

## Module Handbook

Modul Name	Plant tissue culture
Modul Level	Bachelor
Abbreviation, if applicable	BIT304
Sub-heading, if applicable:	-
Courses included in the module, if applicable:	-
Semester	7 <sup>th</sup> / Forth Year
Module Coordinator	Dr. Y. Sri Wulan M., M.Si.
Lectures	Dr. Y. Sri Wulan M., M.Si. Dr. Edy Setiti Wida Utami, M.S
Languange	Bahasa Indonesia
Classification Within The Curriculum	<del>Compulsory Course</del> / Elective Studies
Teaching format/ classhours per week during semester	300 minutes/ week
Workload per semester	100 min lecture + 100 min structural assignment + 100 min self-assignment x 13 weeks; total 3900 min = 65 hours 65/25 = 2.6 ECTS
Credit point	2
Requirement	Plant physiology
Learning Outcome	<p><b>General competence (knowledge):</b> Students are able to evaluate the growth and development of plants through plant tissue culture methods correctly</p> <p><b>Specific competence:</b></p> <ol style="list-style-type: none"> <li>1. Able to explain the scop, principle, and basic concept of plant tissue culture</li> <li>2. Able to explain the implementation of plant tissue culture</li> <li>3. Able to explain the various methods of plant tissue culture</li> <li>4. Able to explain and present the various metods of sterilization in plant tissue culture</li> <li>5. Able to choose leaf explant correctly</li> <li>6. Able to explain the various kind of plant tissue culture media</li> <li>7. Able to explain the various types of micro elements and its function in plant tissue culture</li> <li>8. Able to explain the various types of vitamin, amino acids, Fe, pH and its function in plant tissue culture</li> <li>9. Able to explain the various kinds of auxins and its function in plant tissue culture</li> <li>10. Able to explain the various types of cytokinin (Zeatin, BAP, supplement) and its function in plant tissue culture</li> </ol>
Content	The history of plant tissue culture, basic principles, and the benefits of plants tissue culture; laboratory and completeness; preparation and composition of the media covering plant tissue culture; macronutrient, micronutrient, carbon source, growth regulators, vitamins: plant tissue culture method; various techniques in plant tissue culture
Softskill Atribute	Diclipline and argumentation
Study/exam achievment	Students are considered to be competent and pass if at least get 40 of maximum mark of the exams (UTS dan UAS), structured activity (group discussion). Final score (NA) is calculated as follow: paper project (20%), mid exam (30%), final exam (30%), and softskill (10%).

	<p>Final index is defined as follow:</p> <p>A = 75-100</p> <p>AB = 70-74,99</p> <p>B = 65-69,99</p> <p>BC = 60-64,99</p> <p>C = 55-59,99</p> <p>D = 40-54,99</p> <p>E = 0-39,99</p>
Forms of Media	LCD
Learning Methods	Class and discussion
Literature	-
Note	-