

Course Outline

Institut Pertanian Bogor - ACICIS' Agriculture Semester Program

Unit name	Animal By-Products Processing and Technology (PTP355)		
Department/ Faculty	Animal Science Production and Technology Faculty of Animal Science		
Course credit (SKS)	3 (2-3) (2 hours of lecture, 3 hours of laboratory practice)		
Offered in	Odd semester (September-January)		
Pre-requisite	-		
Language	Indonesian	English	<input checked="" type="checkbox"/> Both
Course description This course discusses the potential and types of by-products (blood, bones, fat, egg shell, hide, sheep wool, and brain) along with physical and chemical properties; management and processing technology that produces food, non-food and handcrafts of economic value to support environmentally-friendly industries of livestock.			
Learning outcomes Having completed this lecture student could explain about the several potential from animal by-product processing and technology to increase the value-in use become the food product, nutrients, non-food with art craft. Student could explain about the physical and chemical characteristic, skin preserving technology with leather tanning technology.			
Indicative assessment <ol style="list-style-type: none"> 1. Written examination (mid and final) 80% 2. Paper task 10% 3. Oral presentation 10% 			
Contact Hours <ol style="list-style-type: none"> 1. Theory: 2 hours/week 2. Practice: 3 hours/week 			
Readings <ol style="list-style-type: none"> 1. ASAE. 1975 Managing Livestock Waste. Proceeding.3 rd International Symposium on Livestock Waste. American Society of Agriculture Engineers. St.Joseph, Michigan 2. Markel. J.A.1981. Managing Livestock Waste.The Avi Publishing Company Inc.Westport.Connecticut. 3. Muller.Z.O. 1980 Feed From Animal Waste. Food and Agriculture Organization Rome. 4. NRC. 1981 . Food. Fuel and Fertilizer from Organic Waste. National Academy Press. Washington D.C. 5. Sievers, D.J. 1977. Farm Animal Manure. Azevedo J.and P.R. Stoun (Authors) Californian Agr.Exp.Sta.Univ. of California. 6. Dugan Jr .L.R.V Meat Animal By- Products and Their Utilization in Prices J.F and Sehweingert B.S. The Seience Of Reat and Reat Products. 3 rd Edit. Food and Nutrition Press . Inc. Westport , Connecticut. 7. Divakaran.S.1982. Animal Blood Processing and Utilization Food and Agriculture organization Rome. 8. Simamora .S.1999. Pengolahan Hasil- ikutan Ternak (Animal By-product Processing) .in Workshop on Animal Product and Animal By- product Prosessing . Fakultas Peternakan .IPB.Bogor. 9. Ockerman .H.W.and C.L.Hasen 2004 .Animal By-Product Processing and Utilization. C.H.I.P.S. Texas. 10. Kontula A.W. By-Product ,In. Meat Sceience U.S. Departemen of Agriculture. Beltsville. Maryland. 11. Gustavson K.H. 1956. The Chemistry of Tanning Process. Academic Press Inc. New York 12. Sarkar. K.T. 1991. Theory and Practice of Leather manufacture. CLS Press. India 13. Haslam. E. 1966. Chemistry of Vegetable Tannins. Academic Press London 			

14. Parthasarathi. K. 2000. Mannual on Tanning and Finishing. India
15. Buljan. J, G.Reich and J. Ludvik. 2000. Mass Balance in Leather Processing. United nations Industrial Development Organization (UNIDO)
16. Judoamidjojo R. M. 1981. Defek-Defek pada Kulit Mentah dan Kulit Samak. Terjemahan dari Jean J Tancous, W. T. Roddy dan Fred O'Flahery. Penerbit Bhratara Karya Aksara. Jakarta
17. Sudarjo. 1984. Teknologi Penyamakan Kulit. Akademi Teknologi Kulit Yogyakarta.
18. Purnomo. E. 1985. Pengetahuan dasar Teknologi Penyamakan Kulit. Akademi teknologi Kulit Yogyakarta.
19. U.S. Census Bureau. 1997. Leather and Hide Tanning and Finishing. 1997 Economic Census Manufacturing Indutsry Series. U.S. Census Bureau.