Course Syllabus

Code - Course Title	**BYK509 - Isolation, Characterization and Purification Techniques of Some Biomacromolecules**
Course Type	II. SEMESTER
Laboratory + Practice	3+0
ECTS	**6.0**
Language of Instruction	Türkçe
Course Type	Elective Courses
Course Instructor(s)	PROF. DR. ŞÜKRÜ BEYDEMİR

Mode of Delivery	Face to face
Prerequisites	There is no prerequisite or co-requisite for this course.
Courses Recomended	Biochemistry
Recommended Resources	Streyer Biochemistry and Lehninger Biochemistry
Work Placement	Not Applicable

Course Syllabus

Weeks	Learning Outcomes	Topics	Teaching Methods
Week - 1		Organelles in the cell	
Week - 2		Biomolecules and macromolecules in the cell	
Week - 3		Cell lysis techniques	
Week - 4		Cell lysis techniques	
Week - 5		Isolation of DNA, RNA and proteins from cell homogenates	
Week - 6		Stabilization of enzymes and proteins	
Week - 7		Concentrating protein solvents and purifying from salts	
Week - 8		Purification of enzymes	
Week - 9		Purification of enzymes	
Week - 10		Preparation of protein purification table	
Week - 11		Purification criteria	
Week - 12		Enzyme activity determination and calculations	
Week - 13		Enzyme activity determination and calculations	
Week - 14		Preparation of Purification Table	

Learning Outcomes

#	Learning Outcome
1	Explains the structure and function of the organelles in the cell
2	Explain the structure and function relationships of biomolecules and macromolecules in the cell
3	Explains the Various Cell Lysis Techniques
4	Explain the concentration and stabilization of enzymes and proteins
5	Explain the purification and its criteria of enzymes
6	Explains enzyme activity and regulation in the solution

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.