

강 의 계 획 서

교과목명	화공열역학1	교강사명	엄송호
수강대상대학	화학공학부		
수업시간	월[CC]12:00-13:15,수[CC]12:00-13:15		
강의실	[26507] 제2공학관26동 5층 첨단e+강의실		
개요/진행	The goal of this lecture is to help students understand the basic principles regarding thermodynamics. It particularly handles the thermal properties of fluidics, expansion and compression, or so, which a chemical engineer may be necessary to figure out in the major.		

▣ 내용

9 월	교과목 소개 First law of thermodynamics &Phase rule and enthalpy PVT behavior of pure substances & Volumetric properties of pure fluids PVT behavior of pure substances & Volumetric properties of pure fluids
10 월	Generalized correlations for gases &Generalized correlations for liquids Sensible heat effects & Latent heats of pure substances "Standard heat of reaction &Standard heat of combustion Second law of thermodynamics &Heat engines" Mid-term exam
11 월	Entropy &Lost work Third law of thermodynamics &Entropy balance for open system Property relations for homogeneous phases &Residual properties Two phase systems &Generalized property correlations for gases
12 월	Applications of thermodynamics to flow processes &Duct flow of compressible fluids Turbines &Compression processes Steam power plant Final exam

▣ 참고문헌

도서구분	도서명	저자	발행년도	출판사
교재	Introduction to chemical engineering thermodynamics	J.M,Smith, H.C, Van Ness, M,M,Abbott	2005	McGraw-Hill International Edition
교재	Fundamentals of Chemical Engineering Thermodynamics	Themis Matsoukas	2012	Prentice Hall