

Module designation	<i>Technology of Organic Farming</i>
Semester(s) in which the module is taught	<i>4<sup>th</sup></i>
Person responsible for the module	<i>Ir. Lestari Wibowo, M.P</i>
Language	<i>Indonesian language</i>
Relation to curriculum	<i>Compulsory</i>
Teaching methods	<i>Lectures (100 minutes) Practicum sessions (170 minutes)</i>
Workload (incl. contact hours, self-study hours)	<i>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</i>
Credit points	<i>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)</i>
Required and recommended prerequisites for joining the module	-
Module objectives/intended learning outcomes	<ul style="list-style-type: none"> <li>- <i>Students are able to apply the basic concepts and principles of cultivation technology and the development of sustainable agriculture technology;</i></li> <li>- <i>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);</i></li> <li>- <i>Students are able to plan, design, implement and develop plant production with the latest and environmentally friendly technology creatively and innovatively.</i></li> </ul>
Content	<i>The natural and organic concepts; organic agriculture in Indonesia; marketing, standardization, quality and certification of organic agriculture as organic fertilizer; compost; soil biota; solid waste; liquid and organic waste as a source of fertilizer; integrated management of plant nutrients/nutrients; green manure; biofertilizer, farming development system through integrated crop management; pest control and integrated disease; biological pesticides; minimum tillage agriculture and no tillage.</i>
Examination forms	<i>oral presentation, essay</i>

Study and examination requirements	<p><i>Participants are evaluated based on their performance in class (lectures) (70%) and lab (practicum) (30%).</i></p> <p><i>Performance in theory (100%):</i>  <i>Mid Exam (20%)</i>  <i>Final Exam (20%)</i>  <i>Assignments (40%)</i>  <i>Class participation (10%)</i>  <i>Individual quiz (10%)</i></p> <p><i>Performance in practicum (100%):</i>  <i>Practicum exam (30%)</i>  <i>Pre-test or post-test (10%)</i>  <i>Experiment reports (60%)</i></p>
Reading list	<ol style="list-style-type: none"> <li>1. <i>Barker, A.V. 2010. Science and Technology of Organic Farming. CRC Press. 240p</i></li> <li>2. <i>Magdoff, F. and R.R. Weil. 2004. Soil Organic Matter in Sustainable Agriculture. CRC Press. 412p</i></li> <li>3. <i>Maliwal, P.L. 2019. Principles of Organic Farming. Scientific Publ. 171p.</i></li> <li>4. <i>Panwar, J.D.S and A.K. Jain. 2016. Organic farming: Scope and Uses of Biofertilizers. New India Publ. 277p.</i></li> <li>5. <i>Permatasari, P., K.M. Zain, E. Rusdiyana, R. Firgiyanto, F. Hanum, E.P. Ramdan, Septiana, U.H..A. Hasbullah, Arsi. 2021. Pertanian Organik. Yayasan Kita Menulis. 130 hlm.</i></li> </ol>