## **MODULE HANDBOOK**

COSMOGRAPHY							
Module/Course Title		Student Workload	Credits	Semester	Frequency	Duration	
8720202092		2 CU X 16 X 170'=	2 CU / 3.18 ECTS	1 <sup>TH</sup>	ONCE YEAR	1 SEMESTER	
		90,6618					
1	Types of courses LECTURES		Contact hours	Independent Study	Structured Study	Class size	
			(2CU X 1,59	(2CU X 1,59	(2CU X 1,59	MAX 120 STUDENT	
			ECTS)	ECTS)	ECTS)		
			X{(50:170')X	X{(60:170')X	X{(60:170')X		
			28,51	28,51	28,51		
			Workhours=	Workhours=	Workhours=		
			26,64	31,96	31,96		
2	Prerequisites for participation (if applicable)						
3	Program Learning outcomes						
	PLO-2						
	Able to analyze regional characteristics and regionalization (regionalizatio context of resources and disasters based on the principles and approache geography to support sustainable development.					ation) in the aches of	
	PLO-5 Able to demonstrate independent and collaborative performance that produces						
	quality and measurable results						
	Able to demonstrate a responsible attitude towards work in the field of expertise					expertise	
	Course Learning Outcome (CLO)						
	CLO-2 Able to analyze regional characteristics and regionalization (regionalization) in the context of universe resources and disasters based on geographic principles and approaches to support sustainable development CLO-5						

	Able to demonstrate independent and collaborative performance that produces quality and measurable results in calculations and concepts in the study of the universe				
	CLO-11 Demonstrate a responsible attitude towards work in the field of in calculations and				
	concepts in the study of the universe independently				
4	Learning materials 1. Definition of Cosmography				
	2. The universe/universe and all its contents and processes				
	3. The Solar System				
	4. The process of motion of the earth and its influence on life on the earth's surface				
	5. Sun, moon and the process of eclipses				
	6. Date (calendar)				
	7. Paint celestial bodies on the celestial sphere based on the horizon coordinate				
	system, the equator coordinate system, and the ecliptic coordinate system				
5	Teaching methods				
6	Small Group Discussion , Project Base Learning				
0	naper test. Portofolio				
7	This module/course is used in the following study programme/s as well				
•	-				
8	Responsibility for module/course				
9	<ol> <li>Anessudin, Mir. 1999. <i>The Universe</i>. Toronto, Canada : Al-Attique Publisher Inc.</li> <li>MGMP Geografi DKI Jakarta. 1993. <i>Kosmografi.</i> Jakarta: Erlangga</li> <li>Perdana, Sukma., <i>Kosmografi.</i> Surabaya. Unesa Pres</li> </ol>				
	<ol> <li>Simamora, P. 1988. Ilmu Falak (Kosmografi). Jakarta : CV. Pedjuang Bangsa</li> <li>Siswanto, Joko. 2005. Orientasi Kosmologi. Yogyakarta. Gadjah Mada University Press</li> </ol>				
	<ol> <li>Yahya, Harun. 2002. Menyibak Rahasia Alam Semesta. Jakarta : Insan Kamil</li> <li>Matt, Daniel C. 2018. Cosmography: Writing the Universe., University of California Press</li> </ol>				
	8. Gott, J. Richard. 2016. The Cosmic Web: Mysterious Architecture of the Universe. Princeton University Press				