Module designation	Technology of Cereal Crops
Semester(s) in which the module is taught	*7th*
Person responsible for the module	*Prof. Dr. Muhammad Kamal, M.Sc.*
Language	*Indonesian language*
Relation to curriculum	*Elective Course*
Teaching methods	*Lectures (100 minutes)* *Practicum sessions (170 minutes)*
Workload (incl. contact hours, self-study hours)	*Contact hours : 14 weeks x 100 minutes* *Structured learning: 14 weeks x 120 minutes* *Independent study: 14 weeks x 120 minutes* *Practicum sessions: 14 weeks x 170 minutes*
Credit points	*3 (2-1) CP or 4.76 (ECTS)* *((14 weeks x 100 minutes) + (14 weeks x 120 minutes) +* *(14 weeks x 120 minutes) + (14 weeks x 170 minutes)) :* *60 minutes/hour* *= 119 hours : 25 study hours/ECTS* *= 4.76 (ECTS)*
Required and recommended prerequisites for joining the module	-
Module objectives/intended learning outcomes	- *Students are able to apply the basic concepts and principles of cultivation technology and the development of sustainable agriculture technology.* - *Students are able to identify, formulate, solve problems, and apply plant science, plant protection, soil science, socio-economic agriculture, and plant production engineering principles that are oriented towards good agricultural practices (GAP)* - *Students are able to plan, design, implement and develop plant production with the latest and environmentally friendly technology creatively and innovatively.*
Content	*Technology of Cereal Crops is a 3 (2-1) credit course. This course contains studies on: food crops of the grain group (rice, corn, sorghum, and wheat); origin and history of deployment, potential, prospects, problems and development programs; botanical and growing requirements; cultivation techniques, aspects of plant pest and diseases, and post-harvest handling, distribution and marketing of produce*
Examination forms	*oral presentation, essay*

Study and examination requirements	*Participants are evaluated based on their performance in class (lectures) (70%) and lab (practicum) (30%).* *Performance in theory (100%):* *Mid Exam (20%)* *Final Exam (20%)* *Assignments (40%)* *Class participation (10%)* *Individual quiz (10%)* *Performance in practicum (100%):* *Practicum exam (30%)* *Pre-test or post-test (10%)* *Experiment reports (60%)*
Reading list	1. *Smith, C.W. and R. H. Dilday. 2002. Rice: origin, history, technology and production. John Wiley & Sons Ltd, The Atrium, Southern Gate, Chichester, West Sussex, PO19 8SQ, United Kingdom. 658p* 2. *Delcour, Jan A. and R. Carl Hoseney. 2010. Principles of Cereal Science and Technology. 3rd Edition. AACC International, St. Paul, Minnesota. USA. 222p.* 3. *McDonald, M.B. and L.O. Copeland. 1997. Seed Production Principles and Practices. Springer-Science Business Media, Dordrecht. 754 p.* 4. *Rao, P.S. and C. G. Kumar. 2013. Characterization of Improved Sweet Sorghum Cultivars. Springer New Delhi Heidelberg New York Dordrecht London. 133p.* 5. *Patil, J.V. 2017. Millets and Sorghum. Biology and Genetic Improvement. John Wiley & Sons Ltd, The Atrium, Southern Gate, Chichester, West Sussex, PO19 8SQ, United Kingdom. 517p.*