**Module Handbook**

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| 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<br>50 minutes lectures, 13 lecture classes/semester |
| | Practical Work<br>100 minutes practical work classes, 13 practical work classes /semester |
| Workload: | Lecture<br>Total 11 hours a semester |
| | Practical Work<br>Total 22 hours a semester |
| Credit Points: | Lecture<br>1 |
| | Practical Work<br>1 |
| Requirements: | |
| Learning goal/competencies: | Knowledge<br>– To understand the concept of plant medicine organ morphology and basic concepts and principles in pharmaceutical botany. |
| | Skills<br>– Critical thinker and comprehensive. |
| | Competence<br>– To understand and able to describe the morphology and anatomy of higher plants and lower plants system as the basis for the identification of |

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| | traditional medicine. |
| Content: | Lecture<br>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. |
| | Practical Work<br>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. |
| Study/exam achievements: | Lecture<br>Student are considered to be competent and pass if at least get 50% of maximum mark of the exams based learning.<br><br>Final score is calculated as follow :<br>50% Exam I + 50% Exam II<br><br>Final index is defined as follow :<br>A : ≥ 75<br>AB : 70 – 74,9<br>B : 65 – 69,9<br>BC : 60 – 64,9<br>C : 55 – 59,9<br>D : 40 – 54,9<br>E : <40 |
| | Practical Work<br>Student are considered to be competent and pass if at least get 50% of maximum mark of the exams based learning.<br><br>Final score is calculated as follow :<br>100% Exam II<br><br>Final index is defined as follow :<br>A : ≥ 75<br>AB : 70 – 74,9<br>B : 65 – 69,9<br>BC : 60 – 64,9<br>C : 55 – 59,9<br>D : 40 – 54,9<br>E : <40 |
| Forms of Media: | Microscope, Slides and LCD Projector, whiteboards. |
| Literature: | 1. Evert, Ray Franklin and Esau, Katherine (2006) *Esau's Plant anatomy: meristems, cells, and tissues of the plant body - their structure, function and development* Wiley, Hoboken, New Jersey, |

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