**Ankara Üniversitesi  
Kütüphane ve Dokümantasyon Daire Başkanlığı**

**Açık Ders Malzemeleri**

Ders izlence Formu

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| Dersin Kodu ve İsmi | **FDE301 INSTRUMENTAL ANALYSIS** |
| Dersin Sorumlusu | PROF. DR. AZİZ TEKİN |
| Dersin Düzeyi | LİSANS |
| Dersin Kredisi | 3 |
| Dersin Türü | ZORUNLU |
| Dersin İçeriği | Classification of Analytical Methods, Introduction to Instrumental Analysis, Instrumental Methods in Food Analysis; pH meter; Basic principles of spectroscopic methods, UV-Visible Absorption Spectroscopy, Flourescence Spectroscopy; Infrared Spectroscopy; Atomic Absorption Spectroscopy; Calibration of Instrumental Methods; Basic principles of Chromatographic Methods; Column Chromatogrphy; TLC; Gas Chromatography; GC-MS; HPLC |
| Dersin Amacı | The aim of the course is to introduce the students to the modern methods of instrumental food analysis.  The students will gain ability to understand the fundamental principles behind the instrumental techniques, a working knowledge of instrument operation, and cognizance of the applications of instrumental analysis. |
| Dersin Süresi | 2+2 |
| Eğitim Dili | İNGİLİZCE |
| Ön Koşul | YOK |
| Önerilen Kaynaklar | * Skoog, D.A., West, D.M., Holler, F.J., Crouch, S.R. (2013). **Fundamentals of Analytical Chemistry** (Ninth edition). Brooks/Cole, Cengage Learning, USA. * Skoog, D.A., Holler, F.J., Crouch, S.R. (2018).**Principles of Instrumental Analysis** (Seventh edition). Cengage Learning, USA. * Nielsen, S.S. (2010). **Food Analysis** (Fourth edition). Springer Science+Business Media, New York, USA. * Harvey, D. (2000). **Modern Analytical Chemistry**. McGraw-Hill Companies. * Harris, D.C., Lucy, C.A. (2016). **Quantitative Chemical Analysis** (Ninth edition). W. H. Freeman and Company, New York, USA. * Cheung, P.C.K., Mehta, B.M. (2015). **Handbook of Food Chemistry** (**Chapter 8-Instrumental Food Analysis**). Springer-Verlag GmbH Berlin Heidelberg. |
| Dersin Kredisi (AKTS) | 4 |
| Laboratuvar | 2 hours |
| Diğer-1 |  |