Module designation	*Agronomy (AGB 101)*
Semester(s) in which the module is taught	*1st semester*
Person responsible for the module	*Nurhayati*
Language	*English*
Relation to curriculum	*Compulsory module*
Teaching methods	*lecture, discussion, project learning*
Workload	▪ *100 minutes of lecture and discussion per week* ▪ *120 minutes of structured tasks per week* ▪ *190 minutes of independent activity per week* ▪ *100 minutes of laboratory work*
Credit points	*3 (lesson 2 and lab works 1) = 4.8 ECTS*
Required and recommended prerequisites for joining the module	*-*
Module objectives/intended learning outcomes	1. *Able to explain the concept basics of plant cultivation* 2. *Able to explain plant reproduction techniques, seed production processes and able to perform vegetative and generative plant propagation.* 3. *Able to design and undertake plant cultivation technology from land preparation, planting, fertilization, irrigation, pest and disease control and harvesting.* 4. *Able to explain the influence of climatic factors, soil and plant disturbing organisms.* 5. *Able to explain the plant growth and development and several metabolic processes related to plant growth and development (photosynthesis, respiration, absorption, nutrient translocation and assimilate) and the role of growth regulators.* 6. *Able to analyze efforts to achieve maximum production through a system of planting patterns, plant breeding, hydroponics, intensification and extenfication of agriculture.* 7. *Able to evaluate sustainable agriculture peformance and the application of organic farming systems.*
Content	*This course provides a knowledge and skills related to plant cultivation: definition, scope, agronomic acts, plant reproduction, cultivation techniques, external and internal factors that affect plant growth and production, plant growth and development, efforts to achieve maximum production and sustainable agriculture. The learning objectives are able to identify, formulate and solve problems in plant cultivation technology in environmentally friendly sustainable agricultural systems with the latest technology creatively and innovatively.*
Exams and assessment formats	*Essay, case analysis, oral presentation*
Study and examination requirements	*20 % participative activityf* *50% case project* *5 % quizzes* *5 % structured assignment* *10% midterm examination* *10% final examination*

Reading list	1. Amarullah, Mardhiana, Willem, N. Chaitiyah. 2021. Dasar Agronomi. Syiah Kuala University Press. Banda Aceh. 2. Arya, R. L. 2020. Fundamentals of Agronomy. Scientific Publ. India. https://books.google.co.id/books/about/Fundamentals_of_Agronomy.html?id=OMf3Dw AAQBAJ&redir_esc=y 3. Chandrasekaran, B., K. Annadurai and E. Somasundaram. 2010. A Text book of Agronomy. New Age Internasional Limited. Publ. New Delhi. https://nishat2013.files.wordpress.com/2013/11/agronomy-book.pdf 4. Harahap, F.S., H. walida, I. Arman. 2021. Dasar-dasar Agronomi Pertanian. CV Mitra Cendekia Media. Solok, Sumatera Barat. 5. Harjadi, S.S. 2019. Dasar-dasar Agronomi. 2019. Gramedia Pustaka Utama. Jakarta. https://books.google.co.id/books?id=M1KZDwAAQBAJ&printsec=frontcover&dq=Dasa r- 11 dasar+Agronomi&hl=id&sa=X&ved=2ahUKEwieprLVuq3rAhWQeX0KHVYEAGUQ6 AEwAHoECAQQAg#v=onepage&q=Dasar-dasar%20Agronomi&f=false 6. Segala, D., H. Ningsih, T. Koryati, E. P. Ramdan, Indarwati, J. Herawati, Mahyati, Junairiah, B. Utomo, S. Purwanti, D. N. Septariani. 2021. Dasar-dasar Agronomi. Yayasan Kita Menulis. Medan. Suyanto, A. 2019. Pola Tanam. Tim UB Press. Malang.