Dasar Klimatologi

Course Brief Description:	Student will be able to demonstrate global understanding of climate, its components and be able to classify climate. This course explain climate in global, Characteristics of climate. Explain component of climate including process, measurement related parameter for precipitation, evaporation, transpiration, Temperature of soil and atmosphere, Radiation and Atmospheric Moisture and Atmospheric Pressure. Climatic classification of a region Using Schmith-Fergusson, Koppen dan Oldeman Classification Methods.
Course Learning Objectives:	[1] Student will be able to demonstrate global understanding of climate, its components. [2] Students will be able to classify climate of a region
Related Expected Learning Outcomes (ELOs):	• ELO-6: Manage and utilize agricultural resources effectively, efficiently, and sustainably • ELO-8: Demonstrate capacity in operating agricultural engineering related business either as producer or service provider.
Teaching Method	• Lecture and in-depth discussion • Independent assignment.
Grading Policy	• Quiz and Assignment : 20% • Exam : 80%
Reference	Robert V. Rohli & Anthony J. Vega, 2018. Climatology 4th Edition. Jones & Bartlett Learning, USA
Lecturer Name	• Dr. Ir. Mahmud Achmad, MP • Dr. Ir. Daniel Useng, M.Eng.Sc • Dr. Suhardi, STP., MP • Samsuar, STP., M.Si

Course Outline

Lecture	Topic:	
1	Introduction: Climate & Weather	
2	Atmosphere	Assignment 1
3	Global Climate and Agriculture	Quiz 1
4	Precipitation: Processes & Types	
5	Precipitation: Measurement & Analysis	Assignment 2
6	Solar Radiation	Quiz 2
7	Energy Transfer and Energy Balance	
8	**Mid Test**	

Lecture	Topic:	
9	Temperature of Atmosphere and Soil	
10	Atmospheric Humidity (Relative and Absolute)	Quiz 3
11	Evaporation, Transpiration & ETP	Assignment 3
12	Atmospheric Pressure	
13	Winds: Processes & Types	Quiz 4
14	Climatic Classification: Smith-Ferguson, Koppen & Oldeman: Theory	Assignment 4
15	Climatic Classification: Smith-Ferguson, Koppen & Oldeman: Practices	
16	**Final Exam**	