

Planning and Quality Assurance Affairs

Form (A)

Course Specifications

General Information

Course name	Pharmaceutics III
Course number	PHTC3211
Faculty	
Department	
Course type	Major Needs
Course level	3
Credit hours (theoretical)	2
Credit hours (practical)	0
Course Prerequisites	

Course Objectives

1 - To understand the importance of the sterile dosage forms
2 - The formulation and the components of the sterile dosage forms

Intended Learning Outcomes

Knowledge and Understanding	* Knowledge of the importance of the sterile dosage forms
Intellectual Skills	* The ensurance of the safety in the production of the sterile dsage forms
Professional Skills	* Understand and conduct research studies on the research in the formulation of the sterile dosage forms
General Skill	* Geeneral understanding of the principles of the sterilization methods used

Course Contents

1 - Introduction to sterile dosage forms, definitions and application.
2 - Components of the sterile dosage forms, water for injection types, method for purification of water. Aqueous and no aqueous vehicles.
3 - Pyrogens and method used for depyrogenation. Packaging of injections Glass types control and testing of glass
4 - Packaging of injections : plastics , types control and testing of plastics
5 - Sterilization: definition and general concept, thermal and thermal methods for sterilization.
6 - Moist and dry method for sterilization: advantages and disadvantages, equipment used
7 - Sterilization by radiation and by using of chemical agents or by radiation by filtration. Control of the process od sterilization.
8 - Available injections: small and large volume parenterals , insulin for injection types and other injectable sterile dosage forms.

Teaching and Learning Methods

1 - Lectures
2 - Notes

Teaching and Learning Methods for the Disabled Students

1 - /

Students Assessment

<u>Assessment Method</u>	<u>TIME</u>	<u>MARKS</u>
Medterm	week 8	40

Books and References

Essential books	Pharmaceutics: The science of dosage form design. Second edition (Michael Aulton). Pharmaceutical Dosage forms and Drug delivery systems. Howard C. Ansel.
Recommended books	Pharmaceutical dosage forms: Parenteral medications Volume 1. Lachman and Lieberman. Pharmaceutical dosage forms: Parenteral medications Volume 2. Lachman and Lieberman. Pharmaceutical dosage forms: Parenteral medications Volume 3. Lachman and Lieberman.