

Module designation	<i>Production Economics (AGB P05)</i>
Semester(s) in which the module is taught	<i>5th semester</i>
Person responsible for the module	<i>Safrida</i>
Language	<i>English</i>
Relation to curriculum	<i>Compulsory module</i>
Teaching methods	<i>lecture, study case</i>
Workload	<ul style="list-style-type: none"> ▪ <i>100 minutes of lecture and discussion per week</i> ▪ <i>120 minutes of structured tasks per week</i> ▪ <i>190 minutes of independent activity per week</i> ▪ <i>100 minutes of laboratory work</i>
Credit points	<i>3 (lesson 2 and lab works 1)= 4.8 ECTS</i>
Required and recommended prerequisites for joining the module	<i>Microeconomics</i>
Module objectives/intended learning outcomes	<ol style="list-style-type: none"> <i>1. Able to understand the scope of production economics, the main elements of the agricultural production economy, and distinguish production factors (the concept and classification of production factors).</i> <i>2. Able to understand the production function and identify the types of production functions (linear, quadratic and exponential), and able to select and analyze the production function based on the need for analysis on a particular research.</i> <i>3. Able to understand and analyze the Cobb-Douglas production function and apply it in agricultural data analysis, and able to understand the meaning and relationship of total product (PT), average product (PR), and marginal product both verbally, graphically and mathematically.</i> <i>4. Able to understand and analyze production elasticity and input efficiency.</i> <i>5. Able to identify and analyze various costs (fixed costs, variable costs, total costs and marginal costs), and able to analyze the relationship between inputs with a combination of minimum costs (the concept of iso product and iso cost)</i> <i>6. Able to understand business expansion, and production optimization with multiple inputs.</i> <i>7. Able to identify and analyze relationships between outputs with a combination of maximum profit, and fixed substitution and complementary relationships (examples and curves).</i> <i>8. Able to identify and analyze the relationship possibilities of complementary, supplementary and competitive product .</i> <i>9. Able to explain the concept and theory of derived demand and explain the production process with time considerations</i>
Content	<i>The meaning and scope of production economics and issues of production economic problems, relationships between products, production elasticity, relationships between production factors, substitution power, optimization concepts, production cost concepts, types, functions and production cost curves, production relationships and production costs, technical and economic efficiency, profit maximization, production functions with multiple inputs, isoquants and relationships between inputs, Isocost/budget line, optimization of production and improvement of technology. production possibility curve, product transformation and output substitution elasticity, production optimization conditions, technology improvement and business scale, integrated quality control: time as input in the production process, discounting revenues and costs.</i>
Exams and assessment formats	<i>Essay, case analysis, oral presentation</i>

Study and examination requirements	<ul style="list-style-type: none"> ▪ 50% case analysis ▪ 5 % Participative Activity ▪ 5% quiz ▪ 5% coursework ▪ 15% midterm examination ▪ 20% final examination
Reading list	<ol style="list-style-type: none"> 1. Rasmussen, S. 2011. <i>Production Economics: The Basic Theory of Production Optimisation</i>. Springer, New York. 2. Soekartawi. 2003. <i>Teori Ekonomi Produksi</i>. PT Raja Grafindo Persada, Jakarta. 3. <i>Jurnal, Skripsi, Tesis, dan hasil-hasil penelitian terkait dengan ekonomi produksi.</i> 4. Doll, J.P dan F. Orazem, 1978. <i>Production Economics : Theory with Applications</i>. Grid Inc., Columbus, Ohio, USA. 5. Debertin, D.L. 1986. <i>Agricultural Production Economics</i>. Macmillan Publishing Company, New York, USA.