



MODULE HANDBOOK

Physical Geography Lab 2

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Undergraduate Study Program for Geography
Faculty of Mathematics and Natural Sciences
Universitas Indonesia

Physical Geography Lab 2

Module designation	Physical Geography Lab 2
Semester(s) in which the module is taught	Second (2nd) Semester
Person responsible for the module	Dr. rer.nat. Eko Kusratmoko, M.S.
Lecturer	<ol style="list-style-type: none"> 1. 2. Dr. rer.nat. Eko Kusratmoko, M.S. 3. Kuswantoro, S.Si., M.Sc. 4.
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 style="list-style-type: none"> 1. Lectures: 50 minutes per week per semester 2. Assignment: 60 minutes per week per semester 3. Independent study: 60 minutes per week per semester 4. Minutes x weeks x semester: $170 \times 14 \times 1 = 2380$ minutes per semester 5. Midterm Examination: 100 minutes per semester 6. Final Examination: 100 minutes per semester 7. Total workload per semester: 2580 minutes / 43 hours
Credit points	1 (One)
Required and recommended pre-requisites for joining the module	<ol style="list-style-type: none"> 1. Principles and Perspective in Physical Geography 2. Physical Geography Lab 1
Module objectives/intended learning outcomes	If given weather / climate and hydrological data a student area is able to process and present it in the form of tables and maps. On the basis of available equipment, students are able to measure weather components (temperature, moisture, wind and rainfall) and hydrological components (river discharge / channel and infiltration)
Content	<ol style="list-style-type: none"> 1. Process and Calculation of Weather Data 2. Processing Weather/Climate Data into Climate Data with Basic Statistical Method 3. Processing Wind Data with the Windrose Method 4. Evapotranspirasi 5. Processing Rainfall Data to Determine Hygromines and Seasons 6. Copen Climate Classification 7. Rainfall Mapping 8. River and Infiltration Debit Measurement 9. Processing River Discharge and Rainfall Data with Basic Statistical Method
Examination forms	-
Study and examination requirements	<ol style="list-style-type: none"> 1. Group and Presentation Score (35%) 2. Individual Score (40%) 3. Final Examination (25%)

Reading list	<p>Effendi, Hafni. 2003. Telaah Kualitas Air Bagi Pengelolaan Sumber Daya dan Lingkungan Perairan. Yogyakarta : Kaisius</p> <p>WMO. 2008. Guide to Hydrological Practices Vol. 1 No. 168.</p> <p>WMO. 2011. Guide to Climatological Practices No. 100.</p> <p>Sandy, I Made. 1987. Iklim Regional Indonesia. Jakarta : Departemen Geografi FMIPA UI</p> <p>Soewarno. 1995. Hidrologi: Aplikasi Metode Statistik untuk Analisa Data Jilid 1. Bandung : Nova.</p> <p>Sosrodasono, Suyono & Takeda, Kensaku. 1978. Hidrologi untuk Pengairan. Jakarta : Pradnya Paramita.</p> <p>Triatmodjo, Bambang. 2009. Hidrologi Terapan. Yogyakarta : Beta Offset</p> <p>R.W. Van Bemmelen. The Geology of Indonesia, Vol 1A. 1949 The Hague. Martius Nijhoff.</p> <p>R.A. van Zuidam. Aerial Photo Interpretation in Terrain Analysis and Geomorphologic Mapping. 1985. ITC.</p> <p>S. Wirjohamidjojo & Y.S. Swarimoto. Praktek Meteorologi Pertanian. 2007. Badan Meteorologi dan Geofisika.</p> <p>World Meteorological Organization. Guide to Climatological Practices No. 100. 2011. World Meteorological Organization (WMO).</p> <p>A. Strahler & A. Strahler. Introducing Physical Geography. 2003. John Wiley & Sons.</p> <p>B. Triatmodjo. Hidrologi Terapan. 2010. Beta Offset.</p> <p>D. Noor. Geomorfologi. 2010. Program Studi Teknik Geologi, Universitas Pakuana</p> <p>T. Dave & N.W. Quinn. Fundamentals of Hydrology. 2019. Routledge</p>
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