Search

CEE3402-01 (1ST SEMESTER, 2021)

연세대학교 YONSEI UNIVERSITY

Created Date	2021-01-13 11:16:37	Last-Modified	2021-01-13 11:38:08
Course Title	REINFORCED CONCRETE STRUCTURES	Credit	3
Location	Realtime online lecture	Time	Mon9,10,Wed2

Instructor	Park Kyoungsoo	Department	공과대학 건설환경공학과
Office		Telephone	
e-mail & Office Hour	k-park@yonsei.ac.kr / Wed 2:00PM ~ 2:50PM		

Core Competencies	공학기초능력	수리공학적사고	창의적융합능력
	50	30	20

Target Students	Junior, School of Civil & Environmental Engineering
Course Description & Goals	The goal of the course is to understand fundamental mechanisms and design principles of reinforced concrete (RC) structures so that students are able to easily adapt to changes in design methods. Topics of the course include behavior of structural concrete and methods for the design of individual RC members for bending, shear and torsion. Additionally, the course requires to design a concrete structure, as a term project.
Prerequisite	CEE3303 Applied Mechanics
Course Requirements	- Course materials and homeworks will be uploaded on YSCEC
Grading Policy(Absolute)	Midterm exam: 35% Final exam: 40% Assignment: 10% Term Project: 10% Attendance: 5%
Texts & References	A.H. Nilson, D. Darwin, C.W. Dolan, 2010, Design of Concrete Structures, 14th Edition, McGraw Hill D. Darwin, C.W. Dolan, A.H. Nilson, 2016, Design of Concrete Structures, 15th Edition, McGraw Hill A.H. Nilson, D. Darwin, C.W. Dolan, 2013, 2012 설계기준 콘크리트구조설계, 동화기술 (김우, 김진근, 오병완 옮김) (위 세가지 중 하나만 선택) ---------- KDS 14 20, 2018 콘크리트구조 설계(강도설계법), www.kcsc.re.kr KDS 24 12, 2018 교량 설계하중 (한계상태설계법), www.kcsc.re.kr
Instructor's Profile	Associate Professor Civil and Environmental Engineering Yonsei University
TA's Name & Contact Information	Jihyuk Park (jihuyk@naver.com) Siwoo Jeon (siwoo9803@naver.com)
Syllabus in English	* Course Description & Goal The goal of the course is to understand fundamental mechanisms and design principles of reinforced concrete (RC) structures so that students are able to easily adapt to changes in design methods. Topics of the course include behavior of structural concrete and methods for the design of individual RC members for bending, shear and torsion. Additionally, the course requires to design a concrete structure, as a term project. * Grading Policy Midterm exam: 35% Final exam: 40% Assignment: 10% Term Project: 10% Attendance: 5%

Week	Period	Weekly Topic & Contents	Course Material Range & Assignments	Reference
1	2021-03-02 2021-03-08	Introduction for Concrete Structures		(3.2.) Spring semester classes begin (3.5. - 3.9.) Course add and drop period
2	2021-03-09 2021-03-15	Material Behaviors		(3.5. - 3.9.) Course add and drop period
3	2021-03-16 2021-03-22	Behavior of Axial Members		
4	2021-03-23 2021-03-29	Flexural Analysis		
5	2021-03-30 2021-04-05	Flexural Analysis of Reinforced Concrete Beams		
6	2021-04-06	Design of Beams		(4.7.) First third of the

	2021-04-12	(Practical consideration)		semester ends
7	2021-04-13 2021-04-19	Design of Beams (Doubly reinforced beams)		(4.19. - 4.23.) Midterm Examinations
8	2021-04-20 2021-04-26	Mid term		(4.19. - 4.23.) Midterm Examinations (4.26. - 4.28.) Course withdrawal period
9	2021-04-27 2021-05-03	Design of Beams (T-beams)		(4.26. - 4.28.) Course withdrawal period
10	2021-05-04 2021-05-10	Shear and Diagonal Tension (Shear stress and strength)		(5.5.) Children`s Day
11	2021-05-11 2021-05-17	Shear and Diagonal Tension (Web reinforcement)		(5.17.) Second third of the semester ends
12	2021-05-18 2021-05-24	Shear and Diagonal Tension (Design for shear)		(5.19.) Buddha`s Birthday
13	2021-05-25 2021-05-31	Serviceability		
14	2021-06-01 2021-06-07	Torsion (Torsional stress and strength)		(6.6.) Memorial Day (6.7. - 6.18.) Self-study and Final Examinations
15	2021-06-08 2021-06-14	Final Exam		(6.7. - 6.18.) Self-study and Final Examinations
16	2021-06-15 2021-06-18	Final Exam		(6.7. - 6.18.) Self-study and Final Examinations

* Changes in Management of Academic Semester
During the midterm examinations (2021.4.19. - 4.23.) and final examinations (2021.6.7. - 6.8.) period, classes or self-study should be continued unless there is an exam scheduled during the week.
* According to the University regulation section 57-2, students with disabilities can request special support related to attendance, lectures, assignments, or exams by contacting the course professor at the beginning of semester.Upon request, students can receive such support from the course professor or from the Center for Students with Disabilities(OSD). The following are examples of types of support available in the lectures, assignments, and exams:
(However, actual support may vary depending on the course.)
[Lecture]
- Visual Impairment: alternative, braille, enlarged reading materials, note-taker
- Physical Impairment: alternative reading materials, access to classroom, note-taker, assigned seat
- Hearing Impairment: note-taker/stenographer, recording lecture
- Intellectual Disability/Autism: note-taker, study mentor
[Assignments and Exam]
- Visual, Physical, Hearing Impairment: extra days for submission, alternative type of assignment, extended exam time, alternative type of exam, arranging separate exam room, and proctors, note-taker
- Intellectual Disability/Autism: personalized assignments, alternative type of evaluation