

## SKIN WHITENING PREPARATION

Module designation	Skin Whitening Preparation
Semester(s) in which the module is taught	2
Person responsible for the module	1. Prof. Dr. apt. Widji Soeratri, DEA ( <b>Course Coordinator</b> ) 2. Prof. Dr. apt. Tristiana Erawati M., M.Si. 3. Prof. Dr. apt. Noorma Rosita, M.Si.
Language	<i>Bahasa Indonesia</i>
Relation to curriculum	<i>Compulsory / elective / specialisation</i>
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	Students are: 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 LO2: Able to internalize the spirit of independence, struggle, and entrepreneurship LO9: Able to carry out molecular manipulation of substances and develop formulations and manufacturing of pharmaceutical preparations with active pharmaceutical ingredients derived from natural products and synthetic compounds through the manufacture of polymorphs, nanoparticles, solid dispersions
Content	The course in Skin Lightening Cosmetics discusses the physiology of pigmentation and hyperpigmentation, principles of skin depigmentation, skin lightening ingredients, both synthetic and/or natural, along with the mechanism of action of skin lightening, skin lightening procedures, skin lightening formulations, skin lightening series preparations, evaluation of skin lightening preparations, Manufacturing & Storage
Exams and assessment formats	<i>Final exam (100 minutes), Presentations (100 minutes), take-home written assignments</i>
Study and examination requirements	<i>the final grade in the module is composed of 40% performance on final exams, 50% presentations and take-home assignments, and 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"><li>1. Farmakope Indonesia Ed. V</li><li>2. United States Pharmacopoea</li><li>3. British Pharmacopoea</li><li>4. Physical Pharmacy</li><li>5. Pharmaceutics The Science of Dosage Form Design</li><li>6. The Theory and Practice of Industrial Pharmacy</li><li>7. Pharmaceutical Dosage Forms: Disperse Systems</li><li>8. Megaw J.M., Drake L.A., 1986, Photobiology an overview dalam Jackson E.M. (ed), <i>Photobiology of the Skin and Eye</i>, Marcel Dekker Inc., NY-Basel:1-31</li><li>9. Bose S.K., Ortonne J.P., 1994, Pigmentation: Dyschromia dalam Baran R., Maibach H.I., (eds), <i>Cosmetic Dermatology</i>, Martin Dunitz, London : 277-285</li><li>10. Mosher D.B., 1993, Disorder of Melanocytes dalam Fitzpatrick's T.B., Eisen A.Z., et. Al. (eds), <i>Dermatology in General Medicine</i>, 4<sup>th</sup> ed., Mc Graw Hill, NY : 967-971</li><li>11. Castanet J., Orthonne J.P., 1995, Melasma : New Approached to Treatment, Martin Dunitz, London : 1-5</li></ol>
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