* Course Keywords	**Ship, Structure, Analysis, Strength assessment, Safety**
* 1. Purpose of Course	We aim to equip the skill for structural analysis and design of local structural elements in Marine Structures such as beam-column, unstiffened- and stiffened panel. Elastic and plastic analysis concepts and buckling behaviour of the local elements will be discussed. The characteristics of the vibration of local elements will also be covered in brief. This module may help ship structural engineers access the strength and safety of local structural elements of marine structures.
* 2. Materials and Reference	Teaching Materials: Paik J. Ultimate Limit State Analysis and Design of Plated Structures (2nd Ed.) Reference: Dow B. Benson S. and Kim D.K. Advanced Marine Structures (Newcastle University)

*** 3. Evaluation Method**

Evaluation: Absolute Evaluation, Grade-on-a-curve Evaluation

Grading Type: A~F, S/U

Evaluation Items	Attendance	Assignment	Medium	Final	Random Evaluation	Attitude	Total
Rate	10	20	20	30	10	10	100 %
Note		[e.g.] 2 times during the semester	[e.g.] Essay questions	[e.g.] Essay questions	[e.g.] 1 pop quiz or 1 Presentation	Q&A participation	

Attendance Policy : Students who are absent for over 1/3 of the class will receive a grade of 'F' or 'U' for the course (Exceptions can be made when the cause of absence is deemed unavoidable by the course instructor).

Other: Cheating regulation, Plan for substitute test, Availability of feedback for assignments or tests, etc.

* 4. Quota Exceeding Course Registration	**Capacity:** **Up to 30 Students**
5. Guideline for Students	Office Hours and Place: SNU, building 34-409

*** 6. Lecture Plan**

Teaching Method: Flipped learning + Project class

Class Schedule : [You can add lines or items to describe your lecture]

Week	Topics and Contents	Lecture Method	Teaching Material
1	Module Introduction & Topic 1 Plastic Theory of Bending	Online or Offline	To be uploaded (ETL)
2	Topic 2 Ultimate Loads on Beams	Online or Offline	To be uploaded (ETL)
3	Topic 3 Collapse of Frames & Grillage	Online or Offline	To be uploaded (ETL)
4	Recap [Part 1] Plastic Design of Structures	Online or Offline	To be uploaded (ETL)
5	Topic 4 Basics of Elastic Plate Theory	Online or Offline	To be uploaded (ETL)
6	Topic 5 Simply Supported Plate under Sinusoidal Loading	Online or Offline	To be uploaded (ETL)
7	Topic 6 Long Clamped Plates	Online or Offline	To be uploaded (ETL)
8	**Mid-term Exam**	Offline	
9	Topic 7 Short Clamped Plates	Online or Offline	
10	Topic 7A Low aspect ratio plates & Permanent Set	Online or Offline	
11	Topic 8 Buckling of the Local structures (Failure modes)	Online or Offline	To be uploaded (ETL)

	12	Topic 9 Tripping	Online or Offline	To be uploaded (ETL)
	13	Topic 9A Post-buckling strength of plate	Online or Offline	To be uploaded (ETL)
	14	**Topic 10** Post-buckling Behaviour	Online or Offline	To be uploaded (ETL)
	15	**Final Exam**		
7. Support Services for Students with Disabilities ※ You can modify these default contents.	For Lectures	○ Visual Impairment: Make textbooks(digital textbook, braille textbook, enlarged textbook etc.), Allow note takers ○ Physical Disability: Make textbooks(digital textbook), Allow note takers and assistants ○ Hearing Impairment: Allow note takers and translators, Allow lecture recording ○ Health Impairment: Excuse absence due to health problems, Allow note takers ○ Learning Disability: Allow note takers ○ Intellectual Disability / Autism Spectrum Disorder: Allow note takers and mentors		
	For Assignments & Evaluations	○ Visual Impairment / Physical Disability / Hearing Impairment / Health Impairment / Learning Disability: Extend assignment deadlines, Offer alternate assignment submission and response method, Extend testing period, Offer alternate testing method, Offer different testing room ○ Intellectual Disability / Autism Spectrum Disorder: Offer individualized assignments and alternative evaluations		
	Other	Students who take this course can get appropriate level of support service including the support listed above depending on the students' individual characteristics and needs through consultation with professors and the Support Center for Students with Disabilities. If you have any questions concerning support service for students with disabilities you can contact Professor *** (02-880-****) or Support Center for Students with Disabilities (02-880-8787).		