics, Impulse and momentum, Impact</li> <li>~ System of particles</li> <li>~ Work and energy of particles, Variable mass system</li> <li>- Mid Exam</li> <li>~ Rigid body dynamics</li> <li>~ Rotating coordinate system</li> <li>~ Plane motion of rigid body/Force and acceleration</li> <li>~ Constrained motion, Work and energy of plane motion</li> <li>~ Impulse and momentum of plane motion</li> <li>~ Rigid body motion of 3-Dimensional body</li> <li>~ Equations of motion of Gyroscope</li> <li>- Final Exam</li> </ul>								
5. Guideline for student	Practice								