

## PHARMACEUTICAL INFORMATION TECHNOLOGY

Module designation	Pharmaceutical Information Technology
Semester(s) in which the module is taught	2
Person responsible for the module	1. apt.Andi Hermansyah, S.Farm.,M.Sc.,Ph.D ( <b>Course Coordinator</b> ) 2. Prof. Dr. apt. Umi Athiyah, M.S. 3. Ira Puspitasari, S.T., M.T., Ph.D
Language	<i>Bahasa Indonesia</i>
Relation to curriculum	<del>Compulsory</del> / <i>elective</i> / <del>specialisation</del>
Teaching methods	<i>lecture, discussion, assignment</i>
Workload (incl. contact hours, self-study hours)	<i>(Estimated) Total workload: Contact hours (structured activities.): 90,67 hours 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>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>LO6: Able to make decisions in the context of solving problems related to science and technology development based on analytical or experimental studies through collaboration with colleagues, colleagues in institutions and research communities at both national and international levels and utilizing research results for the benefit of the user and other communities</p> <p>LO10: Able to develop pharmaceutical management systems and policies related to the referral health care system and the role and function of pharmacists as an integral part of the health care team in order to improve community welfare</p> <p>LO14: Able to build drug management systems from active pharmaceutical ingredients to finished products that are ready for therapeutic uses</p>
Content	The material for this course will be delivered face-to-face in the form of lectures and student presentations. The topic of discussion will focus on understanding the role of information and digital technology in the pharmaceutical sector and the role and function of pharmacists in using technology and digitalization variants in pharmaceutical practice
Exams and assessment formats	<i>Final exam (100 minutes), take-home written assignments</i>
Study and examination requirements	<i>the final grade in the module is composed of 50% performance on final exams and 50% take-home assignments. Students must have a final grade of 70% or higher to pass</i>

Reading list	<ol style="list-style-type: none"><li data-bbox="619 181 1310 255">1. Smith,SG., Information Technology in Pharmacy., Springer, London. 2013.</li><li data-bbox="619 255 1246 329">2. Murthy, PR., Operation Research., New Age International Publisher, New Delhi, 2007</li><li data-bbox="619 329 1150 369">3. Journal of Medical Internet Research</li></ol>
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