102-1 Preliminary Syllabus, Da-Yeh Univ

| Information | | | |
|-------------------|--------------------------|-----------------------|----------------|
| Title | 化妝品微生物學 | Serial No. / ID | 0452 / BTI2047 |
| Dept. | 生物產業科技學系 | School System / Class | 大學日間部2年1班 |
| Lecturer | 吳建一 | Full or Part-time | 專任 |
| Required / Credit | Optinal / 3 | Graduate Class | No |
| Time / Place | (四)2 / H562 (四)34 / H562 | Language | Chinese |

Introduction

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, Candida albicans, E. coli, Pseudomonas aeruginosa and Staphylococcus aureus; (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.

Outline

(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, Candida albicans, E. coli, Pseudomonas aeruginosa and Staphylococcus aureus; (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.

Prerequisite

General Microbiology