

Module Name	Plant Growth Analysis
Module Level, if applicable	Intermediate
Code if Applicable	0420200112
Subtitle, if applicable	-
Courses, if applicable	0420200112 (Plant Growth Analysis)
Semester(s) in which the module is taught	6
Person responsible for the module	Dr.Ir. Sri Mursiani Arifah, MP. Padhina Pangestika,SP.MP
Lecturer	Dr.Ir. Sri Mursiani Arifah, MP. Padhina Pangestika,SP.MP
Language	Indonesian
Relation to curriculum	Compulsory Courses for undergraduate program in Department of Agrotechnology, Faculty of Agriculture and Animal Science.
Type of teaching, contact hours	Lecture, Project, Independent Learning, Lab Work
Workload	<ul style="list-style-type: none"> • Project : 2 sks × 50 minutes × 16 weeks • Independent Learning 2 sks × 60 minutes × 16 weeks • Lab Work: 1 sks × 170 minutes × 16 weeks
Credit points	SKS 3 SCH x (1.5) = 4.5 ECTS
Requirements according to the examination regulations	<ol style="list-style-type: none"> 1. Registered in this course 2. Minimum 80% attendance in this course
Recommended prerequisites	No prerequisites
Module Objectives (Intended learning outcomes)	<p>On successful completion in this course, student should be able to:</p> <ol style="list-style-type: none"> 1. identify plant growth and development from phase to phase 2. using analytical methods and measurement formulations on plants appropriately so that they can answer the problems in the field of plant research 3. convey or apply the results of the analysis and make reports appropriately and correctly
Module Content	<p>The module content for the Plant Growth Analysis course :</p> <ol style="list-style-type: none"> 1. Understanding of plant growth analysis, Phases and processes of plant growth and development, Method of observing the growth of annual and perennial plants, Method of observing reproductive organs, Relationships and Balance of sources and sinks 2. Analysis formulation model and vegetative organ community (leaves, stems, roots), Analysis formulation model and community of generative/reproductive organs (fruit, tubers, cobs, seeds), Method for analyzing the relationship between vegetative and generative/reproductive organs, diagnosis and analysis of plant tissue and method of measuring harvest losses
Study and examination requirements and forms of examination	Cognitive: Midterm exam, Final exam, Quizzes, Assignments

	Affective: Assessed from the element /variables achievement, namely (a) Contributions (attendance, active, role, initiative, and language), (b) Being on time, (c) Effort.
Media employed	Classical teaching tools with white board and power point presentation
Recommended Literature	<ol style="list-style-type: none"> 1. Taiz, L., & Zeiger, E. (2010). <i>Plant Physiology</i>. Sinauer Associates. 2. Salisbury, F. B., & Ross, C. W. (1992). <i>Plant Physiology</i>. Wadsworth Publishing. 3. Poorter, H., & Nagel, O. (2000). The role of biomass allocation in the growth response of plants to different levels of light, CO₂, nutrients and water: a quantitative review. <i>Functional Plant Biology</i>, 27(6), 595-607. 4. Marschner, H. (2011). <i>Marschner's Mineral Nutrition of Higher Plants</i>. Academic Press. 5. Jones Jr, J. B., Wolf, B., & Mills, H. A. (1991). <i>Plant Analysis Handbook II: A Practical Sampling, Preparation, Analysis, and Interpretation Guide</i>. Micro-Macro Publishing. 6. Hunt, R. (1982). <i>Plant Growth Curves: The Functional Approach to Plant Growth Analysis</i>. Edward Arnold. 7. Radford, P. J. (1967). Growth analysis formulae—Their use and abuse. <i>Crop Science</i>, 7(2), 171-175. 8. Monteith, J. L. (1977). Climate and the efficiency of crop production in Britain. <i>Philosophical Transactions of the Royal Society of London. B, Biological Sciences</i>, 281(980), 277-294. 9. Passioura, J. B. (2006). The perils of pot experiments. <i>Functional Plant Biology</i>, 33(11), 1075-1079. 10. Bierhuizen, J. F., & Slatyer, R. O. (1965). Effect of temperature on the nature of the growth yield response of plants to light. <i>Australian Journal of Biological Sciences</i>, 18(4), 715-721. 11. Salisbury, F. B., & Ross, C. W. (1992). <i>Plant Physiology</i>. Wadsworth Publishing. 12. Smith, A. M., & Stitt, M. (2007). Coordination of carbon supply and plant growth. <i>Plant, Cell & Environment</i>, 30(9), 1126-1149.
Date of Last Amendment	23 rd August 2022

Module Name	Genetics
Module Level, if applicable	Intermediate
Code if Applicable	220200678
Subtitle, if applicable	-
Courses, if applicable	220200678 (Plant Genetics)
Semester(s) in which the module is taught	3
Person responsible for the module	Dr. Ir. Agus Zainudin, MP. Dr. Ir. Erny Ishartati, MP
Lecturer	Dr. Ir. Agus Zainudin, MP. Dr. Ir. Erny Ishartati, MP
Language	Indonesian
Relation to curriculum	Compulsory Courses for undergraduate program in Department of Agrotechnology, Faculty of Agriculture and Animal Science.
Type of teaching, contact hours	Type of teaching: Face to Face and Discussion Contact hours : 2 hours x 16 weeks = 32 hours
Workload	Class : 2 hours x 14 weeks = 28 hours Practical class : 0 hours x 16 weeks = 0 hours Examination 2 hours x 2 time = 4 hours Total : 32 Hours
Credit points	SKS 2 SCH x (1.5) = 3 ECTS
Requirements according to the examination regulations	1. Registered in this course 2. Minimum 80% attendance in this course
Recommended prerequisites	No prerequisites
Module Objectives (Intended learning outcomes)	On successful completion in this course, student should be able to: <ul style="list-style-type: none"> Understand the history and scope of genetics and the fine structure of genetic material

	<ul style="list-style-type: none"> • Understand the regulation and expression of genes and the cell life cycle • Understand mendelian and non-mendelian genetics • Understand linkage and crossover and mutation • Understand extra-chromosomal inheritance and sex determination and inheritance
Module Content	The course brief description through guided discussions with lecturers explains about the History and Scope of Genetics, Fine Structure of Genetic Materials, Regulation, gene expression and cell life cycle to introduction to population genetics and quantitative inheritance.
Study and examination requirements and forms of examination	<p>Cognitive: Midterm exam, Final exam, Quizzes, Assignments</p> <p>Affective: Assessed from the element /variables achievement, namely (a) Contributions (attendance, active, role, initiative, and language), (b) Being on time, (c) Effort.</p>
Media employed	Classical teaching tools with white board and power point presentation
Recommended Literature	<p>For Class</p> <p>A. Compulsory</p> <ul style="list-style-type: none"> - Balding, D.J., M. Bishop, and C. Cannings, 2003, Statistical Genetics second edition [Handbook] Vol I, John Wiley & sons, Ltd., The Atrium, Southern Gate, Chichester, West Sussex. P.O19 85Q, England. - Brewbaker, J. L. 1983. Genetika Pertanian. I. Santoso, penerjemah. Penerbit Gede Jaya. Jakarta. (Terjemahan). 142 hal. - Crowder, L.V. 1993. Genetika Tumbuhan. Terjemahan Kusdiarti, L., Sutarso (ed). Gadjah Mada University Press, Yogyakarta: 323 – 351 - Elord, S.L., and W.D. Stanfiled, 2002, Genetics [fourth edition], The Mc GrowHill Companies - Falconer, D. S and F. O. J. B. Miranda. 1982. Quantitative to Genetics. The Roland Press Company. New York - Fehr, W.R. 1987. Principles of Cultivar Development; Theory and Technique. Macmillan Pub.Co., New York - Griffith, AJH, Miller H, D.T. Suzuki, Lewontin RC and W.M. Gelbart. 1996. An Introduction to Genetic Analysis. 6th Ed. Freeman and Company, New York. - Hallauer, A. R. and F. O. J. B. Miranda. 1982. Quantitative genetics in Maize Breeding. Iowa State University Press. New York - Hedrick, P.W., 2011, Genetic of Population [fourth edition], Jones and Barlets Publisher, LL - IAEA. 1976. Manual in Mutation Breeding. IAEA, Vienna, Austria. <p>B. Option</p> <ul style="list-style-type: none"> - Jusuf, M. 1989. Genetika Dasar I (Ekspresi Gen). PAU Bioteknologi IPB. Bogor. - Ringo, J. 2004, Fundamental Genetics, Cambridge University Press

	<ul style="list-style-type: none"> - Yatim, W. 1980. Genetika. Tarsito. Bandung. - Jurnal-jurnal Penelitian Genetika Tanaman
Date of Last Amendment	23 rd August 2022

Module Name	Microbiology and Organic Agriculture
Module Level, if applicable	Intermediate
Code if Applicable	320204776
Subtitle, if applicable	-
Courses, if applicable	320204776 (Microbiology and Organic Agriculture)
Semester(s) in which the module is taught	3
Person responsible for the module	Prof. Dr. Ir. Dyah Roeswitawati, MS. Dr. Ir. Ali Ikhwan, MP.
Lecturer	Prof. Dr. Ir. Dyah Roeswitawati, MS. Dr. Ir. Ali Ikhwan, MP.
Language	Indonesian
Relation to curriculum	Compulsory Courses for undergraduate program in Department of Agrotechnology, Faculty of Agriculture and Animal Science.
Type of teaching, contact hours	Type of teaching: Face to face, Presentation, Practical Contact hours : 3 hours x 16 weeks = 48 hours
Workload	Class : 2 hours x 14 weeks = 28 hours Practical class : 1 hours x 14 weeks = 14 hours Examination 3 hours x 2 time = 6 hours Total 48 Hours
Credit points	SKS 3 SCH x (1.5) = 4.5 ECTS
Requirements according to the examination regulations	1. Registered in this course 2. Minimum 80% attendance in this course
Recommended prerequisites	No prerequisites
Module Objectives (Intended learning outcomes)	On successful completion in this course, student should be able to:

	<ul style="list-style-type: none"> • Explain the definition of pests and the causes of pests, pest groupings and the role of insects as beneficial for crops • Understand examples of plant diseases and their importance in plant cultivation, the position of fungi and bacteria among living things and other microorganisms around plants and the position of viruses and nematodes among other living things and microorganisms around plants
Module Content	This course explains the concept of plant protection, and the concept of plant disease. Therefore, students know how to prevent and give a solution for the case.
Study and examination requirements and forms of examination	<p>Cognitive: Midterm exam, Final exam, Quizzes, Assignments</p> <p>Psychomotor: Practice</p> <p>Affective: Assessed from the element /variables achievement, namely (a) Contributions (attendance, active, role, initiative, and language), (b) Being on time, (c) Effort.</p>
Media employed	Classical teaching tools with white board and power point presentation
Recommended Literature	<p>For Class</p> <p>C. Compulsory (referensi utama)</p> <ul style="list-style-type: none"> - Soil Microbiology, Ecology and Biochemistry ; Essential Microbiology - Biochemistry ; Essential Microbiology - Plant Microbiology ; Essential Microbiology ; Dasar-dasar Microbiology - Soil Microbiology, Ecology and Biochemistry ; Essential Microbiology ; Dasar-dasar Microbiology <p>D. Option</p> <ul style="list-style-type: none"> - Books or journal related Basic Microbiology ; Plant Mikrobiology ; Modul Mikrobiology
Date of Last Amendment	23 rd August 2022

Module Name	Computer Application
Module Level, if applicable	Intermediate
Code if Applicable	220200141
Subtitle, if applicable	-
Courses, if applicable	220200141 (Computer Application)
Semester(s) in which the module is taught	3
Person responsible for the module	Dr. Ir. Wahono, MT
Lecturer	Dr. Ir. Wahono, MT
Language	Indonesian
Relation to curriculum	Compulsory Courses for undergraduate program in Department of Agrotechnology, Faculty of Agriculture and Animal Science.
Type of teaching, contact hours	Type of teaching: Face to Face, Practical, Assignment Contact hours : 2 hours x 16 weeks = 32hours
Workload	Class : 2 hours x 14 weeks = 28 hours Practical class : 0 hours x 14 weeks = 0 hours Examination 2 hours x 2 time = 4 hours Total : 32 Hours
Credit points	SKS 2 SCH x (1.5) = 3,6 ECTS
Requirements according to the examination regulations	1. Registered in this course 2. Minimum 80% attendance in this course
Recommended prerequisites	No prerequisites
Module Objectives (Intended learning outcomes)	On successful completion in this course, student should be able to: <ul style="list-style-type: none"> • Students can understand the concept of Agriculture 4.0 and agricultural improvement

	<p>using Internet of Things Applications for Crop Cultivation.</p> <ul style="list-style-type: none"> • Explain geographic information systems and positioning technology • Understand how to use remote sensing applications for plant cultivation as well as drone applications for plant cultivation
Module Content	This course covers the concept of Agriculture 4.0 and agricultural improvement using Internet of Things Applications for Crop Cultivation and Remote Sensing Applications for plant cultivation and drone applications for crop cultivation.
Study and examination requirements and forms of examination	<p>Cognitive: Midterm exam, Final exam, Quizzes, Assignments</p> <p>Affective: Assessed from the element /variables achievement, namely (a) Contributions (attendance, active, role, initiative, and language), (b) Being on time, (c) Effort.</p>
Media employed	Classical teaching tools with whiteboard and powerpoint presentation
Recommended Literature	<p>For Class</p> <p>E. Compulsory</p> <ul style="list-style-type: none"> - D. Kent Shannon, David E. Clay, and Newell R. Kitchen (2019), Precision Agriculture Basics (ASA, CSSA, and SSSA Books) - Francis J. Pierce, David Clay (2016) GIS Applications in Agriculture - QGIS (2020). Quantum GIS (www.qgis.org) - Piero Toscano (2020) Remote Sensing Applications for Agriculture and Crop Modelling - Prasad S. Thenkabail, John G. Lyon, Alfredo Huete (2019) Hyperspectral Indices and Image Classifications for Agriculture and Vegetation (2nd ed.) - Louise Jupp (2020) Precision Farming From Above: How Commercial Drone Systems are Helping Farmers Improve Crop Management, Increase Crop Yields and Create More Profitable Farms. - Anis Koubaa Ahmad Taher Azar (2021) Unmanned Aerial Systems: Theoretical Foundation and Applications (1st Edition) - Pattnaik, P.K., Kumar, R., Pal, S., Panda, S.N. (Eds.) (2020) IoT and Analytics for Agriculture.
Date of Last Amendment	23 rd August 2022

Module Name	Agriculture Mechanization
Module Level, if applicable	Intermediate
Code if Applicable	220201544
Subtitle, if applicable	-
Courses, if applicable	220201544 (Agriculture Mechanization)
Semester(s) in which the module is taught	3
Person responsible for the module	Dr.Ir. Nugroho Waskito, MP.
Lecturer	Dr.Ir. Nugroho Waskito, MP.
Language	Indonesian
Relation to curriculum	Compulsory Courses for undergraduate program in Department of Agrotechnology, Faculty of Agriculture and Animal Science.
Type of teaching, contact hours	Type of teaching: Face to face, Presentation, Practical Contact hours : 3 hours x 16 weeks = 48 hours
Workload	Class : 2 hours x 14 weeks = 28 hours Practical class : 1 hours x 14 weeks = 14 hours Examination 3 hours x 2 time = 6 hours Total 48 Hours
Credit points	SKS 3 SCH x (1.5) = 4.5 ECTS
Requirements according to the examination regulations	1. Registered in this course 2. Minimum 80% attendance in this course
Recommended prerequisites	No prerequisites
Module Objectives (Intended learning outcomes)	On successful completion in this course, student should be able to: <ul style="list-style-type: none"> Understand the scope of agricultural mechanization which includes 2 stroke and 4 stroke motors

	<ul style="list-style-type: none"> • Understand the work function of tractors and land processing equipment • Understand the tools of milling, harvesting and economic analysis of machine tools • Understand the means of planting, fertilizing and spraying
Module Content	This course covers several principles and technology in Agricultural Industry carried out by understand the types of 2 and 4 stroke motors, harvesting tools, planting tools, fertilizing, spraying to harvesting tools
Study and examination requirements and forms of examination	<p>Cognitive: Midterm exam, Final exam, Quizzes, Assignments</p> <p>Psychomotor: Practice</p> <p>Affective: Assessed from the element /variables achievement, namely (a) Contributions (attendance, active, role, initiative, and language), (b) Being on time, (c) Effort.</p>
Media employed	Classical teaching tools with white board and power point presentation
Recommended Literature	<p>For Class</p> <p>F. Compulsory</p> <p>- Well depend on the topic</p> <p>G. Option</p> <p>- Well depend on the topic</p>
Date of Last Amendment	23 rd August 2022

Module Name	Agroclimatology
Module Level, if applicable	Intermediate
Code if Applicable	0220204778
Subtitle, if applicable	-
Courses, if applicable	0220204778 (Agroclimatology)
Semester(s) in which the module is taught	3
Person responsible for the module	Helvi Ardana Reswari, SP., M.Si
Lecturer	Helvi Ardana Reswari, SP., M.Si
Language	Indonesian
Relation to curriculum	Compulsory Courses for undergraduate program in Department of Agrotechnology, Faculty of Agriculture and Animal Science.
Type of teaching, contact hours	<p>Type of teaching: Face to face, Presentation, Practical</p> <p>Contact hours : 4 hours x 16 weeks = 64 hours</p>
Workload	<p>Class : 3 hours x 14 weeks = 42 hours</p> <p>Practical class : 1 hours x 14weeks = 14 hours</p> <p>Examination 4 hours x 2 time = 8 hours</p> <p>Total 64 Hours</p>
Credit points	SKS 4 SCH x (1.5) = 6 ECTS
Requirements according to the examination regulations	<ol style="list-style-type: none"> 1. Registered in this course 2. Minimum 80% attendance in this course
Recommended prerequisites	No prerequisites
Module Objectives (Intended learning outcomes)	<p>On successful completion in this course, student should be able to:</p> <ul style="list-style-type: none"> • Understand the elements of climate, the composition and role of the atmosphere, radiation, clouds, temperature, humidity,

	<p>evapotranspiration, natural phenomena related to elements of weather and/or climate change and their effects on agriculture.</p> <ul style="list-style-type: none"> • Understand climate classification systems, and their relation to the process of plant cultivation, planting time until plant productivity.y
Module Content	This course explains able about the understanding of elements of weather, atmosphere, radiation, clouds, humidity, temperature, air pressure, precipitation, hydrological cycle, evapotranspiration, climate classification and tropical climate.
Study and examination requirements and forms of examination	<p>Cognitive: Midterm exam, Final exam, Quizzes, Assignments</p> <p>Psychomotor: Practice</p> <p>Affective: Assessed from the element /variables achievement, namely (a) Contributions (attendance, active, role, initiative, and language), (b) Being on time, (c) Effort.</p>
Media employed	Classical teaching tools with white board and power point presentation
Recommended Literature	<p>For Class</p> <p>H. Compulsory</p> <ul style="list-style-type: none"> - Jones, H.G. 2014. Plants and Mikroclimate third edition. Australia : Cambridge University Press - Tim Li and Pang-Chi Hsu.2018. Fundamentals of Tropical Climats Dinamic. Springer Atmospheric Science - Arsalan, M.H. 2008. General Climatology. Western Sydney University - Marshall R. 2014. The Grennhouse Gardener’s Manual. Portland-London : Timber Press - Decker B. 2017. The Complete guide to DIY Greenhouse 2nd edition. Minnesota : Cool Springs Pres <p>I. Option</p> <ul style="list-style-type: none"> - Teaching staff Department of Geomatics dan Meteorology IPB. Editor by Hamdoko PhD. 2017. Klimatologi dasar. Bogor : IPB Press - Wiryono, Budy. 2018. Textbooks Klimatologi for undergraduate students. Pu by blisher Litera : Sleman - Sabarudin, Laode. 2017. Agroklimatoogi Aspek-Aspek Klimatik untuk Sistem Budidaya Tanaman. Yogyakarta : Allfabetta
Date of Last Amendment	22 nd August 2022

Module Name	Practices of Agroclimatology
Module Level, if applicable	Intermediate
Code if Applicable	0220204779
Subtitle, if applicable	-
Courses, if applicable	0220204779 (Practices of Agroclimatology)
Semester(s) in which the module is taught	3
Person responsible for the module	Helvi Ardana Reswari, SP., M.Si
Lecturer	Helvi Ardana Reswari, SP., M.Si
Language	Indonesian
Relation to curriculum	Compulsory Courses for undergraduate program in Department of Agrotechnology, Faculty of Agriculture and Animal Science.
Type of teaching, contact hours	Type of teaching: Face to Face, Discussion Contact hours : 1 hours x 16 weeks = 16 hours
Workload	Class : 1 hours x 14 weeks = 14 hours Practical class : 0 hours x 14 weeks = 0 hours Examination 1 hours x 2 time = 2 hours Total 16 hours
Credit points	SKS 1 SCH x (1.5) = 1.5 ECTS
Requirements according to the examination regulations	1. Registered in this course 2. Minimum 80% attendance in this course
Recommended prerequisites	No prerequisites
Module Objectives (Intended learning outcomes)	On successful completion in this course, student should be able to: <ul style="list-style-type: none"> • Understand the understanding of the elements of the weather • Understand the Greenhouse Effect

	<ul style="list-style-type: none"> • Understand AWS (Automatic Weather Station)
Module Content	This course presents about understand the elements of weather, the Greenhouse Effect, agroclimatology practical work and AWS (Automatic Weather Station) based on IoT
Study and examination requirements and forms of examination	<p>Cognitive: Midterm exam, Final exam, Quizzes, Assignments</p> <p>Psychomotor: Practice</p> <p>Affective: Assessed from the element /variables achievement, namely (a) Contributions (attendance, active, role, initiative, and language), (b) Being on time, (c) Effort.</p>
Media employed	Classical teaching tools with white board and power point presentation
Recommended Literature	<p>For Class</p> <p>J. Compulsory</p> <ul style="list-style-type: none"> - Jones, H.G. 2014. Plants and Mikroclimate third edition. Australia : Cambridge University Press - Marshall R. 2014. The Grennhouse Gardener's Manual. Portland-London : Timber Press - Decker B. 2017. The Complete guide to DIY Greenhouse 2nd edition. Minnesota : Cool Springs Press <p>K. Option</p> <ul style="list-style-type: none"> - Oussama, Hecini. 2020. Internet of Things (IoT) Automatic Weather Station. Faculty of Sciences and Technology Electrical Engineering Department. University of Biskra
Date of Last Amendment	23 rd August 2022

Module Name	Plant Protection Management : Pests, Diseases, and Weeds
Module Level, if applicable	Intermediate
Code if Applicable	320204777
Subtitle, if applicable	-
Courses, if applicable	320204777
Semester(s) in which the module is taught	3
Person responsible for the module	Prof.Dr. Ir. Dyah Roeswitawati, MS. Ir. Henik Sukorini, MP. PhD. Dr. Dian Indratmi, MP
Lecturer	Prof.Dr. Ir. Dyah Roeswitawati, MS. Ir. Henik Sukorini, MP. PhD. Dr. Dian Indratmi, MP
Language	Indonesian
Relation to curriculum	Compulsory Courses for undergraduate program in Department of Agrotechnology, Faculty of Agriculture and Animal Science.
Type of teaching, contact hours	Type of teaching: Face to face, Practical, Demonstration, Discussion Contact hours : 5 hours x 16 weeks = 80 hours
Workload	Class : 3 hours x 14 weeks = 42 hours Practical class : 2 hours x 14 weeks = 28 hours Examination 5 hours x 2 time = 10 hours Total 80 hours
Credit points	SKS 5 SCH x (1.5) = 7,5 ECTS
Requirements according to the examination regulations	1. Registered in this course 2. Minimum 80% attendance in this course
Recommended prerequisites	No prerequisites

Module Objectives (Intended learning outcomes)	<p>On successful completion in this course, student should be able to:</p> <ul style="list-style-type: none"> • Understand the concept of plant protection, plant diseases and the importance of plant cultivation • Understand plant protection, the role of insects and insect phylum • Evaluate and develop management concepts and the meaning of calibration and its benefits
Module Content	<p>This course are able to recognize and understand the limits of plant protection, the role of insects as beneficial to plant crops, phylum Arthropoda, phylum Mollusca, the scope of the insect class, the concept of plant diseases, causes of plant diseases, up to the meaning of calibration and its benefits.</p>
Study and examination requirements and forms of examination	<p>Cognitive: Midterm exam, Final exam, Quizzes, Assignments Psychomotor: Practice Affective: Assessed from the element /variables achievement, namely (a) Contributions (attendance, active, role, initiative, and language), (b) Being on time, (c) Effort.</p>
Media employed	<p>Classical teaching tools with white board and power point presentation</p>
Recommended Literature	<p>For Class</p> <ul style="list-style-type: none"> L. Compulsory <ul style="list-style-type: none"> - Book related to Fundamental Ecosystem Science ; Biocontrol and Natural Enemies M. Option (referensi pendukung) <ul style="list-style-type: none"> - Book related to Science ; Biocontrol and Natural Enemies
Date of Last Amendment	<p>23rd August 2022</p>

Module Name	Al Islam and Kemuhammadiyah III
Module Level, if applicable	Intermediate
Code if Applicable	0120200046
Subtitle, if applicable	-
Courses, if applicable	0120200046 (Islamic and Muhammadiyah Studies III)
Semester(s) in which the module is taught	5
Person responsible for the module	Zulfikar Yusuf, S.Pd.I., M.Pd.I.
Lecturer	Zulfikar Yusuf, S.Pd.I., M.Pd.I.
Language	Indonesian
Relation to curriculum	Compulsory Courses for undergraduate program in Department of Agrotechnology, Faculty of Agriculture and Animal Science.
Type of teaching, contact hours	Type of teaching: Face to Face and Discussion Contact hours : 1 hours x 16 weeks = 16 hours
Workload	Class : 1 hours x 14weeks = 16 hours Practical class : 0 hours x 14 weeks = 0 hours Examination 1 hours x 2 time = 2 hours Total : 16 Hours
Credit points	SKS 1 SCH x (1.5) = 1.5 ECTS
Requirements according to the examination regulations	1. Registered in this course 2. Minimum 80% attendance in this course
Recommended prerequisites	No prerequisites
Module Objectives (Intended learning outcomes)	Students are able to understand the nature of God and humans in Islam, understand the values of divinity and humanity and their implications for personality formation, understand the function of

	divine and human values in developing good deeds in social life
Module Content	The general goal of AIK education is the formation of human learners who are pious, have morals, striving for excellence as the embodiment of <i>Tajdid Da'wah Amar Ma'ruf Nahi Munkar</i> (obey god's command and avoiding god's prohibition). This general goal is translated into a more measurable goal in this first course, namely to form Muslim scholars who know themselves and God, their mission, goals and benefits of life as guided in the Qur'an and as-Sunnah. For this reason, this course is directed at mastering basic material about divinity, humanity and life, which is expected to be used as a scientific foundation for students in living their lives and lives.
Study and examination requirements and forms of examination	Cognitive: Midterm exam, Final exam, Quizzes, Assignments Psychomotor: Practice Affective: Assessed from the element /variables achievement, namely (a) Contributions (attendance, active, role, initiative, and language), (b) Being on time, (c) Effort.
Media employed	Classical teaching tools with white board and power point presentation
Recommended Literature	For Class N. Compulsory - Al-Quran Translate of Yunahar Ilyas, 2001; page 70-76. Moh. Abdullah, dan Shalah As-Shawi, 2009; O. Option - Book by Abdullah dan shalah Ash- Shawi, 2009;
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