

120224702 Plantation Products and Polysaccharides Technology

Module Name	Plantation Products and Polysaccharides Technology
Module Level, if applicable	Advanced
Code if Applicable	120224702
Subtitle, if applicable	-
Courses, if applicable	120224702 Plantation Products and Polysaccharides Technology
Semester(s) in which the module is taught	5 th
Person responsible for the module	Dr. Ir. Damat, MP
Lecturer	Dr. Ir. Damat, MP; Ir. Sukardi, MP
Language	Indonesian
Relation to curriculum	Compulsory Courses for undergraduate program in Departement of Food Technology, Faculty of Agriculture and Animal Science
Type of teaching	Lecture, project, Lab-work
Workload	<ul style="list-style-type: none"> ● Lecture: 3 sks X 50 minutes X 16 weeks ● Project: 3 sks X 60 minutes X 16 weeks ● Independent learning: 3 sks X 60 minutes X 16 week ● Lab-work : 1 sks X 170 minutes X 60 minutes
Credit points	4 SKS X 1.5 = 6 ECTS
Requirements according to the examination regulations	<ol style="list-style-type: none"> 1. Registered in this course 2. Minimum 80% attendance in this course
Recommended prerequisites	Food Chemistry and Biochemistry, Food Analysis, Food Practicum Analysis
Module Objectives (Intended learning outcomes)	<p>On successful completion of this course, student should be able to :</p> <ul style="list-style-type: none"> ● Explain about polysaccharides, classification of polysaccharides, starch sources, and modification of starch, as well as the physiological effects of starch for those who consume it. ● Modify starch and apply modified starch to various products, such as bread, analog rice, glucose syrup, brown sugar and cane sugar. ● Skilled in describing various types of seaweed and seaweed processing
Module Content	This course presents material on polysaccharides, starch modification, physiological effects of starch, and the application of various modified starches in food products, sugar processing and seaweed processing.

Study and examination requirements and forms of examination	Cognitive: Midterm exam, Final exam, Quizzes, Assignments Psychomotor: Practice Affective: Assessed from the element /variables achievement, namely (a) Contributions (attendance, active, role, initiative, and language), (b) Being on time, (c) Effort.
Media employed	Classical teaching tools with white board and power point presentation
Recommended Literature	For Class A. Compulsory <ol style="list-style-type: none"> 1. Damat, D., A. Tain, H. Handjanim U. Chasanah dan D.N. Putri. 2017. Teknologi Pati Termodifikasi dan Manfaatnya bagi Kesehatan. UMM Press. 2. Damat, D., A. Tain, E.A. Saati, R.P. Sudibyoy, R. Wijaya, dan D.N. Putri. 2017. Teknik Pembuatan Roti Manis Fungsional. UMM Press 3. Stephen, A.M. 1995. Food Polysaccharides and Their Applications. Marcel Dekker, Inc., New York. 4. Whistler, R.L. dan J.N. BeMiller. 1999. Carbohydrate Chemistry for Food Scientists. Eagan press. St.Paul Minnesota, USA B. Option <ol style="list-style-type: none"> 1. Research Journals related to Polysaccharides, Modified Starch and Physiological Effects of Modified Starch, Application of Modified Starch in Food Products, Seaweed, and Seaweed Applications in Food Products
Date of Last Amendment	22 nd Agustus 2022