GM-309 - FOOD OPERATION SANITATION - Mühendislik Mimarlık Fakültesi - Gıda Mühendisliği Bölümü General Info

Objectives of the Course

The aim of this course is to provide knowledge and skills on sanitation in food establishments.

Course Contents

Importance of sanitation in the food industry; Facility exterior and internal layout; Equipment design; Cleaning and disinfection

Recommended or Required Reading

Principles of Food Sanitation (N.G. Marriott & R.B. Gravani, Birkhäuser, 2006, 413 pp); Food Plant Sanitation (Y.H. Hui, Marcel Dekker, 2003, 745 pp); Food Plant Sanitation: design, maintenance, and good manufacturing practices (M.M. Cramer, CRC Press, 2006, 283 pp); Principles of Food Sanitation (N.G. Marriott & R.B. Gravani, Birkhäuser, 2006, 413 pp); Gida İşletmelerinde Hijyen - Gida Hijyeni 2 (Prof. Dr. Deniz Göktan & Prof. Dr. Günnur Tunçel, Sidas Medya Ltd. Şti., 2010, 381s); Gida Hijyeni ve Sanitasyonu (Prof. Dr. Semra Kayaardı, Sidas Medya Ltd. Şti., 3. Baskı, 2008, 278 s); Temel Gida Hijyeni – Gida Hijyeni 1 (Prof. Dr. Deniz Göktan & Prof. Dr. Günnur Tunçel Sidas Medya Ltd. Şti., 2010, 214 s)

Planned Learning Activities and Teaching Methods

Oral Presentation

Recommended Optional Programme Components

Not available

Presentation Of Course

Face to face

Dersi Veren Öğretim Elemanları

Prof. Dr. Hilal Yıldız

Program Outcomes

- 1. Knows the importance of sanitation in food establishments.
- 2. Classifies cleaning and disinfection application methods.
- 3. Understands and identifies factors that influence sanitation in food establishments.
- 4. Understands and explains hygiene requirements for staff in food establishments.
- 5. Knows the foodborne hazards.

Weekly Contents

Order	PreparationInfo	Laboratory	TeachingMethods	Theoretical	Practise
1	The content of each week will be covered using lecture notes prepared by the instructor. These notes have been provided to students at the beginning of the semester, with weekly topics clearly indicated.		Lectures and discussions	Hygiene and sanitation: definition and importance Food contaminants	
2	The content of each week will be covered using lecture notes prepared by the instructor. These notes have been provided to students at the beginning of the semester, with weekly topics clearly indicated.		Lectures and discussions	Foodborne diseases	
3	The content of each week will be covered using lecture notes prepared by the instructor. These notes have been provided to students at the beginning of the semester, with weekly topics clearly indicated.		Lectures and discussions	Microbial contamination sources	
4	The content of each week will be covered using lecture notes prepared by the instructor. These notes have been provided to students at the beginning of the semester, with weekly topics clearly indicated.		Lectures and discussions	Food preservation methods and significance	
5	The content of each week will be covered using lecture notes prepared by the instructor. These notes have been provided to students at the beginning of the semester, with weekly topics clearly indicated.		Lectures and discussions	Staff hygiene	

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Laboratory TeachingMethods Theoretical

Practise

6 The content of each week will be covered using lecture notes prepared by the instructor. These notes have been provided to students at the beginning of the semester, with weekly topics clearly indicated. Lectures and discussions

Factors Affecting Sanitation in Food Establishments: Overall condition of the facility (building structure, floors and walls, doors and windows, ventilation, paints used, heating and lighting, equipment selection and design)

7 The content of each week will be covered using lecture notes prepared by the instructor. These notes have been provided to students at the beginning of the semester, with weekly topics clearly indicated.

Lectures and discussions

Factors Affecting Sanitation in Food Establishments: Raw material selection, sanitation during storage, sanitation in packaging and transport, disposal of waste materials, personnel training

9 The content of each week will be covered using lecture notes prepared by the instructor. These notes have been provided to students at the beginning of the semester, with weekly topics clearly indicated.

Lectures and discussions

Cleaning in food establishments – Detergents

Disinfection in food establishments

Midterm Exam

Disinfectants

10 The content of each week will be covered using lecture notes prepared by the instructor. These notes have been provided to students at the beginning of the semester, with weekly topics clearly indicated.

The content of each week will be covered using lecture

notes prepared by the instructor. These notes have

Lectures and discussions

Physical, chemical, and microbiological properties of water used in food establishments

been provided to students at the beginning of the semester, with weekly topics clearly indicated.

12 The content of each week will be covered using lecture notes prepared by the instructor. These notes have

been provided to students at the beginning of the

Lectures and discussions

Dairy plant sanitation

semester, with weekly topics clearly indicated.
 The content of each week will be covered using lecture notes prepared by the instructor. These notes have been provided to students at the beginning of the semester, with weekly topics clearly indicated.

Lectures and discussions

Fruit and vegetable plant sanitation

14 The content of each week will be covered using lecture notes prepared by the instructor. These notes have been provided to students at the beginning of the semester, with weekly topics clearly indicated.

Lectures and discussions

Meat plant sanitation

15 The content of each week will be covered using lecture notes prepared by the instructor. These notes have been provided to students at the beginning of the semester, with weekly topics clearly indicated.

Lectures and discussions

Key considerations in cleaning and disinfection

Workload

Activities	Number	PLEASE SELECT TWO DISTINCT LANGUAGES	
Vize	1	1,00	
Final	1	2,00	
Ders Öncesi Bireysel Çalışma	14	2,00	
Ders Sonrası Bireysel Çalışma	14	2,00	
Derse Katılım	14	2,00	

Activities	Weight (%)	
Ara Sınav	40,00	
Final	60.00	

Gıda Mühendisliği Bölümü / GIDA MÜHENDİSLİĞİ X Learning Outcome Relation

	P.O. 1	P.O. 2	P.O. 3	P.O. 4	P.O. 5	P.O. 6	P.O. 7	P.O. 8	P.O. 9	P.O. 10	P.O. 11	P.O. 12	P.O. 13	P.O. 14
L.O. 1		5	4		5	4			4		5		4	5
L.O. 2				5	4	4		4	4		5	4	5	5
L.O. 3	5	4	4	4	4	3					5	4	4	5
L.O. 4		4		4					5		5	3	4	5
L.O. 5	5	5	4	4				4	4		5	4		5

Table :

- P.O. 1: Gıda Mühendisliği ile ilgili temel mühendislik konularında yeterli alt yapıya sahiptir.
- P.O. 2: Alanı ile ilgili problemleri belirleme, tanımlama ve çözme becerisine sahiptir.
- P.O. 3: Nitelikli araştırma planlama, uygulama ve sonuçları analiz etme bilgi ve becerisine sahiptir.
- **P.O. 4:** Modern teknik ve araçları seçer, kullanır ve bilişim teknolojilerinden etkin biçimde yararlanır.
- P.O. 5: Bilgiye erişebilme yöntemlerini kavrar.
- P.O. 6: Bireysel olarak farklı çalışma gruplarında etkin çalışabilir ve sorumluluk alma özgüvenine sahiptir.
- P.O. 7: Etkin sözlü ve yazılı iletişim kurma becerisine ve en az bir yabancı dil bilgisine sahiptir.
- **P.O. 8:** Yaşam boyu öğrenmenin gerekliliği bilincindedir; bilim ve teknolojideki gelişmeleri izler ve kendini sürekli yeniler.
- **P.O. 9:** Mesleki ve etik sorumluluk bilincine sahiptir.
- **P.O. 10:** Proje hazırlama ve değerlendirme bilgi ve yeteneklerine sahiptir.
- P.O. 11: İşletme yönetimi, çalışanların sağlığı, çevre ve iş güvenliği konularında bilinç sahibidir.
- **P.O. 12:** Mühendislik çözümlerinin ve uygulamalarının evrensel ve toplumsal boyutlardaki etkilerini kavrar.
- P.O. 13: Gıda üretim prosesleri, kalite kontrolü, ürün kalitesinin artırılması, ürün geliştirme ve gıda analizleri alanlarında yeterli düzeyde bilgi ve beceriye sahiptir.
- P.O. 14: Gıda güvenilirliği açısından önem arz eden risklerin ortadan kaldırılması veya minimum düzeye indirilmesine yönelik bilgi birikimi ve uygulama becerisine sahiptir.
- **L.O. 1:** Gıda işletmelerinde sanitasyonun önemini bilir.
- L.O. 2: Temizlik ve dezenfeksiyon uygulama yöntemlerini sınıflandırabilir.
- **L.O. 3**: Gıda işletmelerinde sanitasyonu etkileyen faktörleri tanımlayabilir.
- L.O. 4: Gıda işletmelerinde çalışan personel için hijyen kurallarını açıklayabilir.
- L.O. 5: Gıda kaynaklı tehlikeleri bilir.