**Ankara Üniversitesi
Kütüphane ve Dokümantasyon Daire Başkanlığı**

**Açık Ders Malzemeleri**

Ders izlence Formu

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| --- | --- |
| Dersin Kodu ve İsmi | CHM 229 Analytical Separation Methods |
| Dersin Sorumlusu | Arş. Gör. Dr. Emine Kübra İNAL |
| Dersin Düzeyi | Lisans |
| Dersin Kredisi | 2 |
| Dersin Türü | Seçmeli |
| Dersin İçeriği | Definition of the Separation and the Mixture, Classification of the Mixtures, Separation Methods, Analytical Separations, Precipitation and Separations by Precipitation, Sulfide Separations, Separations by Organic Precipitants, Separations Based on Qualitative Analysis, Filtration and the Types of Filtration, Centrifugation and the Types of Centrifugation, Flotation and Applications in Industry, Distillation and Distillation Techniques, Phase Diagrams for Binary Systems, Temperature – Composition Diagrams, Azeotropes, Extraction, Liquid – Liquid Extraction, Solid – Phase Extraction, Microwave Assisted Extraction, Chromatography and Classification of Chromatographic Methods. |
| Dersin Amacı | Define the separation and classify the separation methods. To inform about applications of separation methods. To correlate separation by precipitation with solubility product constant. To give information about qualitative analysis and to suggest a reagent to separate a pair of solutions or solids. To demonstrate the filtration process. To define the gravitational force, centrifugal force, buoyancy force and frictional force. To illustrate the forces acting in the centrifugal plane. To explain the applications of flotation in industry. Describe the distillation and distillation techniques. To correlate composition diagrams with the temperature for binary systems. To inform about extraction techniques and their applications. To inform about chromatography and some important terms of chromatography. Classify the chromatographic methods based on the mobile phase used. |
| Dersin Süresi | 2 saat/hafta |
| Eğitim Dili | İngilizce |
| Ön Koşul | - |
| Önerilen Kaynaklar | 1. Fundamentals of Analytical Chemistry, D.A. Skoog, D.M. West, F.J. Holler, S.R. Crouch, 9th Edition, Brooks-Cole Learning, 2014.
2. Physical Chemistry, P. Atkins, J. de Paula, 10th Edition, W.H. Freeman and Company, 2014.
3. Extraction Techniques in Analytical Chemistry, J.R. Dean, Wiley, 2009.
4. A Century of Separation Science, H.J. Issaq, Marcel Dekker, 2002.
5. Encyclopedia of Separation Science, M. Cooke, C.F. Poole, Academic Press, 2000.
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| Dersin Kredisi (AKTS) | 2 (4) |
| Laboratuvar | - |
| Diğer-1 | - |