

## Module Handbook

Module Name:	Drug Delivery Systems
Module Level:	Bachelor
Abbreviation, if applicable:	FAT418
Sub-heading, if applicable:	
Courses included in the module, if applicable:	
Semester/term:	1 or 2 (open semester) / Fourth year
Module coordinator(s):	Dra. Esti Hendradi, MSi., PhD., Apt
Lecturer(s):	Dra. Esti Hendradi, MSi., PhD., Apt Dr. Retno Sari, MSc Drs. Acmad Radjaram Drs. Bambang Widjaja, MSi Dr. Dwi Setyawan, SSi., Msi Dewi Melani H, S.Si.,M.Phil., Ph.D Helmy Yusuf, S.Si.,M.Sc., Ph.D
Language:	Bahasa Indonesia
Classification within the curriculum:	Elective Studies
Teaching format/class hours per week during the semester:	100 minutes lectures, 13 lecture classes/semester
Workload:	Total 22 hours a semester
Credit Points:	2
Requirements:	Students must have taken Liquid Preparation Pharmaceutics (FAF203) , Solid Preparation Pharmaceutics (FAF202), Semisolid Preparation Pharmaceutics (FAF211) courses.
Learning goal/competencies:	<p>Knowledge</p> <ul style="list-style-type: none"> <li>– To understand the concept development of drug delivery systems.</li> </ul> <p>Skills</p> <ul style="list-style-type: none"> <li>– Discipline, empathy</li> </ul> <p>Competence</p> <ul style="list-style-type: none"> <li>– To understand and able to apply the concept of drug delivery systems.</li> <li>– To understand and able to explain the concept of oral drug delivery system, transdermal drug delivery system, parenteral drug delivery system.</li> <li>– To understand and able to explain the use of polymer in DDS development in designing a pharmaceutical product.</li> </ul>
Content:	Concept development of new drug delivery system; oral drug delivery system; transdermal drug delivery system; parenteral drug delivery system; polymer in drug delivery system, development in DDS.
Study/exam achievements:	<p>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 is calculated as follow : 45% Exam I + 45% Exam II + 10% Softskill</p> <p>Final index is defined as follow : A : <math>\geq 75</math></p>

	AB : 70 – 74,9 B : 65 – 69,9 BC : 60 – 64,9 C : 55 – 59,9 D : 40 – 54,9 E : <40
Forms of Media:	LCD projector, whiteboard, power point.
Literature:	<ol style="list-style-type: none"> <li>1. Hillery,A., Lloyd, A.W., Swarbrick , 2001. Drug Delivery and Targeting for Pharmacists and Pharmaceutical Scientist .</li> <li>2. Birnbaun,Dt., Peppas, LB, 2003. Microparticle Drug Delivery System In: Drug Deliver System in Cancer Therapy</li> <li>3. Guy,RH and Hadgraft,J., 2002. Transdermal Drug Delivery, 2<sup>nd</sup> Ed., Series of Drugs and Pharmaeutical Sciences, Vol. 123</li> <li>4. Freitas S, et al, 2005. Microencapsulation by Solvent Extraction/ Evaporation</li> </ol>
Notes:	