

**BRIEF OUTLINE OF COURSES OFFERED BY RESEOURCE AND ENVIRONMENTAL ECONOMICS  
STUDY PROGRAM**

**ESL 211 Agricultural Economics**

Upon completion of this course the students will be able to explain the meaning and scope of agricultural economics. The scope of the study includes linkage of economics and agricultural economics; agricultural resources; agricultural institution; agricultural commodities supply and demand; production and cost; revenue; marketing and agricultural commodities marketing; as well as agricultural policies and development.

**ESL 221 Resource Economics**

This course discusses the concepts and understanding of the management and use of natural resources. Discussed the principles of optimization and the use of natural resource management and regulatory policy as well as several static analysis techniques of natural resources. The concept and understanding of the economic value and the influence of management on the welfare of Natural Resources.

**ESL 231 Agricultural Economics**

This course provide knowledge and skill about the interaction between economy, resources and environment; fundamental of environmental economics; environmental degradation; economic and market efficiency in environmental management; natural resources scarcity; externalities, property rights and public goods; market failures and government failures impact on environmental degradation; fundamental equilibrium related to environmental pollution; economics of environmental pollution; environmental pollution policy analysis; macroeconomics of environmental management; global environmental issues and its impact on sustainable development in Indonesia.

### **ESL 212 Production Economics**

This course is given to develop students with concept and scope of production economics, production theory and production cost, production optimization with single and multiple inputs, derived demand, production optimization with double output, and production through time.

### **ESL 222 Land Resources Economic**

This subject discusses about supply and demand of land resources economics; the effect of pressure community, the requirement of land resources; related to input-output; revenue; land resources conservation; development decision; location factor and institution. The subject also gives basic concept of land resources economics and issue of land resources economic such as community factor, institution area and planning.

### **ESL 223 Water Resources Economics**

The subject commonly talk problems about water resources economics problems from economic aspect, both agricultural and no agricultural (industry and household), also to maximize advantages for community sustainably. The topics in this subject involves: scarcity problems, damage of water resources at agricultural and agricultural; water as economics commodities; principal and problems of water resources allocation from others sector; making water pricing for agricultural and nonagricultural; challenging water resources development future; development of integrated of demand and supply water resources; and discussing about regulation of water resources.

### **ESL 225 Institutional Economics**

The subject discuss about history of development of economics thinking, definition of institution, urgent of institutional economics. Also give transaction cost, kind of institution (formal and informal), institution enforcement); theory of changing institution and its impact towards performance economics; system of institution and social regularity, property right, regime of property right, contractual, collective action, and social capital; all of in contexts of development of environmental and natural resources.

### **ESL 232 Biodiversity Economics**

This course is generally discusses the importance of biological diversity (biodiversity), the biosphere and ecosystems, the relationship between ecology and economy, conservation to protect biodiversity (opportunity cost of biodiversity conservation), efficiency and optimal use of natural resources, a variety of economic assessment techniques for biodiversity losses (valuing biodiversity loss)..

### **ESL 313 Agricultural Price Theory**

This course provides knowledge and skills to students about agricultural price determination and the impact of government policies to agricultural products prices. Lecture topics includes: the role of prices in decision-making, demand and supply of agricultural products, agricultural product price determination, agricultural products marketing margin, institutional and government intervention in the determination agricultural product prices , and empirical analysis of agricultural product prices.

### **ESL 314 Agricultural Trade**

This course discusses the concepts, theories, policies and empirical studies of agricultural trade and its relation to the domestic and international economies of the micro and macroeconomic side.

### **ESL 315 Cost and Benefit Analysis**

This course discusses the concept and scope of cost and benefit analysis and its application in agricultural planning and development. The topics covered: the concept of development and its relationship with the investment; concepts, methods and techniques of cost and benefit analysis; time value of money; determination of discount rate; cash flow analysis; investment criteria; financial analysis; economic analysis (determination of shadow pricing, externalities, comparative advantage analysis and welfare analysis); empirical study of cost benefit analysis in agricultural development.

### **ESL 325 Forestry Economics**

This subject discuss about basics of analysis of forestry natural resources optimal. The discussion start with recognize forest and its product; shaping of its property and development; using principal of basic of natural resources economics in all beneficial of forest product and services; invest aspect and benefit from forest plan; air pollution cause forest fire.

### **ESL 328 Ecological Economics**

This subject carried about meaning of ecological economics as new paradigm of economics science that look at economics system connect with natural system. Argumentation that why ecological economics is needed. In details, discussing will start with ecological (ecosystem, biotic and abiotic) economics concept, concepts/law of thermodynamics, system opening economics, closed economics, environmental carrying capacity. Microeconomics from ecological economics perspective i.e. economic growth, GNP, Welfare, and de-growth economy. In addition, also discussed the meaning of development in terms of improving the quality of life; Indicators of economic success.

### **ESL 329 Fisheries Economics**

This subject discusses about basic concept of fisheries and some aspect development fisheries resources that reviewed from economy side. In this lecture that student is given by knowledge about development of fisheries in Regional and International.

### **ESL 332 Economics of Tourism**

This subject provides knowledge about tourism and natural tourism in economic perspectives and how to implement environmental economics theory in tourism. The topics discuss include the definition of ecotourism, economy, and environment, as well as supply-demand of tourism. At the end of this course, economic and environmental impacts of tourism are also deliberated to the students, as well as the approach to value the impact and method to evaluate economics of tourism.

### **ESL 416 Agricultural Policy and Planning**

This course discusses the concepts and theories of development and agricultural policy, describes the constraints and roles of agriculture in development, explains the various agricultural policies and their implications for the development of sustainable agriculture in Indonesia. The topics include: the concepts and theories of agricultural development planning and policy, the roles and issues of agriculture in developing countries including Indonesia, rural development and agricultural development, land and agricultural development, agricultural financing policies and their implications, infrastructure development policies and their implications, agricultural products and their implications, trade policies and their implications, food self-sufficiency policies and their implications, and the concept of sustainable agriculture development.

### **ESL 426 Political Economics of Environmental and Natural Resources**

This subject teaches about theory and principal of political economics in developing of environmental and natural resources. This subject starts with political theory, economy, publics, political economic. Next, continued with political economics in agricultural, fisheries, forestry, land, water, mining, biodiversity, environmental and climate change. In addition, the empirical aspects of the political and economic process in policy-making of natural resource and environment management are discussed.

### **ESL428 Environmental and Resource Economics Modeling**

This course discusses the concepts, theory, policy and empirical modelling of environmental and natural resource studies and relation to the economy.

### **ESL 429 Resources Policy and Planning**

This subject talks about aspect of planning resources policy which starts with contra of analysis between maximizing profit and maximizing products and its consequences towards poverty also extraction and degradation of natural resources. Next talking about government failure and market failure that cause need the policy instrument. The end of this chapter shows some of resources of policy instrument such as fiscal policy, monetary, and command and control.

### **ESL 434 Valuation Economics of Natural Resource and Environment**

This course provides knowledge and skills about the primary concepts the importance of economic valuation of natural resources and environment, about what and how the economic valuation of natural resources and environment, how the theory and calculation of economic valuation of natural resources and environment, and types of monetary and non-monetary economic valuation.

### **ESL 498 Seminar**

Seminar is part of the credit lecture that must be taken by students to present the results of research conducted. The results of research related to agricultural economy, resource economy, and environmental economics depend on student's research interest.

### **ESL 499 Undergraduate Thesis Writing**

Each student is required to recognize, study, and analyze real problems in the field, related to agricultural economy, resources, and environment, whether adopted by society, institutional and organization, or macro with the theory obtained in lectures in scientific writing.