University of Pretoria Yearbook 2020

Advanced production economics 711 (LEK 711)

Qualification	Postgraduate
Faculty	Faculty of Natural and Agricultural Sciences
Module credits	15.00
Programmes	BComHons Agricultural Economics
Prerequisites	EKT 713 and MIE 780
Contact time	1 lecture per week, 1 practical per week
Language of tuition	Module is presented in English
Department	Agricultural Economics Extension and Rural Develo
Period of presentation	Semester 2

Module content

Advanced production economics
(a) Primal approach: Structure of the production technology and properties, elasticity of substitution, homogeneity and returns to scale, separability, estimation of technology parameters and testing hypothesis about properties, functional forms.
(b) Normative supply analysis: Applications of linear programming to farm supply decisions.
(c) Dual approach: The profit function, the cost function, duality and technology structure, estimation and hypothesis testing.
(d) Positive supply analysis: Econometric specification of output supply and factor demand, restrictions from technology structure (homogeneity, etc.), aggregate supply analysis.
(e) Risk and uncertainty: Mean-variance analysis applications in agricultural production, stochastic dominance; MOTAD and quadratic programming.