

CEE3422-01 (2ND SEMESTER, 2020)



Created Date	2020-07-15 17:19:31	Last-Modified	2020-08-27 15:05:46
Course Title	RIVER ENGINEERING	Credit	3
Location	Realtime online lecture/EngHA401	Time	Tue2/Thu,3
Instructor	CHOI SUNG-UK	Department	공과대학 건설환경공학과
Office	N305 (Engineering Bldg. 1)	Telephone	02-2123-2797
e-mail & Office Hour	schoi@yonsei.ac.kr		

Core Competencies	공학기초능력	수리공학적사고	창의적융합능력
	50	25	25
Target Students	Seniors in Civil & Environmental Engineering 건설환경공학과 4학년		
Course Description & Goals	River Engineering offers advanced issues on water resources-related subject. Students are required to use knowledge acquired in elementary fluid mechanics, hydraulics, and hydrology. As for fundamental issues, river morphology, streamflow measurements, open-channel hydraulics, water quality issues, and sediment transport are introduced. For engineering issues, general introduction, investigation of rivers, planning, in-stream structures, and urban streams are dealt. It is intended that students learn general features of rivers, role of river engineering, and how to manage rivers for both nature and human.		
Prerequisite	elementary fluid mechanics/기초유체역학		
Course Requirements	Basic principles and various examples are provided to bring out the engineering solution to numerous problems in river engineering. 기본 이론 강의와 사례 분석을 통하여 하천 문제의 공학적 해결 방안을 강구한다.		
Grading Policy(Absolute)	Midterm/중간시험 1회 40% Final/기말시험 1회 40% Homework Assignments/보고서 20%		
Texts & References	Lecture Note/강의노트		
Instructor's Profile	Professor Department of Civil & Environmental Engineering Ph: 2123-2797		
TA's Name & Contact Information	Choi, Seongwook csu122@hotmail.com 010-7121-2209		
Syllabus in English	"River Engineering" is a course offered to senior students in the department of Civil & Environmental Engineering. The basic knowledge of elementary fluid mechanics, hydraulics, and hydrology is applied to engineering problems related with river. Engineering principles on river improvement and river development will be introduced. Also, open-channel flow theory and mechanics of pollutant and sediment transports will also be covered.		

Week	Period	Weekly Topic & Contents	Course Material Range & Assignments	Reference
1	2020-09-01 2020-09-07	Introduction to the Course	Lecture Note: River Hydraulics and Textbook: River Engineering	(9.1.) Fall semester classes begin (9.3. - 9.7.) Course add and drop period
2	2020-09-08 2020-09-14	Introduction to River Engineering	Chapter 1, Lecture Note	
3	2020-09-15 2020-09-21	River Morphology	Chapter 2, Lecture Note	
4	2020-09-22 2020-09-28	Streamflow Measurements	Chapter 3, Lecture Note	
5	2020-09-29 2020-10-05	Open-Channel Hydraulics	Chapter 4, Lecture Note	(9.30. - 10.2.) Chuseok Holiday (10.3.) National Foundation Day
6	2020-10-06 2020-10-12	Sediment Transport	Chapter 5, Lecture Note	(10.6. - 10.8.) Course withdrawal period (10.7.) First third of the semester ends

(10.9.) Hangul Proclamation Day

7	2020-10-13 2020-10-19	Environmental Hydraulics	Chapter 6, Lecture Note	
8	2020-10-20 2020-10-26	Midterm Exam		(10.20. - 10.26.) Midterm Examinations
9	2020-10-27 2020-11-02	Stream Data 1	Chapter 2, Textbook	
10	2020-11-03 2020-11-09	Stream Data 2	Chapter 2, Textbook	
11	2020-11-10 2020-11-16	Planning 1	Chapter 3, Textbook	(11.16.) Second third of the semester ends
12	2020-11-17 2020-11-23	Planning 2	Chapter 3, Textbook	
13	2020-11-24 2020-11-30	Instream Structures 1	Chapter 4, Textbook	
14	2020-12-01 2020-12-07	Instream Structures 2	Chapter 4, Textbook	
15	2020-12-08 2020-12-14	Urban Streams	Chapter 5, Textbook	(12.8. - 12.21.) Self-study and Final Examinations
16	2020-12-15 2020-12-21	Fina Exam		(12.8. - 12.21.) 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

