Course Syllabus

Code - Course Title	**BYK506 - Nucleotide Biochemistry**
Course Type	II. SEMESTER
Laboratory + Practice	3+0
ECTS	**6.0**
Language of Instruction	Türkçe
Course Type	Elective Courses
Course Instructor(s)	PROF. DR. GÜLŞEN AKALIN ÇİFTÇİ

Mode of Delivery	face to face
Prerequisites	There is no prerequisite or co-requisite for this course.
Courses Recomended	Biochemistry, molecular biology
Work Placement	Not Applicable

Course Syllabus

Weeks	Learning Outcomes	Topics	Teaching Methods
Week - 1		Introduction to Nucleotid Biochemistry	
Week - 2		Functions of Nucleotides	
Week - 3		Structure of Chromosome	
Week - 4		Structure of DNA	
Week - 5		Plasmids, Vectors and DNA libraries	
Week - 6		Structure of DNA Super Coil and Topoisomerases	
Week - 7		Replication of DNA ve DNA Repair	
Week - 8		DNA Recombination	
Week - 9		Synthesis of RNA	
Week - 10		Tranfer RNA ve Messanger RNA	
Week - 11		Ribosomal RNA ve Processing of RNA	
Week - 12		RNA Depended-Synthesis of RNA and DNA	
Week - 13		Translation of Messanger-RNA	
Week - 14		Regulation of Gen Expression	

Learning Outcomes

#	Learning Outcome
1	Know and explain the structure of the nucleosides and nucleotides
2	Explains the structure of the chromosome.
3	Explains structure of DNA
4	Explains plasmides, vectors and DNA libraries.
5	Explains DNA supercoil structures and topoisomerases
6	Explains DNA replication and DNA repair mechanisms
7	Explains DNA recombination and usage areas
8	Explains RNA synthesis and steps
9	Explains transfer RNA and messenger RNA
10	Explains ribozomal RNA and processing of RNA
11	Explains synthesis of RNA and DNA which depends RNA
12	Explains translation of messenger RNA
13	Explains arranging of gene expression

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.