Course	**Course Name**	Disaster Risk Management and Climate Change
	Course Code	DK184713
	Credit	3
	Semester	VIII

Description of Course	
Disaster Risk Management and Climate Change is one of the elective courses that can be taken by students who have passed the preparatory phase in the semester. In this course, students learn about the theoretical concepts of risk management, the concept of vulnerability, the concept of threat, the concept of adaptation, the concept of resilience of cities and regions, as well as concepts related to climate change. Various concepts are expected to be understood by students as a consideration in the process of regional and city planning. In addition, students also expected to apply techniques related to disaster risk management.	
Learning Outcomes	
Knowledge	1.1 Mastering the theoretical concept of urban and regional planning in the aspects of urban studies, regional studies, spatial science, data science & computer application, socio-political, environmental management, built environment design, infrastructure and transportation system, coastal studies, management, economics. 1.2 Mastering the techniques and processes of urban and regional planning in qualitative, quantitative, spatial modeling (geographic information systems) and presentation techniques. 1.3 Mastering the methods of spatial/aspatial planning in decision-making.
Specific Skill	2.1 Able to compile the planning concept and direction of the plan through the study of strategic issues in the context of urban, regional, and coastal planning problems with understanding through observation and utilization of the data of physical/spatial, social, economic and environmental.

	2.2 Able to utilize ICT in the management of data to produce information that is easily understood by the public and the decision makers. 2.3 Able to describe the spatial characteristics of urban, regional and coastal area through the linkage analysis of spatial and aspatial aspects so that provide the information as the basis for drawing up planning model 2.4 Able to compile an alternative spatial model through a qualitative and quantitative approach in the form of scenarios setting the pattern of space and structure of urban, regional, and coastal area as well as propose the appropriate solutions 2.5 Able to produce creative, innovative, sustainable, and accommodating public interest plans whose results are reviewed on the rules and theories of planning and communicating them visually, verbally and in writing so that can be accounted for academically.
General Skill	3.1 Able to apply logical, critical, systematic, and innovative thinking in the context of development or implementation of science and technology by considering and applying the suitable value of humanities in accordance with their expertise 3.2 Able to demonstrate independent, quality and scalable performance 3.5 Able to take an appropriate decision in the context of problems solving in the field of their expertise based on the results of the information and data analyze 3.9 Able to do documenting, storing, securing, and finding back the data to ensure the validity and prevent plagiarism
Course Learning Outcomes	
1. Students are able to apply the concepts and theories of disaster risk management and Climate change within 2. Students are able to conduct disaster risk management simulations	

3. Students are able to apply the concepts and theories of city and regional resilience in the preparation of contingency plans and climate change adaptation
4. Students are able to carry out analysis and projection of greenhouse gas emissions
5. Students are able to formulate disaster risk management and climate change
6. Students are able to communicate the concept and formulation of disaster risk management and climate change in visual, verbal, and written based on ICT

Main Subject

a. Theory and Management's Concept
b. Theory and Disaster Risk's Concept
c. Theory and Resilience City's Concept
d. Disaster Risk, Hazard, Vulnerability, Capacity Characteristics;
e. Disaster Risk, Hazard, Vulnerability, Capacity Analysis;
f. Disaster Risk Management and Climate Change Formulation

Prerequisite

References

1. Bankoff, G., Frerks, G., & Hilhorst, D. (Ed.). (2004). Mapping Vulnerbility: Disaster, Development and People. USA and UK: Earthscan.
2. Blaikie, P., Cannon, T., Davis, I., & Wisner, B. (1994). At Risk: Natural Hazards, People's Vulnerability, and Disasters. London: Routledge.
3. Brikmann. J., & Wisner. B. (2006). Measuring the Un-Measurable: The Challenge of Vulnerability. SOURCE (Study Of the University Research, Consel, Education – Publication Series of UNU-EHS).
4. Burton, I., Kates, R.W., & White, G.F. (1978). The Environment as Hazards. Oxford University Press, New York.
5. Cannon, T. (2008). Reducing People's Vulnerability to Natural Hazards. Research Paper No. 2008/34, UNU Wider.
6. Handmer, J., & Dovers, S. (2007). Handbook of Disaster and Emergency Policies and Institutions. UK and USA: Earthscan.
7. Van Westen, CJ., Alkema, D., Damen MCJ., Kerle, N., Kingma, N. (2011). Multi-hazard risk assessment - Risk City Exercise Book. ITC-University of Twente.