International Student Exchange Program Courses in English Available for Exchange Student and Study Abroad Faculty of Pharmacy

No.	Faculty	Departement / Program Study	Degree	Type of Program	Course Title	Course Code	Credit	Course Description	Kuota
1	Pharmacy	Pharmacy	Undergraduate	Regular	Proteomics	MOOC000297	1	In this module, you will learn the definition of proteomics, protein identification methods, bottom-up and top-down proteomics, and the presentation of proteomics data. After following this module, module participants are able to apply proteomics methods for protein analysis. The estimated time to complete this module is 225 minutes. This module will be carried out in self-paced learning mode. The asynchronous method will be used in this module, which includes watching interactive videos, answering quizzes, chatting in the discussion forums, and reading	40
2	Pharmacy	Pharmacy	Undergraduate	Regular	Nanofibers In Pharmaceutical Drug Delivery System	MOOC000483	1	Over the years, the development of nanofibers continually produces innovative solutions for an improved therapeutic potential. In this course, nanofibers as novel nanomaterial for drug delivery system is presented through video m aterials. The topics presented in this course include the introduction to nanofibers and its development in pharmaceutics, followed by a deeper understanding on the nanofibers production utilising electrospinning technique, its parameters in producing nanofibers, the advancement of electrospinning technology, and its application in pharmaceutical drug delivery and development. Learning objective: By the end of the course, participants understand the basic theory about nanofibers in drug delivery systems, including a deeper understanding about electrospinning method for nanofibers production and its application in pharmaceutical drug delivery for therapy and tissue engineering.	40

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3	Pharmacy	Pharmacy	Undergraduate	Regular	Microneedles as Drug Delivery System	MOOC000482	1	Currently, the majority of drugs are administered via oral route using tablets, capsules or syrup. However, this delivery system has some drawbacks resulting in low bioavailability of the drug administrated. Therefore, it is important to develop different delivery system. Transdermal drug delivery system is one of strategies which have being utilized for overcoming the problems mentioned above. Transdermal drug delivery system used skin as the application site and the drug will be absorbed systemically via dermal blood vessels. Microneedles is a promising method for enhancing transdermal drug delivery system. Such delivery system has been widely used globally for delivering both small and macromolecules for the treatment of various diseases. It is essential to understand and introduce microneedles as a new technology to the public, university students and healthcare professionals. This module aims to introduce the microneedles as drug delivery system to the participants. In this module, the participants will learn about the types, materials for preparing microneedles, manufacturing process, evaluations of microneedles as drug delivery system. Learning objective: After completing this MOOCS, participants are expected to be able to: 1. Explain the classification and materials for preparing microneedles 2. Explain the applications of microneedles as drug delivery system.	40