강의계획서(Syllabus)

[1] 기본 정보(Basic Information)

■강의 정보(Course Information)

개설년도/학기 (Year/Semester)	2019 / 2		개설 캠퍼스 (Campus)	서울(Seoul Campus)	
교과목번호 (Course No.)	49156		분반번호 (Class No.)	01	학점 (Credit)	3
교과목명 (Course Title)	객체지향프로그래밍 (OBJECT-ORIENTED PROGRAMMING)		강의시간/강의실 (Time/Room)	310관 726호 <강의실> 월2 / 수 1,2(310관 726호 <강의실> MON2 / WED1,2)	
이수구분 (Course Classification)	전공(Major)		과목구분 (Lecture Type)	단독강의(Lone-teaching course)	
강의유형 (Course Type)	이론(Theoretical course)		원어강의 여부 (Medium of Instruction)	영어A(ENGLISH A)	
대학 자체 인증 여부 (Accreditation)			공학교육인증 여부 (Accreditation of Engineering Education)	공학주제(Engineering subject-related course)	
개설대학 (College)	소프트웨어대학(College of Software)		개설학과(부) (Department)	소프트웨어대학 소프트웨어학부 (School of Computer Science and Engineering)	
e-class 활용여부 (Usage of e-class)	Yes		유연학기		

■교수자 정보(Instructor Information)

교수명 (Name)	손봉수(Bong-Soo Sohn)	소속 (Department)	소프트웨어학부(School of Computer Science and Engineering)
연구실전화번호 (Office Phone No.)	02-820-5843	연락처 (Contact No.)	820-5843
E-mail 주소 (E-mail)	bongbong@cau.ac.kr	학과전화번호 (Department Phone No.)	820-5301
상담가능시간 (Office Hour)	Tuesday 2pm-3pm	연구실위치 (Office Location)	310-738
홈페이지 (Course Web-site)	http://cau.ac.kr/~bongbong/oop19		

[2] 학습 목표/성과(Learning Objectives/Outcomes)

■과목 설명(Course Description)

In this course, we learn and practice the concepts of Object-Oriented Programming (OOP) such as encapsulation (data abstraction), inheritance and polymorphism using C++ programming language. We apply the object-oriented (OO) concept to real programming and improve the ability of using advanced features of C++. This course also covers object oriented modeling using UML(Unified Modeling Language).

■선수과목 및 공통필수과목(Prerequisites and Co-requisites)

■학습 목표(Learning Objectives)

The main goals of this course are (i) to understand the concepts of object oriented programming (OOP) and improve the ability of designing and developing a "good" software based on the OO concepts. (ii) practice object oriented modeling using UML(Unified Modeling Language) (iii) to improve the ability of utilizing advanced OO features of C++ programming language.

■학습 성과(Learning Outcomes)

Tool Utilization (20%), Data analysis and system design through OOP programming projects (60%), Communication such as teamwork skill through team (size: 4~6 students) projects (20%),

[3] 강의 진행 정보(Course Methods)

■강의 진행 방식(Teaching and Learning Methods)

강의 진행 방식(Teaching and Learning Methods)	추가 설명(Additional Description)
강의(Lecture)	Powerpoint lecture note
개인프로젝트(Individual)	Individual programming projects
그룹프로젝트(Group)	Team project
개인발표(Individual)	presentation on result of team project

■과제(Assignments)

과제(Assignments)	횟수(No.)	과제 설명(내용, 양식, 분량 등)(Assignments Description)
개인프로젝트(Individual)	2	class design and implementation of object-oriented programs
그룹프로젝트(Group)	2	performing all steps (problem definition/analysis/design/implementation/documentation/presentation) of object-oriented software development

■수업 자료(Textbooks, Reading, and other Materials)

수업 자료 (Textbook/Reference)	제목(Title)	저자(Author)	출판일/게재일 (Year of Publication/etc)	출판사/학회지 (Publisher/Name of Journal)	판차사항/권호정보(No. of Edition)
참고도서(Reference)	An Introduction to Object-Oriented Programming	T. Budd			

[4] 학습 평가 방법(Student Assessment)

평가 항목(Assessment Item)	평가 비율(%)(Assessment Ratio)	추가 설명(Additional Description)
중간시험(Mid-term Exam)	35	
기말시험(Final Exam)	35	
과제(Assignment)	25	There will be two individual programming projects and two team-based projects
출결(Attendance)	5	You may get F grade if you miss 1/4 or more of whole classes.

[5] 수업 일정(Course Schedule)

주(Week)	강사명 (Instructor)	수업주제 및 내용(Topic & Content)	학습과제 (Student Assignment)	추가설명 및 교수과제 (Additional Description & Instructor Assignment)
1	Bong-Soo Sohn	Course Overview, C++ Introduction		
2	Bong-Soo Sohn	C++ Introduction, Introduction to OOP		
3	Bong-Soo Sohn	Data Abstraction	Project 1 announcement	
4	Bong-Soo Sohn	Class (Basics)		
5	Bong-Soo Sohn	Class (advanced)	Project 2 announcement	
6	Bong-Soo Sohn	Inheritance		
7	Bong-Soo Sohn	Polymorphism		
8	Bong-Soo Sohn	Midterm Exam		
9	Bong-Soo Sohn	Polymorphism (case study: bank account)		
10	Bong-Soo Sohn	Template	Project 3 announcement	
11	Bong-Soo Sohn	STL(Standard Template Library) Introduction		
12	Bong-Soo Sohn	STL(Standard Template Library): Containers, Iterators	Project 4 announcement	
13	Bong-Soo Sohn	STL(Standard Template Library) Algorithm		
14	Bong-Soo Sohn	UML Introduction		
15	Bong-Soo Sohn	Team Project Presentation		
16	Bong-Soo Sohn	Final Exam		

[6] 수강생 학습 안내 사항(Guide to Learning)

We assume that students have basic knowledge and proficiency of C/JAVA programming language and Data Structures for successful completion of this class.
(This is advanced-level programming course. Do not register this course if you did not take beginner-level C/JAVA programming and "Data Structures" courses.)
Significant amount of C++ programming assignment will be assigned to students. Therefore, students should prepare for the assignments.

기출문제(Previous Exam Samples)

과목 홈페이지

<추가 자료 다운로드>(<Download Additional Sample>)

첨부 자료가 없습니다.

공학 교육 인증용 설계교과목(Engineering Education)

프로그램 학습 성과(Learning Outcomes)

도구활용 : 20 **설계능력** : 60 **의사전달** : 20

■설계 과목 제목(Title)

Object Oriented Programming

■설계 과제 목표(Objective)

By practicing the entire process of object oriented software development as team project (problem definition/analysis,design/implementation/test/documentation/presentation), we acquire the concept of object oriented programming and improve application ability and team skills.

■설계 제한 사항(Restrictions)

The final team project should be designed using UML(Unified Modeling Language) tool and developed using object oriented programming language such as C++ or JAVA.

■설계 평가 방법(Assessment Method)

The professor score the result of projects by testing the execution of the project results and listening to the presentation. Following items will be considered for grading. 1. appropriateness/creativity of the problem definition : 33.3%, 2. completeness of SW implementation : 33.3%, 3. report/presentation quality : 33.4%

※시험 부정 행위 적발 시 중앙대학교 학칙 제71조 【징계】및 학사운영규정 I제 6장 제 47조 【시험 부정행위자의 처벌 】에 따라 징계 처분 대상이 될 수 있습니다.
(※In pursuant to the Article 71 “Discipline” of the Chung-Ang University Regulations, and Article 47 “Punishment for Cheating during Examination” under Chapter 6 of the Academic Affairs Management Rules, any student caught engaging in academic misconduct during an exam will be subject to disciplinary action.)

본 수업을 수강하는 장애학생은 장애유형 및 정도에 따라 정당한 편의지원을 받을 수 있습니다. 이와 관련하여 아래와 같은 편의제공이 필요한 경우, 장애학생지원센터에 문의해 주시기 바랍니다.

1. **시각장애** : **점자, 확대자료, 파일자료, 대필도우미 배치, 평가방법 조정 등**
2. **청각장애** : **대필도우미, 속기사 배치, 평가방법 조정 등**
3. **지체/뇌병변장애** : **휠체어접근이 가능한 강의실 제공, 대필도우미 배치, 평가방법 조정 등**
4. **기타 정신적 장애, 건강장애의 경우 장애학생지원센터 상담 후 지원**

※**문의처** : 02-820-6577~9(**서울캠퍼스**), 031-670-4816(**안성캠퍼스**)
장애학생지원센터 카카오톡 플러스친구(중앙대학교 장애학생지원센터 또는 cauable)

In this class, students with disabilities are eligible for reasonable accommodations depending on the type and severity of disability. If you wish to receive accommodations listed below, please contact the Support Center for Students with Disabilities.

1. Visual Impairment: Braille, large print, electronic class materials, volunteer note-taker, adjustments in assessment practices, etc.
2. Hearing Impairment: Volunteer note-taker, stenographer, adjustments in assessment practices, etc.
3. Physical Disabilities/Brain Lesions: Classrooms with wheelchair access, volunteer note-taker, adjustments in assessment practices, etc.
4. Accommodations for students with other psychiatric disabilities or health impairments can be arranged through the Support Center for Students with Disabilities after consultation.

※Inquiry: 02-820-6577~9 (Seoul Campus), 031-670-4816 (Anseong Campus)
- KakaoTalk Plus Friend ID: @cauable