

Module Handbook

Module Name:	Sterile Preparation Pharmaceutics
Module Level:	Bachelor
Abbreviation, if applicable:	Lecture FAF212 Practical Work FAF206
Sub-heading, if applicable:	
Courses included in the module, if applicable:	
Semester/term:	1 / Fourth year
Module coordinator(s):	Dr. Sugiyartono, M.S., Apt.
Lecturer(s):	Dr. Sugiyartono, M.S., Apt. Dr. Retno Sari, M.Sc., Apt. Dr. Dewi Isadiartuti, M.Si., Apt. Dini Retnowati, S.Farm., M.Si., Apt.
Language:	Bahasa Indonesia
Classification within the curriculum:	Compulsory Course/ Elective Studies
Teaching format/class hours per week during the semester:	Lecture 100 minutes lectures, 13 lecture classes/semester Practical Work 200 minutes practical work classes, 13 practical work classes /semester
Workload:	Lecture Total 22 hours a semester Practical Work Total 43 hours a semester
Credit Points:	Lecture 2 Practical Work 2
Requirements:	Microbiology-Immunology-Parasitology (BIM204), Solid Preparation Pharmaceutics (FAF202) and Practical Work of Solid Preparation Pharmaceutics (FAF207), Liquid Preparation Pharmaceutics (FAF203) and Practical Work of Liquid Preparation Pharmaceutics (FAF208) Semisolid Preparation Pharmaceutics (FAF211) and Practical Work of Semisolid Preparation Pharmaceutics (FAF209)
Learning goal/competencies:	Knowledge <ul style="list-style-type: none"> - To understand the concept of Pharmaceutics (Sterile Dosage Forms) Skills <ul style="list-style-type: none"> - Discipline, teamwork, confidence, and communication Competence <ul style="list-style-type: none"> - Planning formulation and producing a safe, effective, and good quality of parenteral and ophthalmic dosage forms on laboratory scale considering the preformulation, principle of formulation, and define its method of sterilization

	and evaluation
Content:	<p>Lecture Microbiological aspect for sterilization process, types of sterilization method and aseptic techniques, preformulation and formulation of sterile dosage forms, disinfection, packaging and evaluation of sterile dosage forms.</p> <p>Practical Work Planning formulation of single dose parenteral dosage forms, multi dose parenteral dosage forms and ophthalmic dosage forms considering preformulation aspect, deciding the sterilization method. Making and packaging single dose parenteral dosage forms, multi dose parenteral dosage forms and ophthalmic dosage forms. Evaluating the sterile dosage forms.</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 : 50% Laboratory Report + 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>
Forms of Media:	LCD projector, OHP
Literature:	<ol style="list-style-type: none"> Salvatore Turco, Robert E. King. 1994. <i>Sterile Dosage Form, 4th Edition</i>. Lea and Febiger, Philadelphia. Cooper and Gun's. 1975. <i>Dispensing for Pharmaceutical Students 12th ed.</i> Seymour E Block. 1977. <i>Disinfection, Sterilisation and Preservation, 2nd ed.</i> Lea and Febiger, Philadelphia.

	4. Murray S, Cooper (editor). 1972. <i>Quality Control in the Pharmaceutical Industry, Vol 1 dan 2</i> . Academic Press.
	5. Kenneth E Avis. 1993. <i>Pharmaceutical Dosage Forms, Parenteral Medications Vol 1</i> . Marcell Dekker, New York.
	6. Anonim. 1995. <i>Farmakope Indonesia edisi IV</i> . Depkes RI.
	7. Akers M.J.. 1985. <i>Parenteral Quality Control</i> .
	8. Anonim. 1995. <i>The Pharmaceutical Codex</i> . Pharmaceutical Press.
	9. Martin E.W. <i>Dispensing of Medication</i> . Mack Publishing Company.
	10. MJ Akers. 2010. <i>Sterile Drug Products, Formulation, Packaging, Manufacture and Quality</i> . Informa healthcare.
	11. Anonim. 2012. <i>CPOB</i> . BPOM.
	12. Linda Felton (Ed). 2013. <i>Essentials of Pharmaceutics</i> . Pharmaceutical Press.
	13. Michael E , Aulton. 2013. <i>Aulton's Pharmaceutics, 4th ed : The Design and Manufacture of Medicines</i> . Churchill Livingstone, New York.
	14. Loyd V. Allen, Jr.. 2012. <i>Remington : The Science and Practice of Pharmacy 21st ed</i> . Pharmaceutical Press, Philadelphia.
	15. BPOM. 2015. <i>Farmakope Indonesia Edisi V</i> . Depkes RI.
Notes:	