

ADVANCED BIOPHARMACEUTICS

Module designation	<i>Advanced Biopharmaceutics</i>
Semester(s) in which the module is taught	1
Person responsible for the module	1. Dr. apt. Budi Suprapti, M.Si. (Course Coordinator) 2. Prof. apt. Junaidi Khotib, S.Si., M.Kes., Ph.D. 3. Prof. Dra. apt. Esti Hendradi, M.Si., Ph.D.
Language	<i>Bahasa Indonesia</i>
Relation to curriculum	Compulsory / elective / specialisation
Teaching methods	<i>lecture, discussion, assignment</i>
Workload (incl. contact hours, self-study hours)	<i>(Estimated) Total workload:</i> <i>Contact hours (structured activities.): 90,67 hours</i> <i>Private study including independent learning activities: 90,67 hours</i>
Credit points	<i>2 SCU / 6 ECTS</i>
Required and recommended prerequisites for joining the module	NA
Module objectives/intended learning outcomes	<p>Students are:</p> <p>LO1: Able to realize excellence based on religious morals (excellence with morality), able to work together, and show a responsible attitude to work in their field of expertise independently</p> <p>LO2: Able to internalize the spirit of independence, struggle, and entrepreneurship</p> <p>LO3: Able to develop and build logical-critical-systematic-creative thinking and scientific conceptions through scientific research, design creation, or artworks of science and technology that pays attention to and applies humanities values through an interdisciplinary or multidisciplinary approach in the form of a thesis or other equivalent forms.</p> <p>LO4: Able to develop a pharmaceutical professional performance with analytical acumen in solving pharmaceutical problems and managing research in the pharmaceutical field related to national and global systems and policies, both inter and inter-disciplinary approaches.</p> <p>LO5: Able to access and review information through an Information and Communication Technology (ICT) system, decide on a specific subject of study, maintain the feasibility of implementing research designs, conduct research, analyze data, conclude research results comprehensively, and create strategic issues based on the study that reflect the latest updates in the field of pharmaceutical sciences, and communicate them in the media and scientific forums at the national and international level through an interdisciplinary or multidisciplinary approach in the form of a thesis or other equivalent forms.</p> <p>LO14: Able to build drug management systems from active pharmaceutical ingredients to finished products that are ready for therapeutic uses.</p>

Content	Advanced Biopharmaceuticals course describes molecular absorption and transport of active substances through cell membranes, bioavailability of drug in systemic blood circulation, bioequivalence of biosimilar drugs, development of protein-based drugs and endogenous compounds terpenoids.
Exams and assessment formats	<i>Mid term exam and final exam</i>
Study and examination requirements	<i>the final grade in the module is composed of 45% mid term exam, 45% final exam , 10% in-class participation and soft-skills assessment. Students must have a final grade of 70% or higher to pass</i>
Reading list	<ol style="list-style-type: none"> 1. <i>Shargel L, Wu-Pong S. Yu ABC, 2012, Applied Biopharmaceutics and Pharmacokinetics, 6 edition, Mc Graw Hill Education.</i> 2. <i>Ritschel WA Kearns GL, 2009, Handbook of Basic Pharmacokinetics 6th edition, Washington: American Pharmacists Association.</i> 3. <i>Aldeel A, 2003, Absorption and drug development solubility, permeability and charge state, New Jersey: A John Wiley and Sons.</i> 4. <i>Gibaldi, M, 2005, Biopharmaceutics and clinical Pharmacokinetic, 4" edition, Philadelphia: Lea Febiger.</i>