

## MODULE HANDBOOK

## System and Process of Physical Geography

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Module designation	System and Process of Physical Geography
Semester(s) in which the module is taught	Second (2nd) Semester
Person responsible for the module	Dr. Eko Kusratmoko, M.S.
Lecturer	1. Dr. Eko Kusratmoko, M.S.
Language	Bahasa Indonesia
Relation to curriculum	Compulsory
Teaching methods	Student-centered Learning and combination with Cooperative Learning
Workload (incl. contact hours, self- study hours)	<ol> <li>Lectures: 200 minutes per week per semester</li> <li>Assignment: 240 minutes per week per semester</li> <li>Independent study: 240 minutes per week per semester</li> <li>Minutes x weeks x semester: 680 x 14 x 1 = 9520 minutes per semester</li> <li>Midterm Examination: 100 minutes per semester</li> <li>Final Examination: 100 minutes per semester</li> <li>Total workload per semester: 9720 minutes / 162 hours</li> </ol>
Credit points	4 (Four)
Required and recommended pre- requisites for joining the module	<ol> <li>Thinking Geographically</li> <li>Principles and Perspective in Physical Geography</li> <li>Physical Geography Lab 1</li> </ol>
Module objectives/intended learn- ing outcomes	Students are able to analyze weather conditions, climate and hydrology in an area based on the basic principles of meteorological and hydrological processes
Content	<ol> <li>Climate and Hydrological Systems and Its Relevance in Geography</li> <li>Concepts and Process of Forming Weather/Climate Components</li> <li>Concepts and Process of Hydrological System Components</li> <li>Climate Classification with the Koppen, Oldemann, and Mohr Method</li> <li>The Relationship between Weather/Climate Components and Hydrological Components</li> <li>Issues Related to Weather/Climate Aspects and Hydrological Aspects</li> </ol>
Examination forms	-
Study and examination require- ments	<ol> <li>Group &amp; Presentation Score (10%)</li> <li>Individual Score (35%)</li> <li>Quiz (10%)</li> <li>Midterm Examination (20%)</li> <li>Final Examination (25%)"</li> </ol>

Reading list	Christopherson, Robert W. (2008) Geosystem, Introduction to Physical Geography. 8rd Edition. Prentice Hall Publication, New York.
	Holden, Joseph (eds) (2008): Introduction to Physical Geography and Environment. Pearson Education. London.
	Strahler, A and Z. Merali (2008):Visualizing Physical Geography. John Wiley and Sohn, 3rd Edition, New York.
	Barry, R.G. & R.J. Chorley 1998) Atmosphere, Weather & Climate, Routledge, London
	Raghunat, (2006) Hydrology, Principles, Analysis and Design. New Age Internatinal Publisher. New Dehli, India.
	Davie, T. (2008): Fundamental of Hydrology. Routledge. 2nd Edition.
	André Musy & Christophe Higy (2011) Hydrology, A Science of Nature. Science Publisher
	R.J. Hugget. Fundamentals of Geomorphology. 2nd Edition. 2007. Routledge
	T. Dave & N.W. Quinn. Fundamentals of Hydrology. 2019. Routledge