<table>
<tr><td colspan="2">  </td><td colspan="4">Faculty of Natural Sciences and Mathematics
Chemistry Department
Chemistry Education Study Program</td></tr>
<tr><td colspan="2">Module name</td><td colspan="4">Cosmetic Chemistry</td></tr>
<tr><td colspan="2">Module level, if applicable</td><td colspan="4">4th year</td></tr>
<tr><td colspan="2">Code, if applicable</td><td colspan="4">SPK-763</td></tr>
<tr><td colspan="2">Semester(s) in which the module is taught</td><td colspan="4">7th semester</td></tr>
<tr><td colspan="2">Person responsible for the module</td><td colspan="4">Lina Fauzi’ah, M.Sc</td></tr>
<tr><td colspan="2">Lecturer</td><td colspan="4">Lina Fauzi’ah, M.Sc
Widinda Normalia Arlianty, M.Pd</td></tr>
<tr><td colspan="2">Language</td><td colspan="4">Bahasa Indonesia</td></tr>
<tr><td colspan="2">Relation to curriculum</td><td colspan="4">Elective</td></tr>
<tr><td>Teaching methods</td><td>Class size</td><td>Forms of active participation</td><td colspan="3">Workload: 91 hours</td></tr>
<tr><td rowspan="2">Theory and Practice</td><td rowspan="2">50-60</td><td rowspan="2">Discussion</td><td>Lecture: 100 (min) x 16 (meeting)</td><td colspan="2">27 hours</td></tr>
<tr><td>Lab work (making product): 120 (min) x 16 (week) + 120 (min) x 16 (week)</td><td colspan="2">64 hours</td></tr>
<tr><td colspan="2">ECTS credit</td><td colspan="4">3.25</td></tr>
<tr><td colspan="2">Credit points</td><td colspan="4">2 SCU</td></tr>
<tr><td colspan="2">Requirements according to the examination regulations</td><td colspan="4">Minimum attendance at lectures is 75% (according to UII regulation)</td></tr>
<tr><td colspan="2">Recommended prerequisites</td><td colspan="4">N/A</td></tr>
<tr><td colspan="2">Related course</td><td colspan="4">N/A</td></tr>
<tr><td colspan="2">Module objectives/intended learning outcomes</td><td colspan="4">On successful completion of the course students should be able to:
1. Explain the basics of cosmetics
a. Explain the scope of cosmetic chemistry
b. Explain the anatomy, physiology, and macrobiology of the skin.
c. Explain the absorption of lice, classification of cosmetics and manufacturing technology</td></tr>
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d. Explain the contents, ingredients, composition and formula in medical cosmetics, side effects and skin test certificates used.
e. Explain the benefits and applications of cosmetics
2. Explain and determine the types of cosmetics based on their content.
a. Explain and define cosmetic treatments
b. Explain and determine about moisturizing cosmetics
c. Explain and determine protective cosmetic
d. Explain and determine about decorative cosmetics
e. Explain and determine about fragrance cosmetics and traditional cosmetics
3. Explain special tools and actions in skin diseases
a. Can explain medical cosmetics
b. Can explain skin disorders such as pigmentation disorders and aging skin
c. Can explain plastic surgery, collagen implantation, chemobrasion, chemical surgery.
4. Make simple cosmetic products such as maintenance, decorative, protective and traditional cosmetics.
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<tr><td>Content</td><td>
● Definition of bottled water technology (BWT),
● BWT quality standard requirements according to Indonesian National Standard,
● types of BWT manufacturing process technology, BWT manufacturing process steps,
● QC and QA in the BWT manufacturing process,
● BWT quality analysis.
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<tr><td>Study and examination requirements and forms of examination</td><td>
Final score (NA) is calculated as follows:
<table>
<tr><th>Intended learning outcomes</th><th>Weight (%)</th><th>Technique of assessment</th></tr>
<tr><td>1</td><td>20</td><td>Written test (midterm)</td></tr>
<tr><td>2</td><td>20</td><td>Written test (midterm)</td></tr>
<tr><td>3</td><td>20</td><td>Written test (midterm)</td></tr>
<tr><td>4</td><td>40</td><td>Non test: project assessment</td></tr>
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<tr><td>Media employed</td><td>Power point slide presentation, video, Google classroom</td></tr>
<tr><td>Reading list</td><td>Spellman, F.S., and Drinan, J.E., 2012, The Drinking Water Handbook, 2nd ed., Second Edition, CRC Press.</td></tr>
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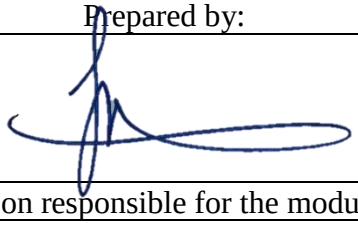
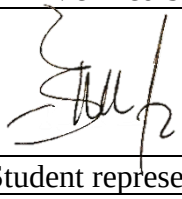
	American Water Works Association, Edzwald, J., 2010, *Water Quality & Treatment: A Handbook on Drinking Water (Water Resources and Environmental Engineering Series)*, 6th ed., McGraw-Hill Professional. Ingram, C., 2012, *The Drinking Water Book: How to Eliminate Harmful Toxins from Your Water*, 2nd ed., Celestial Arts. Rakness, K., 2005, *Ozone in Drinking Water Treatment: Process Design, Operation, and Optimization*, 1st ed., American Waterworks Association. MWH, Crittenden, J.C., Trussell, R.R., Hand, D.W., Howe, K., and Tchobanoglous, G., 2012, *Principles of Water Treatment*, 1st ed., Wiley. Peter M. Huck, Marek M. Sozanski, 2011, *Designing and Optimizing Drinking Water Treatment Processes: A Guide to Conducting Investigations*, IWA Publishing. Chittaranjan Ray, Ravi Jain, 2011, *Drinking Water Treatment: Focusing on Appropriate Technology and Sustainability (Strategies for Sustainability*), Springer; 1st Edition.

Prepared by:	Verified by:	Authorized by:
		
Person responsible for the module	Student representative	Coordinator Program