Module Descriptions

Module designation	**Cosmetics**
Semester(s) in which the module is taught	8th semester/Fourth Year
Person responsible for the module	Dr. Rusmini S.Pd., M.Si
Language	Bahasa Indonesia (Regular Class) Bahasa Inggris (Internasional Class)
Relation to curriculum	Elective course
Teaching methods	Project-Based Learning 2 workhours per week (2 x 170 minutes per week)
Workload (incl. contact hours, self-study hours)	1 CU for a bachelor's degree equals 170 minutes (50 minutes face-to-face, 60 minutes structured, 60 minutes independent learning) per week × 14 weeks, excluding mid and end-term exams. = 39.67 work hours per semester = 1.587 ECTS.
Credit points	2 Credit Units (CU) = 3.18 ECTS
Required and recommended prerequisites for joining the module	-
Module objectives/intended learning outcomes	1. Students will have knowledge of the basic principles of chemical aspects in the cosmetics field, including an initial understanding of the definition of cosmetics, the main functions of cosmetics, the classification of cosmetics from various perspectives, cosmetic ingredients based on their characteristics (physical and chemical properties), the cosmetics manufacturing process, the development of cosmetic research, and the preparation of cosmetic patents. 2. Students will be skilled in using tools to manufacture cosmetic preparations and analyze cosmetic products in terms of their constituent materials, the cosmetics manufacturing process, essential ingredients in cosmetics, hazardous ingredients in cosmetics, the manufacture of cosmetics that are safe for health, traditional cosmetics, and the development of cosmetic research. 3. Students will have the ability to collaborate in the cosmetic manufacturing process and analyze cosmetic products in terms of their constituent materials, the cosmetics manufacturing process from a chemical-physicochemical perspective, essential ingredients in cosmetics, hazardous ingredients in cosmetics, the manufacture of cosmetics that are safe for health, traditional cosmetics, and the development of cosmetic research.

Content	The cosmetics course examines the basic principles of chemical aspects in the field of cosmetics, reviewed from the initial understanding of the definition of cosmetics, the main function of cosmetics, classification of cosmetics from various perspectives, materials that make up cosmetics, the process of making cosmetics reviewed from a chemical and physical perspective, essential ingredients in cosmetics, hazardous ingredients in cosmetics, making cosmetics that are safe for health, traditional cosmetics, development of cosmetic research and preparation of cosmetic patents accompanied by supporting laboratory activities so that students are able to master related concepts, are skilled in using tools, are able to work together and be responsible and can communicate their knowledge and skills scientifically.
Examination forms	-
Study and examination requirements	Assessment includes: Participatory Activities 15.5% Project Outcome Assessment / Product Assessment 51% Practical Assessment 8% Test 25.5%

Reading list	1. Kreps, S.I., Goldenberg, 1972, Suntan Preparation in Balsam MSC, Cosmetic Sciense and Technology,2nd ed, John Wiley &Sons, Inc. 2. Harry R.G., 1982, Harry 19s Cosmeticology, 6th edition, The Principle and Practice Of Modern Cosmetic, Leonard Hill Book,London 3. Shaath N.A., 1990, Sunscreens, Development, Evaluation, and Regulatory Aspects, Marcel Dekker, INC, New York. 4. Retno I.S.Tranggono , 2006, Ilmu Pengetahuan Kosmetik, Penerbit Gramedia Jakarta Indonesia. 5. Taufikurohmah, T., Sanjaya, I.G.M., & Syahrani, A. (2011) Nanogold Synthesis Using Matrix Mono Glyceryl Stearate as Antiaging Compounds in Modern Cosmetics , Journal of Materials Science and Engineering A 1 (2011) 857-864 6. Taufikurohmah, T., Sanjaya, I.G.M., Baktir, A., & Syahrani, A. (2012) Activity Test of Nanogold for Reduction of Free Radicals, a Pre-Assessment Utilization Nanogold in Pharmaceutical as Medicines and Cosmetics, *Journal of Materials Science and Engineering* B 2 (12) : 611-617 7. Taufikurohmah, T., Rusmini, Sanjaya, I.G.M., Baktir, A., & Syahrani, A. (2012) Synthesis of Nanogold and Stability Test of This Colloidal as Essential Material in Drug, Supplement and Cosmetics, International Journal of Science and Research (IJSR), 3(5); 60-63 8. Taufikurohmah T. & Rusmini, 2015, Kimia Kosmetik, Semarang: Penerbit Cerdas, Ulet, Kreatif 9. Taufikurohmah, T., Sanjaya, I.G.M., Baktir, A., & Syahrani, A. (2016) Histochemical Changes Liver and Kidney of Mice Exposed to Mercury and Recovery with Nanogold, *Molekul*, 16(1): 80-91 10. Taufikurohmah, T., Tjandrakirana, Tjahjani , Sanjaya, I.G.M., Lumintang, Baktir, A., Syahrani, A. & Soeprijanto, A., (2018) Clinical Test of Nanogold-Nanoseaweed Cosmetics For User Cosmetic Sociaty, Atlantis Press: DOI. 10.2991/icst-18.2018.180 11. Taufikurohmah, T., Soepardjo, D., Rusmini, & Armadianto, H. (2020) Synthesis and Characterization of Nanogold-Nanosilver Cluster Diameter Using UV-Visible Instruments and TEM Electron Microscope Transform Instruments, Atlantas Press: DOI. 10.2991/icracos-19.2020.31