Course Syllabus

Code - Course Title	**FTK517 - Drug Interactions and Toxicological Results**
Course Type	II. SEMESTER
Laboratory + Practice	3+0
ECTS	**6.0**
Language of Instruction	Türkçe
Course Type	Elective Courses
Course Instructor(s)	DR. ÖĞR. ÜYESİ MERVE BAYSAL

Mode of Delivery	This course is conducted via face-to-face instruction.
Place of Delivery	On Campus
Used Educational Platforms	Face-to-face
Prerequisites	There is no prerequisite or co-requisite for this course.
Courses Recomended	None
Recommended Resources	Katzung, B. G. (2021). Basic and Clinical Pharmacology (15th ed.). McGraw-Hill Education.Brunton, L. L., Hilal-Dandan, R., & Knollmann, B. C. (Eds.). (2018). Goodman & Gilman's: The Pharmacological Basis of Therapeutics (13th ed.). McGraw-Hill Education.McCabe, B. J., Frankel, E. H., & Wolfe, J. J. (Eds.). (2003). Handbook of food-drug interactions. CRC Press.Mozayani, A., & Raymon, L. P. (Eds.). (2004). Handbook of drug interactions: A clinical and forensic guide. Humana Press.Stockley, I. H. (Ed.). (2002). Stockley's drug interactions: A source book of interactions, their mechanisms, clinical importance and management (6th ed.). Pharmaceutical Press.Rodrigues, A. D. (Ed.). (2002). Drug-drug interactions. Micromedex (Drug interaction database – available via university subscription)Lexicomp Drug InteractionsDrugs.com Interaction Checker (Open access)PubMed Central (PMC) – Current literature and case reports
Work Placement	None
Aims of the Course	The primary objective of this course is to ensure that students can anticipate interaction risks they may encounter in professional practice by providing a comprehensive understanding of the mechanisms and toxicological consequences of drug interactions. To enhance drug safety, the course also aims to provide knowledge and awareness regarding strategies for preventing potential interactions and the critical factors that must be considered.

Course Syllabus

Weeks	Learning Outcomes	Topics	Teaching Methods
Week - 1		Overview of Drug Interactions	Lecture, Question & Answer, Discussion
Week - 2	**LO-1**	Classification of Drug Interactions	Lecture, Question & Answer, Discussion
Week - 3	**LO-2** **LO-3** **LO-4**	Basics of Toxicological Responses	Lecture, Question & Answer, Discussion
Week - 4	**LO-2**	Pharmacodynamic Interactions	Lecture, Question & Answer, Discussion

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Weeks	Learning Outcomes	Topics	Teaching Methods
Week - 5	LO-2	Pharmacokinetic Interactions I – Absorption and Distribution	Lecture, Question & Answer, Discussion
Week - 6	LO-1	Pharmacokinetic Interactions II – Metabolism and Elimination	Lecture, Question & Answer, Discussion
Week - 7	LO-1	Pharmaceutical (In Vitro) Interactions	Lecture, Question & Answer, Discussion
Week - 8	LO-3 LO-4 LO-5	Drug-Drug Interactions: Clinical Case Studies	Lecture, Question & Answer, Discussion, Case Study, Brain Storming
Week - 9	LO-3 LO-4 LO-5	Drug-Drug Interactions: Clinical Case Studies	Lecture, Question & Answer, Discussion, Case Study, Brain Storming
Week - 10	LO-3 LO-4 LO-5	Drug-Food Interactions	Lecture, Question & Answer, Discussion
Week - 11	LO-3 LO-4 LO-5	Drug-Herbal Product Interactions	Lecture, Question & Answer, Discussion
Week - 12	LO-4 LO-5	Drug-Disease Interactions	Lecture, Question & Answer, Discussion
Week - 13	LO-4	Risk Factors in Drug Interactions	Lecture, Question & Answer, Discussion
Week - 14	LO-5	Prevention of Drug Interactions: Clinical Practices and Guidelines	Lecture, Question & Answer, Discussion

Learning Outcomes

#	Learning Outcome
1	Defines the basic concepts and classifications of drug interactions.
2	Explains the mechanisms of pharmacodynamic, pharmacokinetic, and pharmaceutical interactions.
3	Distinguishes the toxicological outcomes of different types of drug interactions.
4	Analyzes the main risk factors involved in drug interactions.
5	Lists the basic strategies for the prevention of drug interactions.

Sustainable Development Goals

No content has been provided.

Course Theme

✓ Health Sciences and Medical Technologies

AKTS Workload

Activity	Duration (Hour)	Count	Workload
Teorik Derse Katılım	3.00	14	42
Sınıf Dışı Çalışma (Ön Hazırlık & Pekiştirme Amaçlı)	2.00	14	28
Ödevler	20.00	1	20
Proje - Rapor - Sunum Hazırlama	20.00	2	40
Ara Sınav Hazırlığı (sınav süresi dahil)	10.00	1	10
Final Sınavı Hazırlığı (sınav süresi dahil)	10.00	1	10
Uygulama (Laboratuvar, Müzik/Enstrüman Uygulaması, Atölye/Saha Çalışması vb.)	0.00	0	0
Staj Uygulaması	0.00	0	0
		Calculated ECTS	**6.0**

Assessment Method and Passing Requirements

✓ Open-Ended Test ✓ Multiple Choice Test ✓ Short-Answer Test ✓ True-False Test ✓ Fill-in-the-Blank Test ✓ Homework ✓ Presentation