Course Syllabus

Code - Course Title	**ECZ495 - Pharmaceutical Technology III**
Course Type	VII. SEMESTER
Laboratory + Practice	4+2
ECTS	**6.0**
Language of Instruction	Türkçe
Course Type	Required Courses
Course Instructor(s)	PROF. DR. EBRU BAŞARAN, PROF. DR. EVRİM AKYIL

Mode of Delivery	The mode of delivery of this course is Face to face
Prerequisites	There is no prerequisite or co-requisite for this course.
Courses Recomended	There is no recommended optional programme component for this course.
Work Placement	Includes laboratory studies

Course Syllabus

Weeks	Learning Outcomes	Topics	Teaching Methods
Week - 1		Sterilization. Parenteral Dosage Form.	
Week - 2		Sterilization. Parenteral Dosage Form.	
Week - 3		Parenteral Preparation. Parenteral Dosage Form.	
Week - 4		Parenteral Preparation. Parenteral Dosage Form.	
Week - 5		Parenteral Preparation. Ophthalmic Dosage Form.	
Week - 6		Parenteral Preparation. Ophthalmic Dosage Form.	
Week - 7		Ophthalmic Preparation. Nose Drops.	
Week - 8		Ophthalmic Preparation. Ear Drops.	
Week - 9		Powdered Medicines. Package.	
Week - 10		Importance of Particle Size in Powder Drug Delivery Systems. Cachet.	
Week - 11		Capsules. Hard Capsule.	
Week - 12		Capsules. Hard Capsule.	
Week - 13		Capsules. Pilular.	
Week - 14		Capsules. Pilules.	

Learning Outcomes

#	Learning Outcome
1	Will be able to explain the basic concepts and definitions of parenteral preparations.
2	Will be able to explain the parenteral administration routes.
3	Will be able to define the Injection Dosage Form.
4	Will be able to explain the formulation of injectable dosage form.
5	Will be able to explain the packaging of injectable dosage form.
6	Will be able to explain the quality control process performed in injectable dosage forms.
7	Will be able to explain the anatomy of the eye.
8	Will be able to define ophthalmic preparation.
9	Will be able to explain the ocular route of administration.
10	Will be able to explain the drug disposition in ocular administration.
11	Will be able to explain ocular bioavailability.
12	Will be able to explain the sterility in ophthalmic preparations.
13	Will be able to define contamination.
14	Will be able to define sterilization.
15	Will be able to explain the sterilization method.
16	Will be able to explain the physical sterilization method – Sterilization by heat.
17	Will be able to explain the physical sterilization method – Sterilization by radiation.
18	Will be able to explain the physical sterilization method – Sterilization by ionizing radiation.
19	Will be able to explain the physical sterilization method - sterilization by filtration.
20	Will be able to explain the chemical sterilization method – ethylene oxide sterilization
21	Will be able to explain the aseptic method.
22	Will be able to explain sterilization validation.
23	Will be able to define general information about powdered drugs.
24	Will be able to explain the control performed on powdered drugs.
25	Will be able to explain the packaging of powdered drugs.
26	Will be able to explain the general characteristics of micro-pellets.
27	Will be able to explain the basic concepts and definitions in parenteral preparations.
28	Will be able to define the parenteral route of administration, volume, and dose.
29	Will be able to explain the components found in parenteral dosage forms.
30	Will be able to explain the method of preparing isotonic solution."
31	Will be able to define sterilization.
32	Will be able to explain sterilization control.
33	Will be able to explain the control performed on the ampoule.
34	Will be able to define sterile neutral olive oil."
35	Will be able to define parenteral suspension and emulsion.
36	Will be able to define large volume parenteral solution.
37	Will be able to explain the administration of parenteral preparations.
38	Will be able to explain the basic concepts and definitions in ophthalmic preparations.

Learning Outcomes

#	Learning Outcome
39	Will be able to define the application of ocular solution.
40	Will be able to define the basic concept of nasal drops.
41	Will be able to explain the application of nasal drops.
42	Will be able to define the basic concept of ear drops.
43	Will be able to explain the application of ear drops.
44	Will be able to explain the basic concept of packaging.
45	Will be able to explain the application of the package.
46	Will be able to explain the basic concept of a cachet.
47	Will be able to explain the basic concept of hard capsules.
48	Will be able to explain the application of hard capsules.
49	Will be able to explain the basic concept of a pilular.

Sustainable Development Goals

No content has been provided.

Course Theme

No content has been provided.

AKTS Workload

Activity	Duration (Hour)	Count	Workload
Teorik Derse Katılım	0	0	0
Sınıf Dışı Çalışma (Ön Hazırlık & Pekiştirme Amaçlı)	0	0	0
Ödevler	0	0	0
Proje - Rapor - Sunum Hazırlama	0	0	0
Ara Sınav Hazırlığı (sınav süresi dahil)	0	0	0
Final Sınavı Hazırlığı (sınav süresi dahil)	0	0	0
Uygulama (Laboratuvar, Müzik/Enstrüman Uygulaması, Atölye/Saha Çalışması vb.)	0	0	0
Staj Uygulaması	0	0	0
		Calculated ECTS	**0**

Assessment Method and Passing Requirements

No content has been provided.