

# 2025-Spring Understanding Climate Change (EVSE202-01) The course syllabus

## 1. Course Information

Course No.	EVSE202	Section	01	Credit	3.00
Category	Free elective	Course Type		prerequisites	
Postechian Core Competence	<input type="checkbox"/> Interpersonal Relationship <input type="checkbox"/> Global Citizenship <input type="checkbox"/> Knowledge Research <input type="checkbox"/> Digital Literacy <input type="checkbox"/> Self Management <input type="checkbox"/> Creative Convergence				
Hours	TUE, THU / 15:30 ~ 16:45 / Environ Bldg[208]Seminar Room   TUE, THU / 15:30 ~ 16:45 / Environ Bldg[208]Seminar Room			Grading Scale	G

## 2. Instructor Information

	Name	Min Seung Ki	Department	Div. of Environmental Science & Eng.
	Email address	skmin@postech.ac.kr	Homepage	<a href="http://climatechange.postech.ac.kr/">http://climatechange.postech.ac.kr/</a>
	Office	기후변화연구실	Office Phone	279-2286
	Office Hours			

## 3. Course Objectives

To understand scientific backgrounds of climate change and the importance of interdisciplinary researches to solve the upcoming related issues. To introduce recent important topics including weather and climate extremes, ocean acidification, and carbon cycle.

## 4. Prerequisites & require

None.

## 5. Grading

Mid-term exam (40%)  
Final exam (40%)  
Homework / Attendance (20%)

## 6. Course Materials

Title	Author	Publisher	Publication Year/Edition	ISBN
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## 7. Course References

IPCC Working Group I Sixth Assessment Report:  
<https://www.ipcc.ch/report/sixth-assessment-report-working-group-i/>

## 8. Course Plan

- A. Week 1-8 (Prof. Kitack Lee)
- Origin of the Earth
  - Habitable planet Earth
  - Complex Earth
  - Greenhouse effect
  - Carbon and nitrogen cycles
  - Gas exchange processes
  - Ocean processes
  - Fossil fuel CO<sub>2</sub> in the oceans
- B. Week 9-16 (Prof. Seung-Ki Min)
- Observed climate change
  - Future climate change
  - Climate modeling and exercise
  - Detection and attribution
  - Tropical expansion and water cycle
  - Global warming and extreme weather events
  - Paris Agreement and climate change impacts

## 9. Course Operation

Two professors (Seung-Ki Min and Kitack Lee) provide lectures for eight weeks each.

## 10. How to Teach & Remark

This is one of core courses for the Environmental Convergence Minor (환경융합부전공). Details about the Minor program : <http://dese.postech.ac.kr/board/view.do?iboardgroupseq=54&iboardmanagerseq=258>

## 11. Supports for Students with a Disability

- Taking Course: interpreting services (for hearing impairment), Mobility and preferential seating assistances (for developmental disability), Note taking(for all kinds of disabilities) and etc.
- Taking Exam: Extended exam period (for all kinds of disabilities, if needed), Magnified exam papers (for sight disability), and etc.
- Please contact Center for Students with Disabilities (279-2434) for additional assistance