



Ewha International Summer College

Course Syllabus

Thermodynamics

Professor: Hongyun So
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Home Univ.: Hanyang University
Dept.: Mechanical Engineering

Description: Introduction to the energy and entropy: the first and second law of Thermodynamics

Objective: Understanding the concept of thermal systems with mass, energy, and entropy conservation

Prerequisite: Principles of Engineering Thermodynamics, 9th (global) ed., M.J. Moran et al., Wiley & Sons

Credits	3	Contact Hours	Upon request
Week 1	6/25(Thu)	Introduction to thermodynamic systems	
Week 2	6/29(Mon)	Thermodynamic properties and equilibrium	
	6/30(Tue)	Energy conservation	
	7/1(Wed)	1 st law of Thermodynamics	
	7/2(Thu)	P-v-T relationship for ideal gases	
Week 3	7/6(Mon)	Thermodynamic analysis 1	
	7/7(Tue)	Thermodynamic analysis 2	
	7/8(Wed)	Midterm	
	7/9(Thu)	Control volume analysis 1	
Week 4	7/13(Mon)	Control volume analysis 2	
	7/14(Tue)	The 2 nd law of Thermodynamics	
	7/15(Wed)	Entropy	
	7/16(Thu)	Clausius inequality	
Week 5	7/20(Mon)	Applications of the 2 nd law of Thermodynamics	
	7/21(Tue)	Final Exam	

Evaluation(%)	Midterm	Final	Attendance	Assignments	Participation	Etc.
	40	40	10	10	-	