# CURRICULUM GUIDEBOOK AGRIBUSINESS STUDY PROGRAM



## **Preface**

The curriculum is a set of plans and arrangements regarding graduate learning outcomes, study materials, processes, and assessments used as guidelines for implementing study programs as stipulated in Permenristekdikti Number 44 of 2015 Article 1. The Agribusiness Study Program, Faculty of Agriculture, University of Lampung, develops the 2020-2024 curriculum following the Policy Merdeka Learning – Merdeka Campus, which was compiled based on Permendikbud Number 3 of 2020 concerning National Higher Education Standards.

The Agribusiness Study Program is required to design and implement innovative learning processes so students can achieve learning outcomes covering aspects of attitude, knowledge, and skills optimally. Compiling this curriculum guide aims to develop elements that are already good and renewed to meet demands, currents of change, and the need to link and match with the business and industrial world and prepare students for the world of work.

The method for compiling the curriculum for the Agribusiness Study Program is based on the guidelines for assembling a higher education curriculum in the industrial era 4.0, which consists of five stages: analysis, design, development, implementation, and evaluation. The curriculum guide contains a description of the Agribusiness Study Program, the Vision, Mission, and Objectives of the Study Program, the 2016 Curriculum Evaluation and Tracer Study, Graduate Profiles and Formulation of CPL, Study Materials, Courses (Mk), Semester Credit Unit Weights (SKS), Distribution Per Semester, Semester Learning Plans (RPS), and Learning Management. I want to thank the Team for preparing this guide, who worked hard with dedication, and all parties who have made valuable contributions so that the Curriculum Guide for the Agribusiness Study Program, Faculty of Agriculture, University of Lampung, can be completed.

Finally, we hope that this Guidebook will be helpful for universities and can be used as a reference for preparing graduates who can give birth to society. Indonesia is civilized, competent, professional, and competitive in the Industrial Revolution 4.0 era and contributes to the welfare of the nation's life.

Bandar Lampung, 13 August 2020 Head of the Agribusiness Study Program

Dr. Teguh Endaryanto, SP., M.Si

# **List Of Content**

Pre	face	ii
List	Of Content	iii
A.	Introduction	1
В.	The Vision	1
C.	The Mission	2
D.	The Aim	2
E.	Determination of Graduate Profile	2
F.	Graduate Competencies	2
	Graduate Learning Outcome	
H.	Course	4
I.	Course Description and Course Learning Outcome	7

#### A. Introduction

The Agricultural Socio-Economic Department is the first major within the Faculty of Agriculture, University of Lampung. The Department of Agricultural Socio-Economics was formed in conjunction with the issuance of Decree Mendikbud No.0206/O/1973 dated November 16, 1973, concerning the Granting of "State" Status to the Faculty of Agriculture (without livestock), which was officially included in the University of Lampung. In 1984, the Department of Socio-Economics managed two study programs, namely the Agricultural Socio-Economic Undergraduate Program and the Agricultural Extension Diploma (D3) Program, with the Decree Direktorat Jenderal Pendidikan Tinggi (DIKTI), Departemen Pendidikan dan Kebudayaan Republik Indonesia 103/DIKTI/Kep/1984, dated August 21, 1984. Then in 1999, the Department of Agricultural Socio-Economics opened the Agricultural Extension and Communication Program with the Establishment Decree from DIKTI, Number: 252/DIKTI/Kep/1999, dated May 24, 1999; then, in 2004, the Department of Agricultural Socio-Economics opened a Masters Study Program in Agricultural/Agribusiness Economics with the Establishment Decree from DIKTI, Number: 3003/D/T/2004, Number: 3003/D/T/2004, dated August 4,

The Agricultural Socio-Economic Department, until 2007/2008, had three study programs, namely the Agribusiness Undergraduate Program (S1), the Agricultural Extension and Communication Program (S1), and the Agribusiness Master Program (S2). In its development, based on the agreement between Forum Komunikasi Perguruan Tinggi Pertanian Indonesia (FKPTPI), which was formally confirmed by the issuance of SK Dirjen Dikti Depdiknas RI 163/DIKTI/Kep/2007 concerning the Arrangement and Codification of Study Programs in Higher Education, the name of this department was determined to be Department of Agribusiness. in consequence, the Agribusiness Department only has two study programs, namely the Agribusiness Undergraduate Program and the Agribusiness Masters Study Program. In 2017, based on Ministerial regulation Riset, Teknologi dan Pendidikan Tinggi No 15 of 2017 concerning Naming Study Programs in Higher Education, the Agribusiness Department again managed four study programs, namely the Agribusiness Undergraduate Program (S1), Agricultural Extension Program (S1), Agribusiness Master Program (S2), and Agricultural Extension and Communication Master Program (S2).

To meet the demands, the flow of change, and the need to link and match with the business world and the industrial world, as well as to prepare students for the world of work, universities are required to be able to design and implement innovative learning processes so that students can achieve learning outcomes including aspects of attitude, knowledge, and skills optimally. Therefore, the Agribusiness Program developed a 2020/2021 curriculum following the Independent Learning Policy – Independent Campus, compiled based on Permendikbud Number 3 of 2020 concerning National Higher Education Standards.

#### B. The Vision

In 2025, to be a lead study program in creating qualified and competitive human resources to develop science and technology based on the agribusiness field.



#### C. The Mission

- 1. Implementing an educational process of teaching and learning activities in a professional manner to create graduates with professional, competitive, and noble personalities.
- 2. Improving the quality of research for lecturers and students in the agriculture field, in particular, agribusiness for scientific development and policy formulation.
- 3. Improving the quality of community services to support agribusiness-based community development.
- 4. Improving the quality of cooperation and partnerships with research and educational institutions at national and international levels.

#### D. The Aim

- 1. To create agribusiness graduates with professional, competitive, and noble personalities.
- 2. To create qualified research in the field of Agribusiness for scientific development and policy formulation.
- 3. To create qualified community services to support agribusiness-based community development
- 4. To Implement qualified collaborations and partnerships with research and educational institutions at national and international levels

#### E. Determination of Graduate Profile

Profiles of graduates of the Agribusiness Study Program, Faculty of Agriculture, University of Lampung are:

- 1. Manager with industrial revolution 4.0 and environmental insight.
- 2. Agricultural entrepreneur with industrial revolution 4.0 and environmental insight.
- 3. Agribusiness consultants/reviewers with industrial revolution 4.0 and environmental insight.

## F. Graduate Competencies

The main competencies of graduates of the Agribusiness Study Program are:

- 1. Agribusiness Manager
  - a. Able to design the allocation of natural, human, capital, and social resources to improve the efficiency of agribusiness system operations.
  - b. Able to work in a multidisciplinary team.
  - c. Have environmentally friendly agricultural business ethics.
- 2. Agribusiness Entrepreneur
  - a. Able to design the operation and development of agribusiness business units that are innovative, create added value, and are environmentally friendly.
  - b. Able to identify and manage risks and anticipate uncertainties in agribusiness operating systems.
- 3. Consultant/Assessor
  - a. Able to think analytically and synthetically to evaluate development solutions on agribusiness operating systems.

b. Able to negotiate and communicate effectively with stakeholders in the development of agribusiness operating systems by utilizing information technology.

## G. Graduate Learning Outcome

Graduate Learning Outcomes is a formula of minimum criteria about the qualification of graduate skill which includes attitude, knowledge, and skill. Graduate Learning Outcomes of the Agribusiness Study Program are formulated with reference to the qualification level of KKNI and SN-Dikti. The Graduate Learning Outcomes of Agribusiness Study Program formula is arranged with including abilities needed in an industrial era 4.0 which covers:

- 1. Data literacy, comprehension ability to read, analyze, use data and information (*big data*) in a digital world.
- 2. Technology literacy, ability to understand how a machine works, technology application (*coding*, *artificial intelligence*, and *engineering principal*).
- 3. Human literacy, comprehension ability about humanities, communication, and design.
- 4. Comprehension of industrial revolution 4.0 signs.
- 5. Comprehension of knowledge to be applied for the common good locally, nationally, and globally.

The details of Graduate Learning Outcomes Agribusiness Study Program Agribusiness Major Agriculture Faculty Lampung University are :

Parameter	Program Learning Outcome (PLO)			
Description				
Attitude	1. Students are able to internalize the attitude of believing in God in			
	practicing agricultural business activities with science, technology,			
	and environmental concern as the basis			
	2. Students are able to internalize the value of humanity, and			
	nationalism, and contribute to improving the quality of social life			
Knowledge	3. Students are able to apply the concept of human literacy (ethics,			
	communication, negotiation, leadership, innovation, and			
	creativity) in the field of agribusiness.			
	4. Students are able to analyze agribusiness theory, management,			
	agricultural socioeconomics (micro, macro, and development),			
	entrepreneurship, business communication, and comprehensive			
	knowledge of agricultural technical aspects from upstream to			
	downstream.			
	5. Students are able to implement theory (economics, management,			
	and development) in agricultural business from micro to			
	enterprise scale by paying attention to local wisdom and having a			
	global perspective.			
General	6. Students have critical thinking (logic, systematic, creative,			
Skill	communicative, collaborative, and innovative) in developing			
	agribusiness with scientific-approaches and ethics.			
	7. Students are able to integrate knowledge related to statistics, big			
	data, and information technology in the field of agribusiness			
Specific	8. Students are able to integrate agribusiness concepts into			
Skill	agricultural business creatively, innovatively, and professionally.			

- 9. Students are able to simulate the right decision-making and work professionally both independently and in teams in the field of agribusiness.
- 10. Students are able to formulate a professional and Innovative agricultural business design and development

## H. Course

#### Semester I

Code	Course	Credits	C/E	Prerequisite
UNI620101	Islam Religious Education	3(2-1)	С	
UNI620102	Catholic Religious Education	3(2-1)	С	
UNI620103	Christian Religious Education	3(2-1)	С	
UNI620104	Hindu Religious Education	3(2-1)	С	
UNI620105	Budha Religious Education	3(2-1)	С	
UNI620108	Pancasila Education	2(2-0)	С	
FPU620101	English Language	3(2-1)	С	
FPU620102	Biology	3(2-1)	С	
AGB620101	Introduction to Economics	3(2-1)	С	
AGB620102	Introduction to Agribusiness	2(2-0)	С	
AGB620103	Mathematical Economics	3(2-1)	С	
AGB620104	The Basics of Management	2(2-0)	С	
PPN620101	Rural Sociology	3(2-1)	С	
	Total	24 (18-6)		

## Semester II

Code	Course	Credits	C/E	Prerequisite
UNI620106	Indonesian Language Education	2(2-0)	С	
UNI620107	Citizenship Education	2(2-0)	С	
FPU620115	Physics Education	2(2-0)	С	
FPU620116	Introduction to Chemical	2(2-0)	С	
FPU620106	Introduction to Agriculture	2(2-0)	С	
FPU620202	Basic Statistics	3(2-1)	С	
FPU620111	Agricultural Field Trainning	1(0-1)	С	
AGB620203	Nutrition and Food	2(2-0)	С	
AGB620105	English for Agribusiness	2(2-0)	С	
AGB620106	Micro Economics	3(2-1)	С	
AGB620107	Agribusiness Information Technology	3(2-1)	С	
	Total	24 (20-4)		

## Semester III

Code	Course	Credits	C/E	Prerequisite
UNI290092	Entrepreneurship	3(2-1)	С	
AGB620201	Accountings Introduction	3(2-1)	С	
AGB620202	Macro Economics	3(2-1)	С	
AGB620204	Human Resources Management	2(2-0)	С	
AGB620205	Business Information System	2(2-0)	С	

TNH620214	Introduction to Soil Science	2(2-0)	С	
ABE620217	Agriculture Mechanization	2(2-0)	С	
AGT620212	Plant Cultivation Techniques Introduction	2(2-0)	С	
HPT620214	Basic Plant Protection	3(2-1)	С	
THP620101	Agricultural technologies Introduction	2(2-0)	С	
	Total	24 (20-4)		

## Semester IV

Code	Course	Credits	C/E	Prerequisite
AGB620206	Econometrics	3(2-1)	С	
AGB620207	Cooperative	3(2-1)	С	
AGB620208	Financial and Banking Management	2(2-0)	С	
AGB620209	Agribusiness Risk	2(2-0)	С	
AGB620210	Agricultural Marketing	3(2-1)	С	
AGB620211	Farm Business	3(2-1)	С	
AGB620307	Agribusiness System	2(2-0)	С	
PPN620105	Counseling Basics	2(2-0)	С	
	Total Credits Compulsory course	20(16-4)		
	Elective course (E)	0 - 4	Е	

<sup>\*\*</sup> Note: Can be taken in odd or even semesters

## Semester V

Code	Course	Credits	C/E	Prerequisite
FPU620401	Sustainable Agricultural System	2(2-0)	С	
AGB620301	Decision Making Analysis	2(2-0)	С	
AGB620302	Natural Resources and Environmental Economics	3(2-1)	С	
AGB620303	Marketing and Logistic Management	2(2-0)	С	
AGB620304	Socio-Economics Research Methods	3(2-1)	С	
AGB620305	Sustainable Agricultural Development	2(2-0)	С	
AGB620306	Agribusiness Project Planning and Evaluation	3(2-1)	С	
	Total Credits Compulsory course	17(14-3)		
	Elective course (E)	0 - 7	E	

<sup>\*\*</sup> Note: Can be taken in odd or even semesters

## Semester VI

Code	Course	Credits	C/E	Prerequisite
UNI620401	UNI620401 Community Service Program*		С	
	Total Credits Compulsory course	3(0-3)		
	Elective course (E)	0 - 21	E	

# Semester VII

Code	Course	Credits	C/E	Prerequisite
FPU620402	Internship Program	3(3-0)	С	
AGB620401	Research Proposal Seminar*	1(0-1)	С	

AGB620	0402 Research Result Seminar *	1(0-1)	С	
	Total	5(3-2)		

# Semester VIII

Code	Course	Credits	C/E	Prerequisite
AGB620403	Undergraduate Thesis*	4(0-4)	С	
	Total	4(0-4)		

<sup>\*\*</sup> Note: Can be taken in odd or even semesters

# Elective Course

Code	Course	Credits	Semester
AGB620308	Cost Accounting	2(2-0)	Odd
AGB620309	Accountancy Management	2(2-0)	Odd
AGB620310	Agribusiness Quantitative Analysis	3(2-1)	Odd
AGB620311	International Economics	3(2-1)	Odd
AGB620312	Food and Nutrition Economics	3(2-1)	Odd
AGB620313	Institutional Economics	2(2-0)	Odd
AGB620314	Managerial Economics	2(2-0)	Odd
AGB620315	Agricultural Production Economics	3(2-1)	Odd
AGB620316	Regional Economics	2(2-0)	Odd
AGB620317	Household Economics	3(2-1)	Odd
AGB620318	Business Legal and Ethics	2(2-0)	Odd
AGB620319	Food and Nutrition Policy	2(2-0)	Odd
AGB620326	Business Organization's Behaviour	2(2-0)	Odd
AGB620328	Operasional Research	3(2-1)	Odd
AGB620329	Multivariate Statistic	3(2-1)	Odd
AGB620320	Agricultural Policy	3(2-1)	Even
AGB620321	Operation and Production Management	2(2-0)	Even
AGB620322	Strategic Management	2(2-0)	Even
AGB620323	Business Advocation and Negotiations	3(2-1)	Even
AGB620324	Agribusiness Practices	3(2-1)	Even
AGB620325	Consumer's Behaviour	3(2-1)	Even
AGB620327	Regional Planning and Development	3(2-1)	Even
AGB620330	Agribusiness Policy and Strategy	2(2-0)	Even
AGB620331	Agribusiness Geografic's Information System	3(2-1)	Even
AGB620332	Agroindustry Economics	2(2-0)	Even
AGB620333	Agricultural Company Financing	2(2-0)	Even
FPU620302	Forestry and Plantation Crop Production***	2(2-0)	Even
FPU620303	Aquaculture and Livestock**	2(2-0)	Even
FPU620313	Horticulture and Food Crops Productions**	2(2-0)	Even
AGB620332	Agroindustry Economics	2(2-0)	Even
FPU620301	Community Development	3(2-1)	Even
PPN620314	Agrarian Studies	3(2-1)	Even
PPN620305	Population	2(2-0)	Even
	Total	73 SKS	

Note:

Compulsory course (C); Elective course (E)

\* : offered in every semester

#### I. Course Description and Course Learning Outcome

#### UNI620101, Islam Religious Education, 3(2-1)

Islamic Education course is a 3 (2-1) credit course. This course presents The Qur'an and science; man and religion, aqidah islamiyah, shari'ah islamiyah: Akhlaq Al Islam: Selected Capita History of Islam.

#### UNI620102, Catholic Religious Education, 3(2-1)

Catholic Religious Education course is a 3 (2-1) credit course. This course presents Foundations of the Catholic Faith; living in the church and in society; task and the responsibility of the Catholics; devotion.

#### UNI620103, Christian Religious Education, 3(2-1)

Christian Religious Education course is a 3 (2-1) credit course. This course presents Foundations of the Christian Faith: faith and science; the responsibility of Christians in plural community; Christian moral and ethic conducts.

#### UNI620104, Hindu Religious Education, 3(2-1)

Hindu Religious Education course is a 3 (2-1) credit course. This course presents The basic framework of Hinduism; tattwa, susila, yadnya: The basis of Hindu faith, the basis and purpose of Hindu life.

#### UNI620105, Buddist Religious Education, 3(2-1)

Buddhist Education course is a 3 (2-1) credit course. This course presents Buddhist philosophy, Buddhist way of life, Buddhism and repertoire knowledge; the relevance of Buddhism to modern times and era development.

#### UNI620108, Pancasila Education, 2(2-0)

This course examines the Introduction to Pancasila Education, the History of Pancasila, Pancasila as the Foundation of the Republic of Indonesia, Pancasila as the View of the Nation, Pancasila as the Indonesian Nation's Philosophy of Life, Pancasila as the Basic Value of Science Development, Garuda Pancasila as the State Symbol of the Republic of Indonesia, and Implementation of Pancasila in daily life.

#### **FPU620101**, English Language, 3(2-1)

The General English course is a 3 (2-1) credit course. This course contains studies on: English for Intermediate-Advance Course:

Review in tenses, conditional, active-passive, noun clause. Adjective clause, adverbial clause, gerund, infinitive, conjunction, relative clause, functional skills, reading comprehension.

#### FPU620102, Biology, 3(2-1)

This course contains studies on: Basic theory and concept of life, cells as smallest unit of life, cells function, tissue and organ of plants and animals; Introductions to genetics and evolution; Ecology and organism diversity; Introductions to agriculture ecosystem (biotics



<sup>\*\*:</sup> mandatory choice of thesis interest

and abiotics); Concept of plant pests and disease and also their control especially by implementing integrated pest management (IPM).

## AGB620101, Introduction to Economics, 3(2-1)

The scope of economics introductions course is the concept of scarcity, choice, opportunity cost, types of economic activity, market economy system, differences between micro and macroeconomics, theory of household consumption behavior with various approaches, theory of demand, supply and price, concept of elasticity and method of calculation, theory of production and costs, theory of perfectly competitive market structure and monopoly market and market equilibrium. Next is about the concept of aggregate demand and supply, the concept of aggregate product and national income and the factors that determine it, changes in national income, and the fiscal and monetary policies.

#### AGB620102, Introduction to Agribusiness, 2(2-0)

This course provides students with an understanding of agribusiness. The discussion starts from the evolution of agriculture to agribusiness, the notion of agribusiness which consists of five subsystems, namely the subsystem for the procurement of production facilities and equipment agriculture, farming subsystem, processing subsystem, marketing subsystem, and supporting services subsystem. Furthermore, the development of agribusiness systems and businesses through backward and forward linkages is discussed (forward linkage), as well as various agribusiness companies.

### AGB620103, Mathematical Economics, 3(2-1)

The scope of the Mathematical Economics course is the definition of mathematical economics, the application of line and series, sets and number systems, systems of equations, and inequalities, linear functions and functions and nonlinear functions, limits and derivatives, differential calculus and matrix algebra, and mathematical applications in economy.

#### AGB620104, The Basics of Management, 2(2-0)

The scope of the Basics of Management course is the history and development of management science, management functions which include planning, organizing, actuating (human behavior, communication, motivation, and leadership), controlling and information technology in management.

#### PPN620101, Rural Sociology, 3(2-1)

The scope of the Rural Sociology courses is agricultural sociology, the development of agricultural structures: family farming, feudalistic agriculture, capitalistic agriculture, collective farming, socialistic agriculture, communistic agriculture, social organization of agricultural society in Indonesia: family organization, utilization of living space and the forms of settlements, forms of organization, agricultural production, agricultural development in Indonesia, social structures and appropriate technology.

#### UNI620106, Indonesian Language Education, 2(2-0)

This course presents Indonesian spelling, grammar, words: basic and invented words, sentences; single sentences and compound sentences, paragraphs, manuscripts, and manuscripts scientific.

## UNI620107, Citizenship Education, 2(2-0)



This civics education course is designed in line with academic thinking to provide an understanding in order to know and be able to properly implement the nature of citizenship education, national identity, national integration, the Constitution in Indonesia, obligations and rights of the state and citizens, dynamics of democracy in Indonesia, law enforcement in Indonesia, insight into the archipelago, national resilience, regional autonomy, good governance and civil society.

#### FPU620115, Physics Education, 2(2-0)

This course contains studies on: Basic units and vectors; Motion: straight and circular; Force and mechanics: work, power energy, momentum, thermodynamics, fluid mechanics; lectrodynamics, and electrostatic, electromagnetic, optics, and core physics.

## FPU620116, Introduction to Chemical, 2(2-0)

This course presents an understanding of international units, molecules/objects, changes in molecules/objects; properties of atoms/elements in a periodic system, chemical bonds, compounds, and the structure of atoms/elements in molecules/objects; reaction equation equilibrium, solubility, and precipitation reactions; reaction kinetics (speed reactions, catalysts) and molecular movement, laws of thermodynamics; system chemistry of water, acids, bases, salts and buffer solutions; Electrical chemistry (oxidation-reduction); Basic organic chemistry (chain long-chain carbons and functional groups of organic compounds); nitrogen compounds, and lipids.

## FPU620106, Introduction to Agriculture, 2(2-0)

This course presents Definitions of agriculture, agricultural and environmental science, history of agriculture and business agriculture, the scope of agriculture, the role of agriculture in human life and development, - influencing factors agricultural business (soil, plants, climate, nuisance organisms, and cultivation techniques), the concept of sustainable- and insightful agriculture environment (integrated agriculture, organic farming, - and agroforestry), agricultural mechanization, harvest and post-harvest, socioeconomic agriculture and agricultural development (agribusiness, extension and institutional agriculture, marketing and trade, and agricultural development modern).

## FPU620202, Basic Statistics, 3(2-1)

This course provides competencies for students to be able to explain the basic concepts of statistics, descriptive statistics and statistics inferential, and able to perform statistical data analysis in the field of engineering agriculture, with subjects including probability and distribution, statistics descriptive, parameter estimation, hypothesis testing, value comparison test middle, regression and correlation analysis, analysis of variance, experimental design, and the use of computer programs for statistical analysis.

#### FPU620111, Agricultural Field Trainning, 1(0-1)

The scopes of the agriculture introduction practises course are the introduction of agricultural activities to students directly in the field regarding the social, cultural and economic conditions of farmer families. Student learn techniques in field about agribusiness from up-stream to down-stream; sub-systems: production facilities, farming, processing, marketing and supporting institutions.

## AGB620105, English for Agribusiness, 2(2-0)

This course is about Reading, Vocabulary, Grammar, Writing,

Listening, and Speaking. Every reading material (Reading) is discussed in terms of words (Vocabulary), grammar, and students are required to make a script (Writing) related to the



topic, also stimulated to have a discussion (Speaking). In addition, students will listen to articles presented in audio form

and re-express what they have heard. In the last three weeks students will learn about TOEFL (Test of English as a Foreign Language). English for Agribusiness is a subject given to agribusiness students as a deepening of the English course taken by students in the previous semester. With the rapid development of technology in the era of globalization, graduates of this department are expected to be able to compete with other graduates, especially in English proficiency. By taking this course, students are expected to be able to analyze reading (written and oral), write, and express ideas in English.

## AGB620106, Micro Economics, 3(2-1)

The scope of the Microeconomics course is the scope and role of microeconomics (price theory in the Indonesian economy), consumption theory: consumer behavior theory, modern theory of consumer behavior and demand theory, production theory: production concept, efficiency and optimal product level, the relationship between factors of production and between products, cost theory, market theory, and welfare economics.

## AGB620107, Agribusiness Information Technology, 3(2-1)

The scope of this course is the Industrial Revolution 4.0 Information Technology in Agribusiness, Internet of Things (IoT), Big Data, Artificial Intelligence (AI), Smart Farming, e-commerce (data literacy), financial technology (financial literacy), and coding language (digital literacy).

#### AGB620203, Nutrition and Food, 2(2-0)

The Nutrition and Food Course is a compulsory course at the Department of Agribusiness that students in semester 2 (second) can take in the Agribusiness Study Program FP UNILA with the aim that after attending this lecture students are expected to be able to explain nutrition and food issues and the relationship between nutrition and food and agriculture and health, explaining the functions and diseases caused by deficiencies or excesses of the six kinds of nutrients, understanding and evaluating nutritional status, food patterns of expectations and food security as well as various factors that influence community nutrition problems and efforts to improve them through various community nutrition and food improvement programs in relation to the achievement of the Sustainable Development Goals (SDGs).

#### FPU620201, Entrepreneurship, 3(2-1)

Broadly speaking, this course studies the role of entrepreneurship; obstacles to progress and future challenges, self and its development; optimism; intention and tenacity; creativity; stake; business planning, introduction to attitudes and characteristics of professional entrepreneurs. The scope of the discussion material includes: the role and characteristics of entrepreneurs, business networks, business ideas and opportunities, business feasibility, preparation of business plans, business financial management, marketing strategies, pricing, customer service, business locations and raw materials, capital and business profiles, and entrepreneurial ethics.

#### AGB620201, Accounting Introductions, 3(2-1)

The scope of Accounting Introductions courses is accounting and its utilities, areas of accounting, financial statements and accounting equations, basic accounting procedures, characteristics of accounts, journals and postings, trial balances, accounting errors and corrections, accounting adjustments, accounting principles and determination of net

income, worksheet, closing of books and readjustments. Next, about accounting for trading companies and financial statement analysis.

## AGB620202, Macro Economics, 3(2-1)

The scope of Macro Economics courses is the main problems of macroeconomics, measurement of national income, consumption theory, investment function, money and central bank, IS-LM analysis, inflation, fiscal and monetary policy, unemployment and poverty, and international trade theory.

## AGB620204, Human Resources Management, 2(2-0)

The human resource management (MSDM) course is focused on

understanding concepts and cases related to HRM and broadly related to micro and macro aspects of employment, workforce productivity, efficient use of labor, and human resource development planning. The scope of discussion of this course includes: roles, development, and functions in human resource management, components of employee planning, job analysis, employee recruitment and selection, employee orientation and placement, employee training and development, performance and performance appraisal, compensation and incentives, employee integration, workforce maintenance, and employee termination.

#### AGB620205, Business Information System, 2(2-0)

The scope of the Business Information System course is the types of information systems and the latest business activities, developments in technology and information technology infrastructure, and company applications to achieve operational excellence and closeness with customers. Next is about the development of information systems, and knowledge and project management.

#### TNH620214, Introduction to Soil Science, 2(2-0)

This course contains studies of: Soil and human civilization, soil as a resource, soil formation, physical, chemical and biological properties of soil, sources of soil nutrients (N, P, K, Ca, Mg, S, and micro elements) and their management, interpretation of land use, soil environment, basics of soil classification and surveying.

#### ABE620217, Agriculture Mechanization, 2(2-0)

The Agricultural Mechanization course includes tools and machines (alsin) for primary soil processing, processing secondary soil, planting machine, fertilizing machine, spraying machine, drainage of dry land and wetlands, harvesting machine, sorting machine, drying machine and storage machine.

#### AGT620212, Plant Cultivation Techniques Introduction, 2(2-0)

This course contains studies on: Understanding and scope of plant cultivation, basic needs plants, plant propagation (vegetative, generative, seed criteria and storage), cultivation techniques, planting patterns, plant cultivation local specific and environmentally sound plant cultivation.

#### HPT620214, Basic Plant Protection, 3(2-1)

This course discusses the history, purpose and importance of plant protection, the concept of crop disturbance, various types of plant disturbances, the understanding of plant pests and diseases, the concept of disease occurrence, disease causes and mechanisms of disease occurrence, ways of managing plant diseases, vertebrate taxonomy and plant pest

invertebrates, plant pest bioecology, pest status and garden economics, plant pest management.

#### THP620101, Agricultural technologies Introduction, 2(2-0)

This Course focuses on the importance of Agricultural product science and technology to humans as well as environment. This class discusses the total sequence of operations in processing technology, which includes the selection of raw materials, processing, preservation, and distribution. The topics covered start with an overview of the technology of processing and storage of agriculture products. Also discuss how the processor often controls the producer's operations by demanding a raw product of a certain type in order to satisfy a particular processing and consumer demand.

#### AGB620206, Econometrics, 3(2-1)

The scope of the Econometrics course is the definition of econometrics, simple regression, multiple regression, regression with qualitative independent variables, multicollinearity, heteroscedasticity, autocorrelation, regression with qualitative dependent variables, time series econometrics, and introduction of simultaneous equations.

#### AGB620207, Cooperative, 3(2-1)

The scope of Cooperative courses is the history and development of cooperatives, definition, characteristics, institutions and principles of cooperatives, formation, amalgamation and dissolution of cooperatives, cooperative organizational structure, management and administration of cooperatives, entrepreneurship and cooperative business networks, cooperative capital, types of cooperatives, cooperatives in the market system, cooperative member participation, evaluation of cooperative success, cooperative performance as a business entity, cooperative benefits for members. Next is about the contribution of cooperatives to national development, especially agricultural development, the development of cooperative legislation in Indonesia, and cooperative business opportunities in Indonesia and several other countries.

#### AGB620208, Financial and Banking Management 2(2-0)

This course discusses the meaning of banks and other financial institutions, banking products, banking management, time value of money, non-bank financial institutions, banking and credit law, the central bank, and Indonesia's monetary policy. This course also discusses the concepts of financial management, financial planning, working capital management, cost of capital, financial statement analysis, break even point analysis, leverage analysis, and cash flow statement analysis. Understand the definition of medium and long term sources of funds, banking and credit law, central bank and monetary policy of Indonesia, as well as International Financial Management.

#### AGB620209, Agribusiness Risk, 2(2-0)

The Agribusiness Risk Course is a mandatory subject for the Agribusiness Department which can be taken by 3rd (three) semester students at the Agribusiness Study Program FP UNILA with the aim that after attending this course students are expected to be able to know the knowledge and skills regarding the concept of risk and uncertainty, the types of risk in business, decision-making theory, portfolio risk assessment, risk models in business, and risk management strategy.

#### AGB620210, Agricultural Marketing, 3(2-1)

The Agricultural Commerce Course is a compulsory subject for study programs that students in the 4th (fourth) semester of the Agribusiness Study Program, FP UNILA, can

take part in with the aim that students are able to understand the role of marketing theory in agricultural products and are able to analyze the efficiency of the agricultural trade system and link market performance with developments in the trade system. (marketing) of agricultural products in Indonesia today. Therefore, this course discusses the meaning and scope of the understanding of the agricultural trade system and trade system, the functions of the trade system and the role of the trade system in the development of agricultural products in domestic and foreign markets, the formation of agricultural product prices and their influence on agricultural production and food security and economic stability, government policy in agricultural trade system, marketing efficiency, market organization and assessing (analyzing) marketing performance of agricultural products.

## AGB620211, Farm Business, 3(2-1)

This course is a compulsory subject for the Agribusiness Undergraduate Study Program. The farming course studies the definitions, classifications and patterns of farming in Indonesia, the main elements of farming, farming research, revenue structures, costs and farming income, risk and uncertainty analysis in farming, farming planning, farming budgeting and farming accounting.

## AGB620307, Agribusiness System, 2(2-0)

This course provides students with an understanding of agribusiness systems as a new approach to agricultural development. Therefore discussed agribusiness management of various agricultural sub-sectors. It begins with reviewing management functions and manager functions as well as various forms of agribusiness organizations. Next, the management of up-stream agribusiness, on-farm agribusiness, down-stream agribusiness, and agribusiness supporting systems is discussed successively. In addition, several special topics such as human resource management, financial management, investment management, and strategic management in agribusiness will complement the discussion in agribusiness systems.

#### PPN620105, Counseling Basics, 2(2-0)

The scopes of the counseling basics course are the history of the development of agricultural counseling science, models and roles of counseling in agricultural development, philosophy and principles of counseling, teaching and learning process in counseling, communication process in counseling, adoption process in decision making, innovation, process diffusion of innovations and adopter categories, interpersonal communication and agricultural counseling, mass media communication in agricultural counseling, agricultural counseling methods, the basics of preparing agricultural counseling programs, the basics of evaluating counseling programs, agricultural counseling programs and institutions.

#### FPU620401, Sustainable Agricultural System, 2(2-0)

The scopes of the The Sustainable Agriculture course are the . (1). Reasons for the need for Sustainable Agricultural Management; (2) the concept of sustainable agriculture; (3) components of sustainable agricultural management: cropping pattern regulation, nutrient and fertilization management, management of organic matter and soil conditioner, soil and water conservation, genetic engineering of soil and plant organisms, integrated management of pest organisms, integration of livestock in Sustainable Agriculture; (4) Sustainable Agricultural management models: organic farming, integrated mixed farming, agroforestry, lowland rice systems, and integration of agriculture with post harvest management; (5) the impact of sustainable agriculture on environmental resources; (6)

Sustainable Agricultural socio-economic: concept and analysis of sustainable agricultural economics, institutional and cultural aspects; (7) Agricultural risk management: risk issues and sustainable agricultural risk management.

#### AGB620301, Decision Making Analysis, 2(2-0)

This course provides students with an understanding to understand the meaning, processes and methods of decision-making, is able to analyze problems and make decisions based on the best alternative selection criteria, and prepares students to choose and explore their final assignment (thesis) in the future, especially related to the analytical tools that will be used.

#### AGB620302, Natural Resources and Environmental Economics, 3(2-1)

The Economics of Natural Resources and Environment (ESDA) course is a compulsory course that provides an introduction to and understanding of economic analysis of natural resources. This ESDA course focuses on the sustainability of an economic development strategy. This course will discuss the economic principles of renewable natural resources, natural resources that are already threatened, natural resources that are disposable, and measurement of environmental damage and efforts towards sustainable economic development. The approach method used is descriptive/verbal, graphic and mathematical.

## AGB620303, Marketing and Logistic Management, 2(2-0)

The logistics and marketing management course discusses the basic concepts of marketing, marketing developments in the 21st century, analysis of marketing opportunities, determining marketing strategies, making marketing decisions, managing marketing programs and controlling marketing efforts. This course also discusses the concepts of logistics and supply chain management in agribusiness companies and identifies operations and logistics management to create strategic business opportunities.

#### AGB620304, Socio-Economics Research Methods, 3(2-1)

This course is a compulsory subject for students of the Agribusiness Study Program. This course can be taken in odd or even semesters, namely in semesters V or VI with the prerequisite of passing Indonesian Language and Basic Statistics courses. After graduating from this course, students are expected to be able to complete a series of research processes, starting from making research proposals, conducting research, preparing research reports, to presenting research results. In order to achieve this goal, students will be provided with relevant learning materials.

## AGB620305, Sustainable Agricultural Development, 2(2-0)

The Sustainable Agricultural Development Course is a compulsory subject for the Department of Agribusiness which can be taken by students in semester 5 (fifth) at the Agribusiness Study Program FP UNILA with the aim that after attending this course students are expected to be able to understand the historical, philosophical and theoretical framework of sustainable agricultural development, understand agriculture as a strategic sector in Indonesia, knowing strategies for sustainable agricultural development, analyzing various government policies in increasing production and farmers' income and explaining challenges and best practices of sustainable agricultural development.

#### AGB620306, Agribusiness Project Planning and Evaluation, 3(2-1)

The scopes of the agribusiness project planning and evaluation This course is a compulsory subject in the Agribusiness Study Program. Definition of the project, stages of the project



cycle, objectives and criteria for project analysis, benefits and costs of the project, financial analysis and economic analysis, interest and rate of return on investment, calculation of present and future value of benefits, present value from the flow of costs and benefits, Selection of investment alternatives based on investment criteria, Assessment of economic benefits: consumer surplus, producer surplus and pricing as well as equal distribution of income and job opportunity creation, Evaluation of projects using the domestic resource cost method and effective rate of protection, Evaluation of projects in agricultural sector, strategy planning and project evaluation, especially investment benefit-cost analysis to obtain project information.

## UNI1620401, Community Service Program, 3(0-3)

Students carry out internship in direct agricultural activities in the field; students recognize the social, cultural, and economics condition of farming families; activities are carried out with homstay in farming families or in agricultural cultivation areas. Student learn about: village communities, village sociology, community diversity, social cummunication, community development and enpowerment and introducing innovation to village communities.

#### FPU620402, Internship Program, 3(3-0)

Internship activities carried out by students in agribusiness companies aim to gain real experience in the world of work related to subjects of interest and have been taken before.

#### AGB620401, Research Proposal Seminar, 1(0-1)

The proposal seminar is intended to present a research plan proposal after obtaining the approval of the supervisor. The research proposal seminar was attended by a minimum of 10 students, the supervisory committee and the lecturers who discussed it.

#### AGB620402, Research Result Seminar, 1(0-1)

The research results seminar is intended to present the results of research that has been carried out by students after obtaining the supervisor's approval. The seminar on research results was attended by a minimum of 10 students, the supervisory committee and the lecturers who discussed it

#### AGB620403, Thesis, 4(0-4)

Thesis is an individual scientific work compiled at the end of the study by undergraduate students. The thesis is guided by a supervisory committee consisting of the first and second supervisors. The examination is carried out by a thesis examiner team consisting of a supervisory commission and one examiner outside the supervisor. Exams are carried out comprehensively related to the research that has been carried out and the knowledge that has been learned related to research.

## AGB620308, Cost Accounting, 2(2-0)

Subject Cost Accounting is an elective course in a study program that fifth semester students can take part in the Agribusiness Study Program FP UNILA with the aim that students are able to understand the meaning of cost and cost accounting, calculate costs based on orders and processes, understand and calculating costs for by-products, and planning & controlling costs, especially raw material, labour and factory overhead costs through an estimated and standard costing system approach.

## AGB620309, Accountancy Management, 2(2-0)



This subject is discussing about the basic concepts of accountancy management holistically from traditional concepts to contemporary concepts. Those concepts comprises price accumulation and product assessment, management planning and controlling, and managerial decision making. Aside from discussing about conceptual things about accountancy management, this subject are also discussing about how to apply those concepts practically. Therefore, hopefully this subject could provides knowledge for management accountant and managerial prospectives on doing their duties afterward.

#### AGB620310, Agribusiness Quantitative Analysis, 3(2-1)

This course provides students with an understanding of agribusiness quantitative analysis agribusiness. The discussion starts from the basic framework of agribusiness quantitative analysis. Quantitative Forecasting (Time Series and ARIMA), Qualitative Forecasting (Delphi and AHP). Deterministic and Probabilistic Inventory Systems. Foundation of Input-output Analysis. Input-output Models at Regional Level. Multiplier in the output-input model. Implication analysis for agribusiness development.

## AGB620311, International Economics, 3(2-1)

The scope of this international economics course is the basic concepts of international economics, theory of international trade, international finance, trade policy, international economic cooperation, balance of payments and exchange rate systems, as well as monetary aspects of international trade.

## AGB620312, Food and Nutrition Economics, 3(2-1)

The scopes of this food and nutrition economics course are the foundation of nutrition economics and consumer behavior, the relation of economic variables with food and nutrition consumption, the element of nutrition as an element of welfare/poverty, the role of nutrition in economic development.

#### AGB620313, Institutional Economics, 3(2-1)

The scope of the institutional economics course is the history, understanding and scope of institutional economic theory (institutional economics), some basic concepts (imperfect/expensive information, asymmetric information, conflict of interest, rent seek, collective action, good collective impact, free driving), externalities, intergenerational interdependence, property rights, property rights, the role of representation, enforcement, and transaction costs), the dual impact of goods/services in economic transactions and transaction costs, economics of property rights in the economy and transaction costs; essence of companies and markets, several institutional elements, institutions as a method of carrying out economic activities, specificity of assets and economic forms, issues of partnership in economic/agribusiness activities, agribusiness institutions and alternative power, farmer institutions, agribusiness institutional development strategies

## AGB620314, Managerial Economics, 2(2-0)

This course provides students with knowledge, skills and abilities regarding the application of microeconomic principles for managerial decision making, including demand analysis and forecasting, production and cost analysis, pricing, market structure, and risk and uncertainty

#### AGB620315, Agricultural Production Economics, 3(2-1)

The Production Economics course studies the Economics of Production. The concept of production function, the concept of cost function, the allocation of one variable input, production with two variable inputs, the basics of CobbDouglass function theory,

production with two or more outputs, the production process over time, economic size and its implications for farming, introduction to decision-making theory.

## AGB620316, Regional Economics, 2(2-0)

Regional economics courses are given with the aim that students can understand various theories, central issues, and analytical methods that regional economic planners and researchers popularly use. Regional economics courses discuss Regional Economic Growth Theory, Company Location Theory, Growth Centers, Interregional Development Inequalities, Regional Economic Development Planning, Regional and Interregional Labor Market Analysis, Regional Economic Policy Analysis.

## AGB620317, Household Economics, 3(2-1)

This course is an elective course for students of the Agribusiness Study Program. This course provides students with an understanding of the basic knowledge of agricultural household economics which includes an economic approach in the analysis of human behaviour including theories, models, and methodologies, household economics analysis includes internal and external factors, the interrelationship of behaviour and family economic decisions, use and outpouring employment, production and income, consumption spending and household investment. Agricultural household subjective balance theory and household economic models in perfectly and imperfectly competitive markets.

#### AGB620318, Business Legal and Ethics, 3(2-1)

This course provides students with knowledge and skills on moral and legal principles in agribusiness practices so as to achieve business decisions and transactions that ensure business sustainability. The materials discussed in this course include the definition of law and ethics in business, several concepts of law and ethics in business and their relationship and application in business, especially in agriculture (agribusiness).

#### AGB620326, Business Organization's Behaviour, 2(2-0)

An elective course taught by the Agribusiness Study Program, Agribusiness Department, Faculty of Agriculture, Unila Discusses the definition and model of organisational behaviour, the basics of individual behaviour, the effectiveness of business organisations, the basics of group behaviour, and organisational systems, as well as organisational dynamics.

#### AGB620328, Operasional Research, 3(2-1)

This course is an elective course. This course provides students with an understanding of Operational Research . The discussion starts from Optimization models and linear programming, Transport and Assignment, Integer Programming, Game Theory, Nonlinear Programming, PERT/CPM Network Model, Queuing Theory and Simulation, Markov Chain and Dynamic Programming. Use of Operations Research in solving agribusiness management cases.

#### AGB620329, Multivariate Statistic, 3(2-1)

This course studies methods or statistical tests related to problems with more than one variate (multivariate). Topics covered include multivariate aspects, random matrix and random vector algebra, random samples, multivariate normal distribution, inference of vector means, multivariate mean difference tests (two groups, one and two way ANOVA),

multivariate regression models, path analysis, principal component analysis, factor analysis, canonical correlation analysis, discriminant analysis, and group analysis.

## AGB620320, Agricultural Policy Analysis, 3(2-1)

This course is an elective course. The students interested in analysing commodity competitiveness, fiscal policy, exchange rate, government subsidy on input and output are encouraged to register for this course. Extensive work on developing Policy Analysis Matrix (PAM) table involved in this course The table PAM consists of Private and Social Identity, and divergences rows. Further, divergences of private and social in terms of tradeable input, non-tradeable input, land rent, and profit are identified. Further analysis from PAM table are taught such as DRCR (Domestic Resource Cost Ratio), PC (Private Cost) ratio, NPCO (Net Protection Coefficient on Output), NPCI (Net Protection Coefficient on Input) to determine competitiveness of local commodities in the global market. In addition, update data of global commodity prices, derived from pink sheet data of the World Bank as well as BPS (Central Agency of Statistic) are also reviewed and placed in determining social price.

#### AGB620321, Operation and Production Management, 2(2-0)

This course is taught by the Agribusiness Department, for fourth, sixth, and eighth semester students. This course discusses: Operations and Productivity, Goods and Services Operations Strategy, Selection of Location Strategy, Inventory Management for Dependent Demand, Inventory Management for Independent Demand, Supply Chain Management, Project Scheduling and Costing with PERT and CPM.

## AGB620322, Strategic Management, 2(2-0)

Strategic Management is an elective course in the Agribusiness Study Program, Department of Agribusiness, Faculty of Agriculture, University of Lampung. The Strategic Management course is a course that encourages students to learn about the theories and concepts of Strategic Management in various development sectors (social, economic, and environmental). In addition to learning to understand theoretical matters, students will also learn various practical knowledge in the form of approaches, methods and techniques that can be applied to development activities that are based on the approach of development, empowerment and community participation.

## AGB620323, Business Advocation and Negotiations, 3(2-1)

This course is taught by the Agribusiness Department, for fourth, sixth, and eighth semester students. This course discusses: the definition of business negotiation and advocacy, effective negotiation process, the role of presentation in business negotiation and advocacy, how to handle conflict, preparation of business contracts, advocacy process, evaluation of advocacy impact, business advocacy cases in Indonesia, and the role of mass media in business advocacy.

## AGB620324, Agribusiness Practices, 3(2-1)

This course is a compulsory course for students of the Agribusiness Study Program. This course can be taken in odd or even semesters, namely in semester V or VI with the prerequisites of passing the Indonesian Language and Basic Statistics courses. After passing this course, students are expected to be able to complete a series of research processes, starting from making research proposals, conducting research, preparing research reports, to presenting research results. In order to achieve this goal, students will be equipped with relevant learning materials.

#### AGB620325, Consumer's Behaviour, 2(2-1)

The Consumer Behavior Course is an elective subject for the Department of Agribusiness that can be taken by students in the 4th (fourth) semester of the Agribusiness Study Program, FP UNILA, with the aim that after attending this lecture students are expected to be able to have knowledge, understanding and understanding of the definition of consumer behaviour, the scope of consumer behaviour , the relationship between consumer behaviour and decision making and marketing strategy as well as the development of products and services by producers and marketers, then able to conduct research in the field of consumer behaviour.

## AGB620327, Regional Planning and Development, 3(2-1)

The course of Regional Planning and Development are the Students can master the concept of regional planning and its application in learning planning dimensions and functions, development principles and regional development planning, development components and regional development planning, planning cycles and hierarchies, basic concepts of spatial patterns and structures, compilation and determination of RTRW principles of agriculture and industry, principles of agropolitan and settlement planning, rural and urban planning models, basic concepts of agropolitan planning and settlement planning, case studies of development planning in rural and urban areas.

#### AGB620330, Agribusiness Policy and Strategy, 2(2-0)

The course outlines ranges of agribusiness strategic issues such as: issue in manpower, issues in marketing and marketing mix, issues in process decision making, issues in how business organisation adapts with environmental issues, competition, and changing in government policies This course is a course that encourages students to learn about the theories and concepts of Business Strategy and Policy. In addition to learning to understand theoretical matters, students will also learn best practices of agribusiness activities, especially for Small Medium Agribusiness Enterprises.

#### AGB620331, Geographic Information System, 3(2-1)

The Geographic Information Systems course discusses the general understanding of GIS; GIS development history; understanding of data, information and information systems; basic concepts and components of GIS; real world representation into GIS; Geodesy concept for spatial (spatial) data; database management concept in GIS; spatial analysis methods; mapping function in GIS; link between Remote Sensing and GIS; the concept of Digital Terrain Model (DTM); Global Positioning System (GPS); and GIS applications in the field of urban and regional planning.

#### AGB620332, Agroindustry Economics, 2(2-0)

The scopes of the Agroindustry Economics course are the concept of agroindustry as the leading sector of agricultural development, agroindustry activities, the concept of added value for agroindustry, agroindustry competitiveness, agroindustry performance, problems and constraints, human resources, agroindustry technology, institutions, agroindustry in developing countries, competitive industrial environment, agroindustry patterns and friendly business models for small farmers, and strategies for developing agroindustry.

## AGB620333, Agricultural company financing, 2(2-0)

Definition, function and role and objectives of financial management or management/financing; Analysis of financial planning and control by making financial statement analysis, budgeting, and asset management; Concepts and theories of financing such as investment theory, measurement of risk and return value, capital structure theory, financing needs of agribusiness companies both short and long term, as well as financing implications for firm value; Sources and financing decisions from internal corporate sources and non-market external sources; Sources and financing decisions from the money market (credit), capital markets and from other domestic markets; Microfinance and shariabased financing.

#### FPU620301, Community Development, 2(2-0)

The scope of community development courses is participatory concepts, community empowerment and convergent counseling, understanding of participatory analysis methods and their application in development planning (Button Up Planning). Furthermore, the concepts of organizational development, developing local institutions, developing creative social potential, methods of developing participation, methods of developing social resilience, field school methods and community development indicators with participatory characteristics will be discussed.

#### PPN620314, Agrarian Studies, 3(2-1)

The scope of agrarian studies courses is the background of agrarian studies, the formation and change of agrarian structures, agrarian laws in Indonesia, agrarian conflicts background, law, history, opportunities and challenges of agrarian reform and agrarian study methodology.

#### PPN620305, Population, 2(2-0)

The scope of the population course is the understanding of demography and population science and its use in analyzing the community/population in various scopes (macro, micro, rural, urban, regional and international which includes aspects of quality and quantity), the variables determining population development (birth, mortality, and migration), various definitions and basic measures in demography, labour force and employment opportunities, population movement, principles in population projection, relationships between population variables and other variables (land, food/green revolution, poverty, agricultural development sustainable and environmental) and population policies.

# Matrix Program Learning Outcomes (PLO), Indicators and Subject Agribusiness Study Program

No	Proram Learning Outcomes		Indicators	Code	Level	Subject
1.	Students are able to internalize an attitude of piety to God Almighty in carrying out agricultural business activities based on science, technology and the environment (Level A5)	a.	Able to show honesty, responsibility, toughness, and discipline as a reflection of piety to God Almighty	1a	A5	Religion Education; Pancasila Education; English Language; The Basics of Management; Citizenship Education; Human Resources Management; Community Service Program; Internship Program; Research Proposal Seminar; Research Result Seminar; Thesis;
		b.	Able to demonstrate awareness of the importance of running an agricultural business based on science, technology and the environment	1b	A3	Biology; Physics Education; Chemical Introduction; Agriculture Introduction; Agribusiness Information Technology; Sustainable Agricultural System;
2.	Students are able to internalize human attitudes, nationalism, and contribute to improving the quality of social life (Level A5)	a.	Able to demonstrate social concern in improving the quality of social life	2a	A5	Pancasila Education; Rural Sociology; Agriculture Introduction Practices; Agriculture Introduction Practices; Counseling Basics; Community Service Program; Agroindustry Economics
		b.	Able to show a professional attitude in the field of agribusiness as a form of love for the country and the nation	2b	A5	Agribusiness Introduction; Citizenship Education; English for Agribusiness; Entrepreneurship;
3	Students are able to apply the concepts of human literacy (ethics, communication, negotiation, leadership, innovation and creativity) in the field of agribusiness (Level C3)	a.	Able to describe the concept of human literacy (ethics, communication, negotiation, leadership, innovation and creativity)	3a	C2	Religion Education; Agribusiness Information Technology; Human Resources Management; Business Information System; Counseling Basics; Business Law and Ethics; Business Organization's Behaviour; Business Advocation and Negotiations

No	Proram Learning Outcomes		Indicators	Code	Level	Subject
		b.	Able to demonstrate communication skills orally and in writing (Indonesian & English) in the field of angribusiness	3b	C2	English Language; Indonesian Language Education; Agriculture Introduction Practices; English for Agribusiness; Socio-Economics Research Methods; Research Proposal Seminar; Research Result Seminar; Thesis
		C.	Able to use human literacy (ethics, communication, negotiation, leadership, innovation and creativity) in teamwork	3c	C3	Rural Sociology; Agriculture Introduction Practices; Entrepreneurship; Natural Resources and Environmental Economics; Community Service Program; Internship Program;
4	Students are able to integrate agribusiness concepts into agricultural businesses creatively, innovatively and professionally (Level P4)	a.	Able to implement the theory of agribusiness, management, socio-economic agriculture (micro, macro and development), entrepreneurship, business communication and knowledge of technical aspects of agriculture from upstream to downstream	4a	P3	The Basics of Management; Entrepreneurship; Accountings Introduction; Human Resources Management; Agriculture Mechanization; Plant Cultivation Techniques Introduction; Basic Plant Protection; Agricultural technologies Introduction; Agricultural Commerce; Farming; Sustainable Agricultural System; Agricultural Production Economics; Business Organization's Behaviour; Agroindustry Economics; Forestry and Plantation Crop Production; Aquaculture and Livestock; Horticulture and Food Crops Productions

No	Proram Learning Outcomes		Indicators	Code	Level	Subject
		b.	Able to integrate agribusiness concepts (production facilities, farming, processing, marketing and support) in agricultural business creatively, innovatively and professionally	4b	P4	Agribusiness Introduction; Agribusiness Risk; Agribusiness System; Agricultural Production Economics; Business Law and Ethics; Operation and Production Management; Consumer's Behaviour
		c.	Able to practice agricultural business from upstream to downstream in a professional manner based on digital technology	4c	Р3	Agribusiness Information Technology; Marketing and Logistic Management; Internship Program; Cost Accounting; Business Advocation and Negotiations; Agribusiness Practices;
5	Students are able to analyze the theory of agribusiness, management, socio-economic agriculture (micro, macro and development), entrepreneurship, business communication and knowledge of technical aspects of agriculture from upstream to downstream comprehensively (Level C4)	a.	Able to comprehensively describe the theory of agribusiness, management, socio-economic agriculture (micro, macro and development), entrepreneurship, business communication and knowledge of technical aspects of agriculture from upstream to downstream	5a	C2	Biology; Economics Introduction; Agribusiness Introduction; The Basics of Management; Physics Education; Chemical Introduction; Agriculture Introduction; Nutrition and Food; Accountings Introduction; Macro Economics; Soil Science Introduction; Agriculture Mechanization; Plant Cultivation Techniques Introduction; Basic Plant Protection; Agricultural technologies Introduction; Financial and Banking Management; Agribusiness Risk; Sustainable Agricultural Development; Household Economics; Forestry and Plantation Crop Production; Aquaculture and Livestock; Horticulture and Food Crops Productions; Agroindustry Economics;

No	Proram Learning Outcomes		Indicators	Code	Level	Subject
						Community Development; Agrarian Studies
		b.	Able to demonstrate theory in the field of agribusiness that is relevant in simulating agribusiness practices and agricultural development	5b	C3	Mathematical Economics; Basic Statistics; Micro Economics; Financial and Banking Management; Decision Making Analysis; Internship Program; Agribusiness Quantitative Analysis; Operasional Research; Multivariate Statistic;
		C.	Able to examine the application of the concept of sustainable development, institutions, and policies in the development of agribusiness in a comprehensive manner	5c	C4	Economics Introduction; Macro Economics; Cooperative; International Economics; Food and Nutrition Economics; Institutional Economics; Agricultural Production Economics; Regional Economics, Food and Nutrition Policy; Agricultural Policy; Regional Planning and Development; Agribusiness Policy and Strategy; Agribusiness Geografic's Information System;
6	Students are able to build logical, critical, systematic, creative, communicative, collaborative and innovative thinking in agribusiness development with a scientific approach and scientific ethics (Level P4)	a.	Able to apply theory and research results in the field of agribusiness in economic, management, development simulations with a scientific approach and scientific ethics	6a	P2	English Language; Economics Introduction; Mathematical Economics; English for Agribusiness; Nutrition and Food; Econometrics; Natural Resources and Environmental Economics; Socio- Economics Research Methods; Sustainable Agricultural Development; Agribusiness Project Planning and Evaluation; International Economics; Food and Nutrition Economics; Institutional Economics; Regional

No	<b>Proram Learning Outcomes</b>		Indicators	Code	Level	Subject
						Economics; Household Economics; Food and Nutrition Policy; Agribusiness Policy and Strategy;
		b.	Able to overcome problems in the field of agribusiness with a scientific approach and scientific ethics	6b	P4	Micro Economics; Thesis; Agricultural Policy; Consumer's Behaviour; Regional Planning and Development
7	Students are able to simulate making the right decisions, work professionally both independently and in teams in the field of	a.	Able to formulate various alternative solutions to problems in the field of agribusiness in a professional manner	7a	P4	Macro Economics; Operasional Research;
	agribusiness (Level P5)	b.	Able to simulate making the right decisions in the field of agribusiness	7b	P5	Rural Sociology; Decision Making Analysis; Agroindustry Economics; agricultural company financing; Agroindustry Economics; Community Development; Agrarian Studies
8	Students implement theory (economics, management, and development) in agricultural business from micro to enterprise scale with due regard to local wisdom and global perspective (Level C3)	a.	Able to find problems faced by agribusiness actors both small, medium and large scale	8a	C3	Micro Economics; Econometrics; Cooperative; Agribusiness System; Sustainable Agricultural System; Marketing and Logistic Management; Cost Accounting; Management Accounting; Institutional Economics; Managerial Economics; Operation and Production Management; Strategic Management; Agribusiness Practices; Consumer's Behaviour; Agroindustry Economics; agricultural company financing

No	Proram Learning Outcomes		Indicators	Code	Level	Subject
		b.	Able to determine alternative solutions to the problems faced by companies in agribusiness simulations	8b	C3	Agricultural Commerce; Farming; Agribusiness Project Planning and Evaluation
9	Students are able to formulate agricultural business designs and developments in a professional and innovative manner (Level P4)	a.	Able to plan and evaluate agricultural business professionally and innovatively	9a	P3	Accountings Introduction; Human Resources Management; Cooperative; Financial and Banking Management; Agribusiness Risk; Agricultural Commerce; Farming; Decision Making Analysis; Agribusiness Project Planning and Evaluation; Community Service Program; Cost Accounting; Management Accounting; Operation and Production Management; agricultural company financing
		ь.	Able to formulate agribusiness development plans and strategies in a professional and innovative manner	9b	P4	Natural Resources and Environmental Economics; Marketing and Logistic Management; Business Law and Ethics; Business Organization's Behaviour; Strategic Management; Business Advocation and Negotiations; Regional Planning and Development; Agribusiness Policy and Strategy
10	Students are able to integrate knowledge related to statistics, big data, and information technology in the field of agribusiness (Level	a.	Able to operate data analysis software, statistics, big data and digital information in the field of agribusiness	10a	P2	Basic Statistics; Agribusiness Information Technology; Econometrics; Thesis; Regional Economics
	P4)	b.	Able to simulate data, big data, and information technology in agriculture	10b	Р3	Business Information System; Thesis; Agribusiness Quantitative Analysis;

No	<b>Proram Learning Outcomes</b>	Indicators	Code	Level	Subject
					Multivariate Statistic; Agribusiness
					Geografic's Information System

										Th	e Ind	licato	r of l	PLO									
Course/Module		1		2		3			4			5		1	6		7		8		9	1	.0
	a	b	a	b	a	b	c	a	b	С	a	b	c	a	b	a	b	a	b	a	b	a	b
Semester 1																							
Religion Education	3				2																		
Pancasila Education	3		2																				
English Language	1					3								2									
Biology		2									1												
Economics Introduction											3		1	2									
Agribusiness Introduction				1					1		3												
Mathematical Economics												3		1									
The Basics of Management	1							1			3												
Rural Sociology			2				3										1						
Semester 2																							
Indonesian Language Education						3								2									
Citizenship Education	2			3																			
Physics Education		1									1												
Chemical Introduction		1									1												
Agriculture Introduction		2									3												
Basic Statistics												2										3	
Agriculture Introduction Practices			3			2	2																
English for Agribusiness				1		3								3									
Micro Economics												3			3			2					
Agribusiness Information Technology		2			2					2												3	
Nutrition and Food											3			2									
Semester 3																							
Entrepreneurship				2			3	3															
Accountings Introduction								2			3									2			<u></u>

										Th	e Ind	licato	r of l	PLO									
Course/Module		1		2		3			4			5		(	6		7		8		9	1	10
	a	b	a	b	a	b	c	a	b	c	a	b	c	a	b	a	b	a	b	a	b	a	b
Macro Economics											3		2			3							<u> </u>
Human Resources Management	1				3			2												3			
Business Information System					3																		3
Soil Science Introduction								1			1												
Agriculture Mechanization								1			1												
Plant Cultivation Techniques Introduction								1			1												
Basic Plant Protection								1			1												
Agricultural technologies Introduction								1			1												
Semester 4																							
Econometrics														3				3				3	
Cooperative													3					2		2			
Financial and Banking Management											2	3								2			
Agribusiness Risk									3		3									2			
Agricultural Commerce								3											3	3			
Farming								3											3	3			
Agribusiness System									3									3					
Counseling Basics			1		3																		
Elective Course (E)																							
Semester 5																							
Sustainable Agricultural System		3						2										2					
Decision Making Analysis												3					3			3			
Natural Resources and Environmental																							
Economics							3							2							2		
Marketing and Logistic Management										3								3			3		
Socio-Economics Research Methods						3								3									
Sustainable Agricultural Development											3			3									
Agribusiness Project Planning and																							
Evaluation														3					3	3			
Elective Course (E)																							
Semester 6																							
Community Service Program	2		3				3													2			

										Th	e Inc	licato	r of l	PLO									
Course/Module		1		2		3			4			5			6		7		8		9	1	10
	a	b	a	b	a	b	С	a	b	С	a	b	С	a	b	a	b	a	b	a	b	a	b
Elective Course (E)																							L
Semester 7																							<u> </u>
Internship Program	2						3			2		2											
Research Proposal Seminar*	3					3																	
Research Result Seminar*	3					3																	
Semester 8																							
Thesis*	3					3									3							3	3
Elective Course																							
Cost Accounting										3								2		3			
Management Accounting																		2		3			
Agribusiness Quantitative Analysis												3											3
International Economics													2	3									
Food and Nutrition Economics													2	3									
Institutional Economics													2	3				1					
Managerial Economics																		3		2			
Agricultural Production Economics								2	1				3										
Regional Economics													3	3								1	
Household Economics											3			3									
Business Law and Ethics					3				3												1		
Food and Nutrition Policy													3	3									
Business Organization's Behaviour					3			3													2		
Operasional Research												3				3							
Multivariate Statistic												3											3
Agricultural Policy													3		3								
Operation and Production Management									3									3		3			
Strategic Management																		3			3		
Business Advocation and Negotiations					3					2											2		
Agribusiness Practices										3								3					
Consumer's Behaviour									2						2			3					
Regional Planning and Development													2		3						3		
Agribusiness Policy and Strategy													3	3				1			3		

										The	e Ind	icato	r of I	PLO									
Course/Module		1		2		3			4			5		(	6	7	7		8	9	9	1	10
	a	b	a	b	a	b	С	a	b	С	a	b	С	a	b	a	b	a	b	a	b	a	b
Agribusiness Geografic's Information																							
System													3										3
Agroindustry Economics								3									2	3					
agricultural company financing																	2	3		3			
Forestry and Plantation Crop Production**								3			3												l,
Aquaculture and Livestock**								3			3												
Horticulture and Food Crops Productions**								3			3												
Agroindustry Economics			3								3						2						
Community Development											3						2						
Agrarian Studies											3						2						