Course Syllabus

Code - Course Title	**FTK515 - Developmental Toxicology**
Course Type	II. SEMESTER
Laboratory + Practice	3+0
ECTS	**6.0**
Language of Instruction	Türkçe
Course Type	Elective Courses
Course Instructor(s)	PROF. DR. ÖZLEM ATLI EKLİOĞLU

Mode of Delivery	Face to Face
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	Hood, R.D. (2019). Developmental and Reproductive Toxicology: A Practical Approach (3rd ed.). CRC Press.Klaassen, C.D., Watkins, J.B. (2018). Casarett & Doull\'s Essentials of Toxicology (3rd ed.). McGraw-Hill Education.EPA and OECD guidance documents (available online).Current literature from PubMed Central (PMC).
Work Placement	None
Aims of the Course	The aim of this course is to provide students with an understanding of the adverse effects of chemical, physical, and biological agents on germ cells and embryonic and fetal development, the mechanisms underlying these effects, and the testing and risk assessment approaches used to evaluate developmental toxicity.

Course Syllabus

Weeks	Learning Outcomes	Topics	Teaching Methods
Week - 1		Introduction to Developmental Toxicology and Basic Concepts	
Week - 2		Toxicology of the Male Reproductive System	
Week - 3		Toxicology of the Female Reproductive System	
Week - 4		Endocrine Disruptors	
Week - 5		Embryonic Processes and Maternal-Fetal Transfer	
Week - 6		Teratology	
Week - 7		Developmental Neurotoxicology	
Week - 8		Embryonic and Fetal Responses to Xenobiotics	
Week - 9		Developmental Cardiotoxicity	

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Weeks	Learning Outcomes	Topics	Teaching Methods
Week - 10		Reproductive Toxicity Tests and Analysis	
Week - 11		Developmental Toxicity Testing Using Non-mammalian Models	
Week - 12		Epigenetics and Developmental Programming	
Week - 13		Case Studies in Developmental Toxicology	
Week - 14		Risk Assessment and Preventive Strategies	

Learning Outcomes

#	Learning Outcome
1	Describe and explain mechanisms of developmental toxicity.
2	Evaluate toxicological effects on reproductive systems.
3	Define and apply developmental toxicity tests.
4	Analyze relationships between epigenetics and toxicity.

Sustainable Development Goals

✓ Health and Quality of Life

Course Theme

✓ Health Sciences and Medical Technologies

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

✓ Open-Ended Test ✓ Oral Examination ✓ Homework ✓ Presentation