**Ankara Üniversitesi
Kütüphane ve Dokümantasyon Daire Başkanlığı**

**Açık Ders Malzemeleri**

Ders izlence Formu

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| Dersin Kodu ve İsmi |  **FDE 105 Basic Concepts in Food Engineering** |
| Dersin Sorumlusu | Doç. Dr. Eda DEMİROK SONCU |
| Dersin Düzeyi | Lisans |
| Dersin Kredisi | 2 |
| Dersin Türü | Zorunlu |
| Dersin İçeriği | Definition of food engineering and its importance, the relationship between food engineering and other branches of science, food properties and functions, food components: water, carbohydrates, lipids, proteins etc..., food processing operations, food biodeteriorations and preservation methods, food safety and legistlation |
| Dersin Amacı | To have knowledge of students about food engineering and related application areas |
| Dersin Süresi | 14 hafta |
| Eğitim Dili | İngilizce |
| Ön Koşul | Yok |
| Önerilen Kaynaklar | * Singh, R.P. and Heldman, D.R. (2008) Introduction to food engineering. (4th ed.) Academic Press, California, USA.
* deMan, J.M. (1999) Principles of food chemistry. (3rd ed.) An aspen publication, Maryland, USA.
* Sikorski, Z.E. and Piotrowska, B. (2007) Food components and quality (chapter 1) In Chemical and functional properties of food components. (3rd ed.) CRC Press Taylor & Francis Group, Florida, USA.
* Brennan, J.G. (2006) Food processing handbook. WILEY-VCH Verlag GmbH & Co. KGaA, Weinheim, Germany.
* Ortega-Rivas, E. (2010) Processing effects on safety and quality of foods. CRC Press Taylor & Francis Group, Florida, USA.
* Coles, R., McDowell, D. and Kirwan M.J. (2003) Food Packaging Technology. CRC Press Blackwell Publishing, Florida, USA.
* Carocho, M., Barreiro, M.F., Morales, P. and Ferreira CFR. (2014) Adding Molecules to Food, Pros and Cons: A Review on Synthetic and Natural Food Additives. Comprehensive Reviews in Food Science and Food Safety, 13, 377-399.
* Ahmed, I. et al. 2017. A comprehensive review on the application of active packaging technologies to muscle foods. Food Control, 82, 163-178.
* Fang, Z. et al. 2017. Active and intelligent packaging in meat industry. Trends in Food Science & Technology, 61, 60-71.
* Fellows, P.J. (2017). Food processing technology principles and practice. (4th ed.) Woodhead Publishing, Duxford, United Kingdom
* Campbell-Platt, G. (2009). Food Science and Technology. Blackwell Publishing
* Singh, R.P. and Anderson, B.A. (2004) The major types of food spoilage: an overview (chapter 1) in a book titled «Understanding and Measuring the Shelf-life of Food» Ed. by Steele, R. Woodhead Publishing Limited and CRC Press LLC. Pages 3-17.
* Tucker, G.S. (2003). Food biodeterioration and methods of preservation (chapter 2) in a book titled «*Food Packaging Technology*» Ed. by Coles, R., McDowell, D. and Kirwan M.J. CRC Press Blackwell Publishing, Florida, USA. Pages 32-63.
* Tucker, G.S. (2016). Control of biodeterioration in food (chapter 1) in a book titled «*Food Preservation and Biodeterioration*». John Wiley & Sons Ltd., UK. Pages 1-35.
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| Dersin Kredisi (AKTS) | 3 |
| Laboratuvar | Yok |
| Diğer-1 |  |