2018학년도 1학기 강의계획안 (Syllabus)

교과목명 Course Title	Fundamental design in climate and energy systems engineering (기후 · 에너지기초설계)	학수번호-분반 Course No.	38518-01
개설전공 Department/Major	Climate and Energy Systems Engineering	학점/시간 Credit/Hours	2.0 / 3.0
수업시간/강의실 Class Time/ Classroom	Monday 2 : 09:30 ~ 10:45, A125 Thursday 3 : 11:00 ~ 12:15, A125		
담당교원 Instructor	Name : Baehyun Min (민 배 현)	Department(소속): Climate & Energy Systems Engineering	
	E-mail: bhmin01@ewha.ac.kr	Phone: 02-3277-6946	
면담시간/장소 Office Hours/ Office Location	Hours: Please make an appointment via email or cyber campus Location: JinSunMiGwan Office #237 (진선미관 237호)		

Ⅰ. 교과목 정보 Course Overview

1. 교과목 개요 Course Description

This class aims at cultivating women engineers by providing methodologies to solve climate and energy systems engineering problems in a creative and practical manner.

2. 선수학습사항 Prerequisites

N/A

3. 강의방식 Course Format

강의 Lecture	발표/토론 Discussion/Presentation	실험/실습 Experiment/Practicum	현장실습 Field Study	기타 Other
80%		20%		-

(위 항목은 실제 강의방식에 맞추어 변경 가능합니다.)

강의 진행 방식 설명 (explanation of course format): Powerpoint & Writing on the Blackboard

4. 교과목표 Course Objectives

This class aims at cultivating women engineers who can solve real-world problems related to climate and energy systems using commerical softwares such as MS-Office and Matlab.

5. 학습평가방식 Evaluation System

중간고사 Midterm Exam	기말고사 Final Exam	발표 Presentation	리포트 Report	과제물 Assignments	참여도 Participation	기타 Others
35%	35%	%	%	20%	5%	5%

(위 항목은 실제 학습평가방식에 맞추어 변경 가능합니다.)

You are expected to attend all class sessions. If you have any situation which prevents you from attending class (e.g., illness, family or personal issues, etc.), please let me know your absence via email or message at the Cyber Campus before class. Two absences will not significantly affect your grade. If you miss three days or more, however, your attendance grade will drop accordingly. Three late arrival to class is equivalent to one absence. More than six absences will force you to be given F grade by the university regulation. You do not need to submit a weekly assignment. Note that your achievement is assessed based on three exams.

Ⅱ. 교재 및 참고문헌 Course Materials and Additional Readings

1. 주교재 Required Materials

Lecture materials are to be provided before each class time.

2. 부교재 Supplementary Materials

N/A

3. 참고문헌 Optional Additional Readings

N/A

Ⅲ. 수업운영규정 Course Policies

* For laboratory courses, all students are required to complete lab safety training.

IV. 주차별 강의계획 Course Schedule (최소 15주차 강의)

Week	Date	Topics & Class Materials, Assignments (주요강의내용 및 자료, 과제)
1주차	05 Mar. (Mon.)	Starting with Matlab
	08 Mar. (Thu.)	Starting with Matlab
2주차	12 Mar. (Mon.)	Creating Data Arrays
	15 Mar. (Thu.)	Creating Data Arrays
3주차	19 Mar. (Mon.)	Mathematical Operations with Arrays
	22 Mar. (Thu.)	Mathematical Operations with Arrays
4주차	26 Mar. (Mon.)	Exercise I - CESE Data Analysis
	29 Mar. (Thu.)	Exercise I - CESE Data Analysis
5주차	02 Apr. (Mon.)	Script files and mapping data
	05 Oct. (Thu.)	Script files and mapping data
6주차	09 Apr. (Mon.)	Two-dimensional plots
	12 Apr. (Thu.)	Two-dimensional plots
7주차	16 Apr. (Mon.)	Exercise II - CESE Data Analysis
	19 Apr. (Thu.)	Exercise II - CESE Data Analysis
8주차	23 Apr. (Mon.)	Midterm Exam
	26 Apr. (Thu.)	Midterm Exam (Solution)
9주차	30 Apr. (Mon.)	Programming in Matlab
	03 May (Thu.)	Programming in Matlab
10주차	07 May (Mon.)	User-defined functions
	10 May (Thu.)	User-defined functions
11주차	14 May (Mon.)	Polynomials, Curve fitting, and interpolation
	17 May (Thu.)	Polynomials, Curve fitting, and interpolation
12주차	21 May (Mon.)	Three-dimensional plots
	24 May (Thu.)	Three-dimensional plots
13주차	28 May (Mon.)	Exercise III - CESE Data Analysis
	31 May (Thu.)	Exercise III - CESE Data Analysis
14주차	04 Jun. (Mon.)	Symbolic Math
	07 Jun. (Thu.)	Symbolic Math
15주차	11 Jun. (Mon.)	Final Exam
	14 Jun. (Thu.)	Final Exam (Solution)
16주차		
보강1 (필요시) Makeup Classes	(요일, 장소)	TBD
보강2 (필요시) Makeup Classes	(요일, 장소)	TBD

V. 참고사항 Special Accommodations

* 학칙 제57조에 의거하여 장애학생은 학기 첫 주에 교과목 담당교수와의 면담을 통해 출석, 강의, 과제 및 시험에 관한 교수학습지원 사항을 요청할 수 있으며 요청된 사항에 대해 담당교수 또는 장애학생지원센터를 통해 지원받을 수 있습니다.

According to the University regulation #57, students with disabilities can request special accommodation related to attendance, lectures, assignments, and/or tests by contacting the course professor at the beginning of semester. Based on the nature of the students' requests, students can receive support for such accommodations from the course professor and/or from the Support Center for Students with Disabilities (SCSD).

*** 강의계획안의 내용은 추후 변경될 수 있습니다.**

* The contents of this syllabus are not final—they may be updated.