



Subject Module  
 Department of Agribusiness  
 Faculty of Agriculture  
 University of Islam Malang

## MODULE HANDBOOK

<b>Module Title</b>	Basic of Agronomy
<b>Module Level, if available</b>	Undergraduate Study Program of Agribusiness
<b>Course Code</b>	MKD60703
<b>Title, if available</b>	-
<b>Course (MK)</b>	Basic of Agronomy
<b>Semester</b>	2
<b>Course Coordinator</b>	Prof (Riset). Dr. Ir. Suyamto
<b>Teaching Team</b>	Dr. Ir. Sugiarto, MP
<b>Language of instruction</b>	Indonesian language/English
<b>Linkages with the Curriculum</b>	Study Program : Agribusiness Specialization: Agribusiness Type: Compulsory
<b>Learning Methods and Duration</b>	<ol style="list-style-type: none"> <li>1. Lecture: 100 minutes/meeting (14 meetings)</li> <li>2. Practicum: 170 minutes/meeting (7 meetings)</li> <li>3. Structured Assignments/individual and group Assignments presentation</li> </ol>
<b>Student Study Load</b>	<ol style="list-style-type: none"> <li>1. Lecture: 100 minutes/meeting (14 meetings)</li> <li>2. Practicum: 170 minutes/meeting (7 meetings)</li> <li>3. Structured Assignments/quiz/group presentation</li> <li>4. Attendance: 75% of total attendance</li> </ol>
<b>Credit Weight</b>	3 SKS or 5,1 ECTS
<b>Requirements for Passing the Course</b>	<ul style="list-style-type: none"> <li>• Attendance &gt; 75%</li> <li>• The final score of all learning evaluation components <math>\geq 50</math></li> </ul> Final score component: <ul style="list-style-type: none"> <li>• 20% Midterm Exam</li> <li>• 20% Final Exam</li> <li>• 30% Practicum</li> <li>• 20% Structured Taks (individual and group)</li> <li>• 10% Presence</li> </ul>
<b>Course Prerequisite</b>	-
<b>Learning Outcomes</b>	The expected learning outcomes is: <ol style="list-style-type: none"> <li>1. Able to respond to problems regarding entrepreneurship, agribusiness, and green food (ILO 1)</li> </ol>
<b>Learning Content</b>	After completing this course students are able to: <ol style="list-style-type: none"> <li>1. Able to master basic knowledge of Agronomy and its benefits</li> <li>2. Able to understand the classification, systematics, growth and development of plants</li> <li>3. Able to understand important factors and how to manage plants in an integrated manner</li> <li>4. Able to assess and identify plant growth conditions.</li> </ol>

	<p>5. able to understand the process of energy bioconversion in crop production</p> <p>6. Able to understand food problems and analyze future solutions</p> <p>7. Able to analyze the factors that affect the growth and production of plants.</p> <p>The topics include:</p> <ol style="list-style-type: none"> <li>1. Introduction</li> <li>2. Origin and classification of plants</li> <li>3. Plant growth and development</li> <li>4. Factors and techniques of plant cultivation</li> <li>5. Integrated plant maintenance/management</li> <li>6. Efforts to increase crop production</li> <li>7. Plant breeding</li> <li>8. Energy and agricultural production 1</li> <li>9. Energy and agricultural production 2</li> <li>10. Food and human needs</li> <li>11. Plants and environmental factors 1</li> <li>12. Plants and environmental factors 2</li> <li>13. Harvest and predict yields</li> <li>14. Post-harvest handling</li> </ol>
<b>Test Terms and Forms</b>	<p>Examination requirements: Minimum of 75 % attendance to attend the final exam</p> <p>Test Form: Essay</p>
<b>Learning Media</b>	<p>Projector and screen, Zoom application, Google Classroom, e-book, WA Group, Learning Management System (LMS UNISMA), Youtube</p>
<b>References</b>	<p><b>Main References :</b></p> <ol style="list-style-type: none"> <li>1. Sheaffer, C.C. and K.M. Moncada. 2012. Introduction to Agronomy : Food, Crops and Environment. Second Edition. DELMAR Cengage Learning. 721 p.</li> <li>2. Azam-Ali, S.N. and G.R. Squire. 2002. Principles of Tropical Agronomy. CABI Publishing. 245 p</li> <li>3. Rai, I.N. 2018. Dasar-dasar Agronomi. Penerbit Pelawa Sari. 277 h</li> <li>4. Ndiwa, A.S.S. dan S.S. Oematan. 2018. Buku Ajar Dasar-dasar Agronomi. Faperta Undana. Kupang. 230 h</li> <li>5. Wiratmaja, I.W. 2017. Bahan Ajar Fotosintesis. Prodi Agroteknologi Fakultas Pertanian UNUD. 45 h</li> <li>6. Chandrasekaran B., K. Annadurai and E. Somasundaram. 2010. A Textbook of Agronomy. New Age International (P) Limited, Publisher. New Delhi. 856 p</li> </ol> <p><b>Supporting References</b></p> <ol style="list-style-type: none"> <li>1. Bahrin, A., M. Taufik, L.O Arfa, I.G.A.K. Sutariati, T.C. Rakian dan S. Leomo. 2014. Agronomi : teori dan aplikasi praktis. Unhalu Press. Kendari. 218 h</li> <li>2. Anonim. 2012. Undang-undang Republi Indonesia No 18 Tahun 2012 tentang Pangan.</li> <li>3. Anonim. 2015. Panduan penghitungan pola pangan harapan (PPH). Badan Ketahanan Pangan. Kementerian Pertanian.</li> </ol>