**Ankara Üniversitesi  
Kütüphane ve Dokümantasyon Daire Başkanlığı**

**Açık Ders Malzemeleri**

Ders izlence Formu/ Curriculum Form

|  |  |
| --- | --- |
| Dersin Kodu ve İsmi | CHM 429 Instrumental Analysis |
| Dersin Sorumlusu | Doç. Dr. H. Elif KORMALI ERTÜRÜN |
| Dersin Düzeyi | Lisans / Bachelor’s Degree |
| Dersin Kredisi | 4 |
| Dersin Türü | Zorunlu / Compulsory |
| Dersin İçeriği | Classification of instrumental analysis methods, Introduction to spectroscopy. Principles of spectroscopic methods. Atomic spectroscopy, AAS and AES. Molecular spectroscopy, Ultraviolet - Visible field spectroscopy, Luminescence, IR spectroscopy, NMR methods. Spectrum solution for structure analysis. |
| Dersin Amacı | To transfer the benefits of instrumental analysis methods in analytical chemistry. Transfer of the analysis time, systematic errors and the limits of determination to the desired changes by instrumental analysis methods. Presentation of basic spectroscopic methods. Infra-ultraviolet-visible field, Infrared, NMR, AAS and MS methods are shown in detail and students can interpret the spectral output of these methods. |
| Dersin Süresi | 5 saat/hafta / 5 hours/week |
| Eğitim Dili | İngilizce / English |
| Ön Koşul | - |
| Önerilen Kaynaklar | B.C. Smith, ***Fundamentals of Fourier Infrared Spectroscopy***, CRC Press, Second Edition, 2011.  D.A. Skoog, F.J. Holler, S.R. Crouch, ***Principles of Instrumental Analysis***, Sixth Edition, Thomson Brooks/cole, 2007.  Skoog DA, West DM, Holler FJ, Crouch SR. ***Fundamentals of Analytical Chemistry***. Nelson Education; 2013.  R.M. Silverstein, F.X. Webster, D.J. Kiemle, ***Spectrometric Idenfication of Organic Compounds***, J.Wiley &Sons, Seventh edition, 2005. |
| Dersin Kredisi (AKTS) | 4 (7) |
| Laboratuvar | - |
| Diğer-1 | - |