## Course Syllabus

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|---|---|
| **Code - Course Title** | **FKG502 - Chroma.Techni.Used in Seperation of Natural Compounds** |
| **Course Type** | II. SEMESTER |
| **Laboratory + Practice** | 3+0 |
| **ECTS** | **6.0** |
| **Language of Instruction** | Türkçe |
| **Course Type** | Required Courses |
| **Course Instructor(s)** | PROF. DR. FATMA ZERRİN SALTAN |

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| **Mode of Delivery** | Face to face. During the pandemic, it will take place in the form of internet-based online education. |
| **Prerequisites** | There is no prerequisite or co-requisite for this course. |
| **Courses Recomended** | FKG 501: Extraction of Natural Sources Raw Materials |
| **Work Placement** | Not Applicable |

## Course Syllabus

| Weeks | Learning Outcomes | Topics | Teaching Methods |
|---|---|---|---|
| **Week - 1** | | Definition of chromatography, separation mechanisms; adsorption, partition, ion exchange, jel permeation. | |
| **Week - 2** | | Chromatographic methods:Column chromatography:frontal analysis, elution analysis. | |
| **Week - 3** | | Gas chromatography; equipment, dedectors. | |
| **Week - 4** | | Gas chromatography/mass spectrometry. | |
| **Week - 5** | | High pressure liquid chromatography; mechanisms, detectors. | |
| **Week - 6** | | Homework | |
| **Week - 7** | | Flash chromatography, Low pressure liquid chromatography. | |
| **Week - 8** | | Medium pressure liquid chromatography. | |
| **Week - 9** | | Ion exchange chromatography, jel chromatography. | |
| **Week - 10** | | Paper chromatography, Thin layer chromatography. | |
| **Week - 11** | | Chromatotron. | |
| **Week - 12** | | Supercritical fluid chromatography. | |
| **Week - 13** | | Supercritical fluid chromatography. | |
| **Week - 14** | | Practices. | |

## Learning Outcomes

| # | Learning Outcome |
|---|---|
| 1 | Define chromatographic techniques. |

## Sustainable Development Goals

*No content has been provided.*

## Course Theme

*No content has been provided.*

## AKTS Workload

| Activity | Duration (Hour) | Count | Workload |
|---|---|---|---|
| Teorik Derse Katılım | 0 | 0 | 0 |
| Sınıf Dışı Çalışma (Ön Hazırlık & Pekiştirme Amaçlı) | 0 | 0 | 0 |
| Ödevler | 0 | 0 | 0 |
| Proje - Rapor - Sunum Hazırlama | 0 | 0 | 0 |
| Ara Sınav Hazırlığı (sınav süresi dahil) | 0 | 0 | 0 |
| Final Sınavı Hazırlığı (sınav süresi dahil) | 0 | 0 | 0 |
| Uygulama (Laboratuvar, Müzik/Enstrüman Uygulaması, Atölye/Saha Çalışması vb.) | 0 | 0 | 0 |
| Staj Uygulaması | 0 | 0 | 0 |
| | | **Calculated ECTS** | **0** |

## Assessment Method and Passing Requirements

*No content has been provided.*