

100-1 Preliminary Syllabus, Da-Yeh Univ

Information			
Title	化妝品微生物學	Serial No. / ID	3079 / MHI4012
Dept.	藥用植物與保健學系	School System / Class	大學日間部4年1班
Lecturer	吳建一	Full or Part-time	專任
Required / Credit	Optinal / 3	Graduate Class	Yes
Time / Place	(三)1 / H563 (四)56 / H563	Language	Chinese

Introduction	
<p>Examination and control of microbial contamination in cosmetic products are matters of great importance to the industry and it can become a major cause of both product and economic losses. Moreover, the contamination of cosmetics can result in their being converted into products hazardous for consumers. The water and nutrients present in cosmetics make them susceptible to microbial growth, although only a few cases of human injury due to contaminated cosmetics have been reported. More often, microorganisms are the cause of organoleptic alterations, such as offensive odors, and changes in viscosity and color. Cosmetic microbiology plays an essential role in product development, plant sanitation, product testing and research. Manufacturers continue to have microbiological issues with product formulation, microbiota, preservation, house organisms, deionized water quality and contaminated batches of product. 12 topics will be discussed in the course of cosmetic microbiology as followings: (1) Introduction to cosmetics; (2) Dermatology and skin microbiota; (3) Control of microbial contamination of cosmetics; (4) Cosmetic preservatives; (5) Indicators and methods of microbiological testing of cosmetics, including the total aerobic microbial plate count, yeast and mold characteristics and inspection techniques, <i>Candida albicans</i>, <i>E. coli</i>, <i>Pseudomonas aeruginosa</i> and <i>Staphylococcus aureus</i>; (6) Cosmetics identification of microorganisms: The traditional method and fast method; (7) Preservative efficacy testing of cosmetics; (8) Cosmetics plant cleaning and sanitation method and validation; (9) Hygienic Standard for Cosmetics; (10) GMP and HACCP cosmetics factory; (11) ISO 29621:2010-Cosmetics microbial low-risk product identification and risk assessment guidelines; and (12) Application of biotechnology in cosmetics microbiology.</p>	

Outline	
<p>(1) Introduction to cosmetics; (2) Dermatology and skin microbiota; (3) Control of microbial contamination of cosmetics; (4) Cosmetic preservatives; (5) Indicators and methods of microbiological testing of cosmetics, including the total aerobic microbial plate count, yeast and mold characteristics and inspection techniques, <i>Candida albicans</i>, <i>E. coli</i>, <i>Pseudomonas aeruginosa</i> and <i>Staphylococcus aureus</i>; (6) Cosmetics identification of microorganisms: The traditional method and fast method; (7) Preservative efficacy testing of cosmetics; (8) Cosmetics plant cleaning and sanitation method and validation; (9) Hygienic Standard for Cosmetics; (10) GMP and HACCP cosmetics factory; (11) ISO 29621:2010-Cosmetics microbial low-risk product identification and risk assessment guidelines; and (12) Application of biotechnology in cosmetics microbiology.</p>	

Prerequisite	
general microbiology	