



Course	CHEM 302 /Analytical Chemistry
Instructor	Selmiye Alkan Gürsel
Term	2020-2021 Spring
Hours and place of classroom	<i>Monday 10.40-11.30</i> <i>Thursday 10.40-12.30</i>

Instructor's Contact Information

Office Phone	02164839573
Office Location	FENS 2045
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Office hours	Monday 13.40-14.30 (but please email me!)

Teaching Assistants

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General Course Information

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; 8 th edition (or any other new edition)
Top Hat (online response system)	In lectures, we will use an online response system called TopHat 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 and bring a device connected to SABANCIUNIV WiFi to each lecture.

Grading	<i>Top Hat activities- 15 %</i> <i>Homework - 15 %</i> <i>Laboratory- 15 %</i> <i>Project - 25 %</i> <i>Final exam - 30 %</i>
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Tentative Course Schedule

February 22 & 25	The Nature of Analytical Chemistry
March 1 & 4	Calculations used in Analytical Chemistry
March 8 & 11	Calculations used in Analytical Chemistry
March 15 & 18	Calculations used in Analytical Chemistry
March 22 & 25	Aqueous Solutions and Chemical Equilibria
March 29 & April 1	Aqueous Solutions and Chemical Equilibria
April 5 & 8	Aqueous Solutions and Chemical Equilibria
April 12 & 15	Titrimetric Methods
April 19 & 22	Principles of Neutralization Titrations
April 26 & 29	Introduction to Electrochemistry
May 3 & 6	Introduction to Electrochemistry
May 10	Applications of Standard Electrode Potentials
May 17 & 20	Project Presentations: Instrumental Techniques
May 24 & 27	Project Presentations: Instrumental Techniques