Course Syllabus

Code - Course Title	**GMS509 - Modern Food Microbiology Applications**
Course Type	I. SEMESTER
Laboratory + Practice	3+0
ECTS	**6.0**
Language of Instruction	Türkçe
Course Type	Elective Courses
Course Instructor(s)	ÖĞR. GÖR. DR. ÜMİT YILMAZ YILDIZ

Mode of Delivery	Face to face (in person)
Prerequisites	There is no prerequisites and co-requisites
Courses Recomended	There is no recommended optional programme component
Recommended Resources	James M. Jay, Modern Food Microbiology
Work Placement	Doesn't apply

Course Syllabus

Weeks	Learning Outcomes	Topics	Teaching Methods
Week - 1		History of microorganisms in Food	
Week - 2		Habitat, taxonomy, role, and significance of microorganisms in Foods	
Week - 3		Microorganisms in foods	
Week - 4		Determining Microorganisms and/or Their Products in Foods	
Week - 5		Food Protection and Some Properties of Psychrotrophs, Thermophiles, and Radiation-Resistant Bacteria	
Week - 6		Microbiological indicators and criteria in foods	
Week - 7		Advanced food safety in gastronomy	
Week - 8		Mid term	
Week - 9		Yeast growth	
Week - 10		Food protection with microorganisms	
Week - 11		Modern microbiological techniques in cusine	
Week - 12		Probiotics, prebiotics	
Week - 13		Microbiological applications in gastronomy	
Week - 14		Final week	

Learning Outcomes

#	Learning Outcome
1	The concept of food microbiology will be defined
2	Major microorganism groups will be defined and classification parameters will be explained.
3	It will be explained how food products can be prepared with microorganisms.
4	It will be explained how food products can be preserved with microorganisms.
5	The concepts of culture and stock preparation will be defined and their use in the cusine will be evaluated.
6	Modern culinary applications of microorganisms or their products will be exemplified.
7	The biological processes of microorganisms in food products and their effects on consumers will be explained.

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.