Instructor: E. Ko
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Office hours of instructor and teaching assistants will be announced.

Class Hours:
M 9:30-10:20 a.m BH355
W 9:30-10:20 a.m PHA18A
F 9:30-11:20 a.m SH206


Course Objectives:

In this course you will learn to apply the principles of chemical kinetics to the design of reactors. By the end of this semester, you should be able to:

1. analyze kinetic data and obtain rate laws,
2. develop a mechanism that is consistent with an experimental rate law for homogeneous and heterogeneous systems,
3. understand the behavior of different reactor types when they are used either individually or in combination,
4. choose an appropriate reactor and determine its size for a given application,
5. work with mass and energy balances in the design of non-isothermal reactors,
6. understand the importance of selectivity and know the strategies that are commonly used in maximizing yields, and
7. appreciate the importance of both external and internal transport effects in gas/solid systems.

The diagram on the next page shows an overall structure of how these concepts are related. In this course we will cover Chapters 1 - 11 in our textbook.