

220222913 Fermentation Technology

Module Name	Fermentation Technology
Module Level, if applicable	Advanced
Code if Applicable	220222913
Subtitle, if applicable	-
Courses, if applicable	220222913 Fermentation Technology
Semester(s) in which the module is taught	5 th
Person responsible for the module	Afifa Husna, STP., MTP., M.Sc
Lecturer	Sri Winarsih, S.TP., 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
Workload	<ul style="list-style-type: none"> ● Lecture: 2 sks X 50 minutes X 16 weeks ● Project: 2 sks X 60 minutes X 16 weeks ● Independent learning: 2 sks X 60 minutes X 16 weeks
Credit points	2 SKS X 1.5 = 3 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	Graduated from Cell Biology, Food Microbiology and Enzymology courses
Module Objectives (Intended learning outcomes)	<p>On successful completion of this course, student should be able to :</p> <ul style="list-style-type: none"> ● Operate the fermentation process. ● Identify fermentation methods, materials and tools. ● Operate the fermentation process on solid or liquid media
Module Content	This course learning about the development of fermentation technology, principles of fermentation, behavior and metabolism of microbiology in fermentation, methods and kinetics of fermentation, sterilization, chacteristics and medium handling, inoculation, and the process of harvesting and purifying fermented products.

<p>Study and examination requirements and forms of examination</p>	<p>Cognitive: Midterm exam, Final exam, Quizzes, Assignments Affective: Assessed from the element /variables achievement, namely (a) Contributions (attendance, active, role, initiative, and language), (b) Being on time, (c) Effort.</p>
<p>Media employed</p>	<p>Classical teaching tools with white board and power point presentation</p>
<p>Recommended Literature</p>	<p>For Class</p> <p>A. Compulsory</p> <ol style="list-style-type: none"> 1. Hui, Y. H., Meunier-Goddik, L., Josephsen, J., Nip, W. K., & Stanfield, P. S. (Eds.). (2004). <i>Handbook of food and beverage fermentation technology</i> (Vol. 134). CRC Press. 2. Stanbury, P. F., Whitaker, A., & Hall, S. J. (2013). <i>Principles of fermentation technology</i>. Elsevier. 3. McNeil, B., & Harvey, L. (Eds.). (2008). <i>Practical fermentation technology</i>. John Wiley & Sons. 4. Berenjian, A. (Ed.). (2019). <i>Essentials in fermentation technology</i>. Springer <p>B. Option</p> <ol style="list-style-type: none"> 1. Videos from Youtube related to the fermentation process 2. National and international journals related to fermentation
<p>Date of Last Amendment</p>	<p>22nd August 2022</p>