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| Course | CHEM 302 /Analytical Chemistry |
| Instructor | Selmiye Alkan Gürsel |
| Term | 2021-2022 Spring |
| Hours and place of classroom | <i>Wednesday 12.40-13.30</i> <i>Thursday 15.40-17.30</i> |

Instructor's Contact Information

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| Office Phone | 02164839573 |
| Office Location | FENS 2045 |
| E-mail address | selmiye@sabanciuniv.edu |
| Office hours | Tuesday 14.40-15.30 (but please email me!) |

Teaching Assistants

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|-------------------|-----------------------------------|
| Bilal Iskandarani | bilal@sabanciuniv.edu |
| Esaam Jamil | ejamil@sabanciuniv.edu |
| Negar Amirhaghian | negar.amirhaghian@sabanciuniv.edu |
| Sezen Öztürk | sezen.ozturk@sabanciuniv.edu |

General Course Information

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| Course Description | This course is designed to be a comprehensive introduction to fundamentals of analytical chemistry |
| Objectives | The overall goals of this course are to <ul style="list-style-type: none">• teach calculations used in analytical chemistry• teach proper solution handling and standards preparation• teach the basics of aqueous solutions and chemical equilibria• teach gravimetric and titrimetric methods• teach the principles of neutralization titrations and titration curves• provide a foundation in electrochemistry which is sufficient for the understanding of many basic phenomena.• provide a basic understanding of common analytical and instrumental techniques |
| Textbook | Fundamentals of Analytical Chemistry, Skoog/West/Holler/Crouch; 9 th edition (or any other new edition) |
| Top Hat (online response system) | In lectures, we will use an online response system called Top Hat accessible from tophat.com on your web browser, or through free Top Hat app (tophat.com/mobile-apps) if using tablet. If you have not used the system before, please review this "Getting Started" guide before the first lecture. You must log in Top Hat with your SU email account name with a device connected to SABANCIUNIV WiFi to each lecture. |
| Grading | <i>Attendance & Top Hat activities- 15 %</i> <i>Homework - 15 %</i> <i>Laboratory- 15 %</i> <i>Project - 25 %</i> <i>Final exam - 30 %</i> |

Tentative Course Schedule

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| March 2 & 3 | The Nature of Analytical Chemistry |
| March 9 & 10 | Calculations used in Analytical Chemistry |
| March 16 & 17 | Calculations used in Analytical Chemistry |
| March 23 & 24 | Calculations used in Analytical Chemistry |
| March 30 & 31 | Aqueous Solutions and Chemical Equilibria |
| April 6 & 7 | Aqueous Solutions and Chemical Equilibria |
| April 13 & 14 | Aqueous Solutions and Chemical Equilibria |
| April 20 & 21 | Titrimetric Methods |
| April 27 & 28 | Principles of Neutralization Titrations |
| May 4 & 5 | Spring Break |
| May 11 & 12 | Introduction to Electrochemistry |
| May 18 | Introduction to Electrochemistry |
| May 25 & 26 | Applications of Standard Electrode Potentials |
| June 1 & 2 | Project Presentations: Instrumental Techniques |
| June 8 & 9 | Project Presentations: Instrumental Techniques |