

Module Handbook

Module Name:	Pharmaceutical Botany I
Module Level:	Bachelor
Abbreviation, if applicable:	Lecture FAB201 Practical Work FAB203
Sub-heading, if applicable:	
Courses included in the module, if applicable:	
Semester/term:	2 / First year
Module coordinator(s):	Prof .Dr. Bambang Prajogo EW. MS
Lecturer(s):	Dr. Aty Widyawaruyanti, M.Si Drs. Abdul Rahman, Msi Prof.Dr. Bambang Prajogo EW. MS Dr. Wiwied Ekasari, M.Si Prof. Dr. Hj. Mangestuti Agil, MS Prof.Dr. Sukardiman, MS Drs. Herra Studiawan, MS Dra. Rakhmawati, Msi Suciati, S.Si, M.Phil.Ph.d Neny Purwitasari, S.Farm. MSc, Apt. Dr. Idha Kusumawati, MSi Rice Disi Oktarina, S.Farm Lusiana Arifianti, S.Farm. M. Farm
Language:	Bahasa Indonesia
Classification within the curriculum:	Compulsory Course/ Elective Studies
Teaching format/class hours per week during the semester:	Lecture 50 minutes lectures, 13 lecture classes/semester Practical Work 100 minutes practical work classes, 13 practical work classes /semester
Workload:	Lecture Total 11 hours a semester Practical Work Total 22 hours a semester
Credit Points:	Lecture 1 Practical Work 1
Requirements:	
Learning goal/competencies:	Knowledge – To understand the concept of plant medicine organ morphology and basic concepts and principles in pharmaceutical botany. Skills – Critical thinker and comprehensive. Competence – To understand and able to describe the morphology and anatomy of higher plants and lower plants system as the basis for the identification of

	traditional medicine.
Content:	<p>Lecture Plant organ morphology, ie leaves, stems, roots, flowers, fruits, seeds and homologous organs from stem-leaf roots, plant habitus. Application of plant morphology identification. Plant anatomy, cell and tissue, stem (Dicotyl-monocots-gymnosperms-Pteridophyta), roots (Dicotyl-monocots), leaves (Dicotyl-monocots-gymnosperms), rhizomes, flowers and roots.</p> <p>Practical Work Plant organ morphology, ie leaves, stems, roots, flowers, fruits, seeds and homologous organs from stem-leaf roots, plant habitus. Application of plant morphology identification. Plant anatomy, cell and tissue, stem (Dicotyl-monocots-gymnosperms-Pteridophyta), roots (Dicotyl-monocots), leaves (Dicotyl-monocots-gymnosperms), rhizomes, flowers and roots.</p>
Study/exam achievements:	<p>Lecture Student are considered to be competent and pass if at least get 50% of maximum mark of the exams based learning.</p> <p>Final score (NA) is calculated as follow : 50% Exam I + 50% Exam II</p> <p>Final index is defined as follow : A : 100 > NA > 75 AB : 75 > NA > 70 B : 70 > NA > 65 BC : 65 > NA > 60 C : 60 > NA > 55 D : 55 > NA > 50 E : 50 < NA</p> <p>Practical Work Student are considered to be competent and pass if at least get 50% of maximum mark of the exams based learning.</p> <p>Final score (NA) is calculated as follow : 100% Exam II</p> <p>Final index is defined as follow : A : 100 > NA > 75 AB : 75 > NA > 70 B : 70 > NA > 65 BC : 65 > NA > 60 C : 60 > NA > 55 D : 55 > NA > 50 E : 50 < NA</p>
Forms of Media:	Microscope, Slides and LCD Projector, whiteboards.
Literature:	1. Evert, Ray Franklin and Esau, Katherine (2006) <i>Esau's Plant anatomy: meristems, cells, and tissues of the plant body - their structure, function and development</i> Wiley, Hoboken, New Jersey,

	2. IGP Santa, <i>Anatomi Tumbuhan</i> , Diktat Kuliah, Laboratorium Botani Farmasi – Farmakognosi Fakultas Farmasi Unair.
	3. Fahn A., 1992, <i>Anatomi Tumbuhan</i> , Edisi ke tiga, Gadjah Mada University Press.
Notes:	