

	Module Description/Course Syllabi Study Programme : Magister of Soil Science Department of Soil Science and Land Resources Faculty of Agriculture Universitas Andalas
1. Course number and name	
MIT 82108 Integrated Watershed Management	
2. Credits and contact hours/Number of ECTS credits allocated	
3 scs (2-1) /3,925	
3. Instructors and course coordinator	
1. Prof. Dr. Ir. Aprisal, MP; 2. Dr.Ir. Adrinal, MS	
4. Text book, title, author, and year	
1. Arsyad, S. (2006). <i>Soil and Water Conservation</i> . IPB Press, Bogor. ISBN: [ISBN]. 2. Asdak, C. (2010). <i>Hydrology and Watershed Management</i> . Gadjah Mada University Press, Yogyakarta. ISBN: [ISBN]. 3. Agassi, M. (1996). <i>Soil Erosion, Conservation, and Rehabilitation</i> . Marcel Dekker Inc., New York. ISBN: [ISBN]. 4. Vijay, S. (1991). <i>Elementary Hydrology</i> . Pearson. ISBN: [ISBN].	
5. Specific course information	
A. Brief description of the content of the course (catalog description)	
In this course, students learn about the definition of watersheds, classifying watershed, watershed characteristics, watershed problems and threats, factors affecting water management, predicting watershed damage, analyzing socio-economic influences and the role of institutions and regulations in watershed management, how to observe and formulate watershed problems, find out the solutions and write down a paper as well as presentations and discussions.	

B. Course Content
Introduction, Watershed as an ecosystem Rainfall and the analyses in a watershed Rainfall Interception by several vegetation, and the measurement Infiltration and water absorption in a watershed, the Model and the calculation Runoff, and the models Evapotranspiration, and the calculation models Erosion, soil erosion prediction model by water MID TERM Exam Hydrograph and the meaning Unit hydrograph, the unit hydrograph models, and Synthetic hydrograph Analyses of soil management and the watershed relationship Application of Logical Frame Work Analyses (LFA) Model in designing integrated watershed Final Exam
C. Semester when the course unit is delivered
Even Semester
D. Mode of delivery (face-to-face, distance learning)
Face to face
6. Intended Learning Outcomes (CPL)
ILO 2 : An ability to classify soil, to evaluate land capability and suitability, as well as to determine the alternative utilization for sustainable agriculture and environment PI 3 : An ability to determine suitable land use management ILO 3 : An ability to use technology in identifying and solving problems of soil, land resource, environment problems independently, eligibly, and accurately PI 3 : An ability to conserve soil for sustainable agriculture and environment
7. Course Learning Outcomes (CPMK) ex. The student will be able to explain the significance of current research about a particular topic.
1. Students will be able to determine suitable land management to reach sustainable agriculture and environment Students will be able to find out the best method to conserve soil problem for sustainable agriculture and environment
8. Learning and teaching methods
Cooperative Learning and Case Base Method
9. Language of instruction
Indonesia and English (English Class)

10. Assessment methods and criteria
Summative Assessment : 1. Tasks : 5% 2. Quiz : 5 % 3. Mid Semester : 25% 4. Final Semester : 25% 5. Practicum :30% 6. Attendance : 5% Formative Assessment: 1. Minutes paper