

Apr 12, 19, and 26 Act III – Interactions lead to binding

Chemical kinetics – A quick recapitulation of NS 10X courses

The effect of temperature; is this thermal energy again?

How is it different from physical kinetics?

Binding and Adsorption Processes

The Langmuir Model – we better recollect our thermodynamics fundamentals

The Michaelis–Menten Model; yes, another old but not aged model

Sabatier's Principle – too many names floating around here! No worries just to shorten the syllabus

Delicacy – binding should be neither too tight nor too weak

May 3, 10, and 17 Act IV – Multiple agents cooperatively in action

(First of all, Spring will have, hopefully with more people vaccinated, with all types of blossoms knocked on our door by now! Monday lectures will be the most favorable time period to go out – but c'mon it's the day after the weekend)

Self-assembly

Benjamin Franklin spirit

Amphiphilic molecules – what shapes of micelles do they form and why?

Biological machines

Are they different from thermodynamic cycles via which macro engines operate?

Time and length scales in the Nano-world

And "Curtain!"

May 24 Review and the **Final**

Class Policies

Course will be online.

Zoom link:

<https://sabanciuniv.zoom.us/j/96294995289>

Grading

Quizzes: (6-best/7-8 of them), total is for 30% of the final grade

Midterm: 30% of the final grade

Final exam: 40% of the final grade; covers all the material