Course Syllabus

Code - Course Title	**ECZ394 - Pharmaceutical Technology II**
Course Type	VI. SEMESTER
Laboratory + Practice	4+2
ECTS	**6.0**
Language of Instruction	Türkçe
Course Type	Required Courses
Course Instructor(s)	PROF. DR. EVRİM AKYIL, PROF. DR. MUSTAFA SİNAN KAYNAK

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		Absorption from the skin (Percutaneous absorption). Preparation of Semi-Solid Dosage Forms.	
Week - 2		Semi-solid drug delivery system, ointment. Preparation of Semi-Solid Dosage Forms.	
Week - 3		Gel, Pat, Greenhouse, Soap, Paste, Moxibustion / Flaster. Preparation of Semi-Solid Dosage Forms.	
Week - 4		Radiopharmaceutical Product. Preparation of Semi-Solid Dosage Forms.	
Week - 5		Suppository. Preparation of Suppository.	
Week - 6		Pharmaceutical Aerosol. Preparation of Suppository.	
Week - 7		Medical devices. Preparation of Cosmetics.	
Week - 8		Packaging and Packaging Materials, Surgical Materials. Preparation of Cosmetics.	
Week - 9		Drug Stability and Incompatibility. Preparation of Cosmetics.	
Week - 10		Drug Stability and Incompatibility. Preparation of Cosmetics.	
Week - 11		Drug Stability and Incompatibility. Preparation of Cosmetics.	
Week - 12		Biopharmaceutics - Pharmacokinetics. Preparation of Cosmetics.	
Week - 13		Biopharmaceutics - Pharmacokinetics. Preparation of Cosmetics.	
Week - 14		Biopharmaceuticals - Pharmacokinetics. Preparation of Cosmetic Preparations.	

Learning Outcomes

#	Learning Outcome
1	Will be able to explain the general feature of the semi-solid drug delivery system.
2	Will be able to explain the general feature of ointments.
3	Will be able to explain the general feature of the ointment base.
4	Will be able to explain the preparation of the ointment.
5	Will be able to define the stability issue in ointments.
6	Will be able to define the controls performed on the ointment.
7	Will be able to explain the preservation of the ointment.
8	Will be able to explain the general feature of the gel.
9	Will be able to explain the general feature of the paste.
10	Will be able to explain the general feature of the serum.
11	Will be able to explain the general feature of soap.
12	Will be able to explain the general feature of the plaster.
13	Will be able to explain the general feature of the poultice.
14	Will be able to explain the general feature of the skin.
15	Will be able to explain the purpose of drug application to the skin.
16	Will be able to define dermal absorption.
17	Will be able to explain general information about medical devices.
18	Will be able to explain pharmaceutical product packaging.
19	Will be able to explain general information about surgical materials.
20	Will be able to define cotton.
21	Will be able to define the gauze.
22	Will be able to define the bandage.
23	Will be able to define the surgical thread.
24	Will be able to define the drain.
25	Will be able to explain the basic concepts of radiopharmaceutical products.
26	Will be able to explain general information about radiopharmaceutical products.
27	Will be able to explain general information about pharmaceutical aerosols.
28	Will be able to explain the classification of pharmaceutical aerosols.
29	Will be able to define the topical aerosol.
30	Will be able to define the inhalation aerosol.
31	Will be able to explain pharmaceutical aerosol production.
32	Will be able to explain pharmaceutical aerosol quality control.
33	Will be able to explain general information about rectal, vaginal, and urethral suppositories.
34	Will be able to explain the application of medication to the rectal area.
35	Will be able to explain the application of medication to the vaginal area.
36	Will be able to explain suppository preparation.
37	Will be able to explain the quality control of suppositories.
38	Will be able to explain drug stability.

Learning Outcomes

#	Learning Outcome
39	Will be able to explain the degradation reaction of drugs.
40	Will be able to explain the drug stability study protocol.
41	Will be able to explain the degradation reaction kinetics of drugs.
42	Will be able to explain stability issues encountered in drugs.
43	Will be able to explain the concept of biopharmaceutics.
44	Will be able to explain the concept of pharmacokinetics.
45	Will be able to explain the concept of bioequivalence.
46	Will be able to explain the general characteristics of semi-solid dosage forms.
47	Will be able to define ointments.
48	Will be able to define creams.
49	Will be able to define gels.
50	Will be able to define pastes.
51	Will be able to define poultices.
52	Will be able to define occlusive preparations.
53	Will be able to define sun preparations.
54	Will be able to define skin cleansing preparations.
55	Will be able to define body odor prevention preparations.
56	Will be able to explain shaving preparations.
57	Will be able to define skin care preparations.
58	Will be able to define hair care preparations.
59	Will be able to define skin refreshing preparations.
60	Will be able to define medical plaster.

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

AKTS Workload

Activity	Duration (Hour)	Count	Workload
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.