



**HASANUDDIN
UNIVERSITY**

**Agricultural
Engineering**
Bachelor Program

2023 MODULE DESCRIPTION

BACHELOR PROGRAM
AGRICULTURAL ENGINEERING
FACULTY OF AGRICULTURE
HASANUDDIN UNIVERSITY
2023



Introduction to Agronomy

Semester 3

| | |
|---|--|
| Module designation | <i>Introduction to Agronomy</i> |
| Semester(s) in which the module is taught | <i>I</i> |
| Person responsible for the module | <i>Prof. Dr. Ir. Elkawakib Syam'un, MP. Prof. Dr. Ir. Kaimuddin, M.Si. Prof. Dr. Ir. Muh. Farid BDR, MP. Dr. Ir. Amir Yassi, M.Si. Dr. Ir. Katriani Mantja, MP. Prof. Ir. Rinaldi Sjahril, M.Agr., PhD.</i> |
| Language | <i>Indonesia</i> |
| Relation to curriculum | <i>Compulsory</i> |
| Teaching methods | <i>Lecture, Lab Works</i> |
| Workload (incl. contact hours, self-study hours) | <i>(Estimated) Total workload: 3 SKS x 1.7 = 5.1 ECTS = 137.7 hours > Lecture = 35 hours > Exercise = 42 hours > Sel study = 42 hours > Exam = 4 hours (MID term and final) > Exam preparation = 8.5 hours</i> |
| Credit points | <i>3 SKS : 5.1 ECTS</i> |
| Required and recommended prerequisites for joining the module | |
| Module objectives/intended learning outcomes | <i>ILO 3: Apply knowledge of mathematics, sciences, and engineering principles in agricultural fields; (Knowledge 1) ILO 7: Manage and utilize agricultural resources effectively, efficiently, and sustainably; (Competence 1)</i> |
| Content | <i>This course covers the basic understanding and scope of agronomy, agricultural systems in Indonesia, plants and environmental factors, plant growth phases, efforts to increase production and inhibiting factors, modern and conventional plant propagation, land and environmental management, cultivation techniques and biotechnology in agriculture.</i> |
| Examination forms | <i>Write Exam</i> |
| Study and examination requirements | <i>Attendance above 80% and Completion of all laboratory practicum</i> |

| | |
|--------------|--|
| Reading list | <p>Endress, R. 1994. Plant cell Biotechnology. Spinger-Verlag. Berlin. Heidelberg. New York.</p> <p>Gardner, F.P., R.B. Pearce, dan R.L. Mitchell. 1985. Physiology of Crop Plants. The Iowa State University Press, Ames, Iowa.</p> <p>Hartman, H.T. and D. E. Kester. 1983. Plant Principles and Practices. Prentice-Hall, Inc.</p> <p>Hay, R.K.M., A.J. Walker. 1992. An introduction to the physiology of crop yield. Longman Scientific & Technical England.</p> <p>Harjadi, S.S. 2002. Pengantar Agronomi. PT Gramedia Pustaka Utama. Jakarta.</p> <p>Jumin, H.B. 2005. Dasar-Dasar Agronomi. PT raja Grafindo Persada. Jakarta.</p> <p>7. <i>Lakitan, B. 1996. Fisiologi pertumbuhan dan perkembangan tanaman. PT. RajaGrafindo Persada Jakarta.</i></p> <p>8. <i>Nasir. 2001. Bioteknologi Pertanian. Penerbit PT. Grafindo Jakarta.</i></p> <p>9. <i>Sennang, N.R., dkk. 2013. Pengantar Agronomi. Heksa Utama. Makassar.</i></p> <p>10. <i>Sri Setyati H. 1989. Pengantar Agronomi. PT. Gramedia Jakarta.</i></p> <p>11. <i>Sutanto, R. 2002. Penerapan Pertanian Organik. Pemasarakatan dan Pengembangan. Penerbit Kanisius Yogyakarta</i></p> <p>12. <i>Syamsu Sadjad. 1984. Dasar-dasar Agronomi, Departemen Agronomi Fakultas Pertanian IPB.</i></p> |
|--------------|--|