

Course Number	414.560	Lecture Number		Course Title	Topics in Ship Structure	Credit	3
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Instructor	Name : Jang, Beom Seon (Position : Assistant Professor)	Homepage : openlab.snu.ac.kr
	E-mail : seanjang@snu.ac.kr	Telephone : 02-880-8380
	Consultation Time/Place(English) : to be scheduled by E-mail/36-307A	

Purpose of Course(English)	This course aims at understanding high cycle fatigue strength and low cycle fatigue strength. Then, students learn overalls about fracture mechanics from the basic to its application.
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Materials and Reference(English)	Materials :Fundamentals of Metal Fatigue Analysis, J A Bannantine, Prentice Hall, 1990 Fracture Mechanics ; Fundamentals and Application, T.L. Anderson, Taylor & Francis, 2005 : DNV CN 30.7 Fatigue Assessment of Ship Structures
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Evaluation Method	Attendance	Task	Medium	Final	Academic Attitudes	Other Data	Total
		10%	20%	35%	35%	%	%
	Remark (English)						

References to Course Registration (ENG)	The lecture "Topics in Ship Structures" should be taken in undergraduate course.
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Penalty for Cheating(English)	The corresponding examination is scored zero.
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	Week	Lecture Content
Lecture Plan	1Week (English)	1. Fatigue Strength
	2Week (English)	1, Fatigue Strength, 2. LCF for Base Material
	3Week (English)	3 LCF for Notch
	4Week (English)	4 LCF for Weld Joint - Design Rules
	5Week (English)	5 Introduction of Fracture Mechanics
	6Week (English)	6 Energy Thoery
	7Week (English)	7 Linear fracture mechanics
	8Week (English)	7 Linear fracture mechanics, Mid Examination
	9Week (English)	8 Elastic-Plastic Fracture
	10Week (English)	8 Elastic-Plastic Fracture
	11Week (English)	9 Application to Structure
	12Week (English)	10 Fatigue Crack Propagation
	13Week (English)	10 Fatigue Crack Propagation
	14Week (English)	11 Computational Fracture Mechanics
	15Week (English)	Final Examination