Course Syllabus

Code - Course Title	**ECZ872 - Innovative Approaches to Antisense Technology**
Course Type	X. SEMESTER
Laboratory + Practice	1+0
ECTS	**1.5**
Language of Instruction	Türkçe
Course Type	Specialization Courses
Course Instructor(s)	DOÇ. DR. BEHİYE ŞENEL

Mode of Delivery	The mode of delivery of this course is Face to face
Prerequisites	Pharmaceutical Biotechnology course has to be taken
Courses Recomended	Molecular Biology course is recommended for this course
Work Placement	Not Applicable

Course Syllabus

Weeks	Learning Outcomes	Topics	Teaching Methods
Week - 1		Classification of DNA and RNA Definitions and Types	
Week - 2		Gene, Gene Organization and Gene Expression	
Week - 3		Control of Gene Expression and Epigenetic Mechanisms	
Week - 4		Genome Editing Definition and Types	
Week - 5		Gene Editing Variants with Modified eEdonucleases (ZNF, TALEN, CRISPR / Cas9)	
Week - 6		Examples of Applications Related to Genome Editing with Endonucleases	
Week - 7		Gene Therapy	
Week - 8		RNA Interference	
Week - 9		Antisense Therapy Definition and Molecules	
Week - 10		siRNA and miRNA Definition and Working Mechanisms, Differences	
Week - 11		Delivery Systems Used for Antisense Molecules	
Week - 12		Areas Where Antisense Technology Is Used	

Learning Outcomes

#	Learning Outcome
1	distinguish the obtaining methods of Antisense Technology and Its Applications
2	recognises Gene silencing mechanisms

Learning Outcomes

#	Learning Outcome
3	Inspects using Area of Antisense Technology and Its Applications

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.