2020년도 1학기 자료구조및실습 수업계획서

교과목명 Course Title	(국문) 자료구조및실습	(영문) Data Structure and Lab

담당교수(소속) Lecturer	최유경 (스마트기기공학전공)	학수번호/구분/학점 (Course No. /)	009952/전공필수/4학점
전화(연구실/HP) Contact No.	02-6935-2671	강의시간/강의실 (Class Hour/Venue)	Mon/Wed 13:30-15:00, Wed16:30-18:30
선수과목 (Course Prerequisite)	C Programmingand Lab, Advanced C Programmingand Lab	수강대상 (Target Student)	Undergraduate Students in School of Intelligent Mechatronics Engineering
E-mail (E-mail Address)	ykchoi@sejong.ac.kr	연구실/Office Hour (Office/Office Hour)	(센601) Please, email me.

교과목표 (Objectives)	1) Understanding basic concepts of data structure 2) Learning how to design and implement data structure 3) Understanding various abstract data structure used in programming 4) Implementing data structure in C (programming practice)
핵심역량 (Competencies related to this course)	☑ 논리비판적사고 (Logical and Critical Thinking) ☐ 창의융합적사고 (Creative and Convergent Thinking) ☐ 자기관리 (Self-management Competency) ☑ 문제해결 (Problem Solving Competency) ☐ 소통 (Communication Competency) ☐ 글로벌 (Global Competency) ☐ 공동체의식 (Community Competency)
이번 강의의 개선을 위한 개선계획 CQI (Continuous Quality Improvement Plan)	- 챕터별 실습이 마무리 되면, 모범답안을 공개하여 자기주도적 학습에 도움일 줄 예정 - OJ 모니터링을 통해 학생별 실습 및 과제의 어려워 하는 부분들을 원포인트 도움을 줄 예정
교 재 (Text book)	Textbook: 데이터구조 원리와 응용, 국형준 저, 21세기사 (구) 데이터구조-문제해결중심으로, 국형준 저, 교보문고 Reference : C언어로 쉽게 풀어쓴 자료구조, 천인국 저, 생능출판사 C로 쓴 자료구조론, 이석호 역, 교보문고 C로 배우는 쉬운 자료구조, 이지영 저, 한빛미디어
과제도서 (Assignment book)	If you find it difficult to implement in the C programming, I encourage you to read reference books.
과제물 (Assignment)	Programming Assignment (in C programming) Assignment 1: Recursion Assignment 2: Array Assignment 3: List Assignment 4: Stack or Queue Assignment 5: Tree
학업성취 평가방법 (Course Grading)	[상대평가] 중간고사(%) : 30, 기말고사(%) : 35, 수시평가및과제(%) : 25, 출석(%) : 10,

주별 교과내용 (교과목명 : 자료구조및실습)

주 (Week)	교 수 내 용 (Course Contents)	수업형태 및 활용기자재 (Etc.)	비 고
1	Introduction and C language Review	Lecture and Lab	
2	1. Algorithm Analysis	Lecture and Lab	
3	2. Recursion	Lecture and Lab	Assignment 1
4	3. Basic Data Structure	Lecture and Lab	
5	4. List (1)	Lecture and Lab	Assignment 2
6	4. List (2)	Lecture and Lab	
7	5. Set	Lecture and Lab	Assignment 3
8	Midterm Exam	Exam	

주별 교과내용 (교과목명 : 자료구조및실습)

주 (Week)	교 수 내 용 (Course Contents)	수업형태 및 활용기자재 (Etc.)	비 고
9	6. Stack (1)	Lecture and Lab	
10	6. Stack (2)	Lecture and Lab	
11	7. Queue	Lecture and Lab	Assignment 4
12	8. Tree (1)	Lecture and Lab	
13	8. Tree (2)	Lecture and Lab	Assignment 5
14	8. Tree (3)	Lecture and Lab	
15	9. Disjoint Set	Lecture and Lab	
16	Final Exam	Exam	

	특별한 지원이 필요한 경우(장애학생 등) 학기 첫 주에 담당교수와의 면담을 통해 출석, 강의, 과제 및 시험 등에 관한 교수학습지원 사항을 요청할 수 있음. Students who require special assistance (including special needs students) may contact their professors during the first week of the semester to discuss issues related to attendance, lectures, assignments and exams and request learning assistance.
추 가 안내사항1 (Additional Guide1)	0) Lecture sites - Do no use Blackboard - https://github.com/sejongresearch/2020.Spring.DataStructure 1) Lesson method - Lecture (3 hours per week): lecture class focusing on textbook - Lab (2 hours per week): Implement data structure learned in the lecture class 2) All lectures, exercises, and assignments are follow the contents of the main textbook. 3) Exercises and assignments in C programming 4) Assignment and examination - Assignment will be conducted 5 times by the university's guidelines - Exam will be written by handwriting and coding (practical) 5) Attendance: If the attendance is 1/4 or more absent from the FA
추 가 안내사항2 (Additional Guide2)	1) I highly recommend reviewing C programming before opening class. - Array, pointer, structure, and function are essential for data structure 2) Be sure to attend the opening class - I will explain the outline and direction of lecture, how to submit the assignment.