UNDERGRADUATE PROGRAM **MODULE HANDBOOK**

Module designation	Practicum of Agroclimatology (SSOL1008)
Semester(s) in which the module is taught	2nd Semester
Person responsible for the module	Prof. Dr. Ir. Hairul Basri, M.Sc
Language	Indonesian, English
Relation to curriculum	Compulsory module for Soil Science Department
Teaching methods	Practice, lecture, presentation
Workload (incl. contact hours, self-study hours)	✔ 170 minute of practice per week (field/laboratory 50 minutes; structured learning 60 minutes; 60 minutes self-study)
Credit points	1 SKS = 1.6 ECTS
Required and recommended prerequisites for joining the module	-
Module objectives/intended learning outcomes	✔ Students are understanding and demonstrating proficiency in using meteorological/climatological instruments related to commonly used climate elements in the field of agriculture. ✔ Students can process climate data using various analytical methods relevant to the agricultural sector.
Content	This practice and lecture cover the scope and fundamental concepts of agroclimatology, emphasizing the importance of climate science in agriculture. Topics include the structure of the atmosphere, elements of weather and climate, environmental issues, and climate change. The course also explores the impact of weather and climate on agriculture and plant pest organisms, the application of climate information in crop management, climate classification systems, and the concept of land water balance.
Exams and assessment formats	Paper assignment, Midterm exam, Final exam
Study and examination requirements	✔ Quiz: 10% ✔ Assignment: 20% ✔ Practice: 25% ✔ Final exam: 45%

Reading list	1. Rusmayadi, G. 2019. Agroklimatologi di Era Perubahan Iklim Global. Malang: CV IRDH. 2. Wicaksono, A., dkk. 2023. Pengantar Agroklimatologi. Surakarta: Tagta Media Group. 3. Hatfield, J. L., Sivakumar, M. V., & Prueger, J. H. (Eds.). (2020). Agroclimatology. John Wiley & Sons. 4. Cobon, D. H., Baethgen, W. E., Landman, W., Williams, A., van Garderen, E. A., Johnston, P & Davis, P. (2020). Agroclimatology in grasslands. Agroclimatology: Linking Agricult Prasad, P. V. V., Djanaguiraman, M., Stewart, Z. P., & Ciampitti, I. A. (2020). Agroclimatology of maize, sorghum, and pearl millet. Agroclimatology: linking agriculture to climate, 60, 201-241. ure to Climate, 60, 369-423. 5. Prasad, P. V. V., Djanaguiraman, M., Stewart, Z. P., & Ciampitti, I. A. (2020). Agroclimatology of maize, sorghum, and pearl millet. Agroclimatology: linking agriculture to climate, 60, 201-241