

Industrial Associates Program Course Offerings, Fall 2021

To register, contact:

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Undergraduate Administrator
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GENERAL INFORMATION:

Visitor Parking: Lot 23
Follow signs at the intersection of Elm Drive and Faculty Road to park in Lot 23

Campus Map:

http://transportation.princeton.edu/guests_visitors/maps-and-directions

Important Dates:

First Day of Classes: Wed., Sept. 1
Fall Recess: Oct. 16-24
Reading Period: Dec. 7-14
Final Exam Period: Dec. 15-21

CHM 515 Biophysical Chemistry I

Jannette Carey

This course provides a comprehensive introduction to basic principles of macromolecular structure, stability, and interactions. Major topics include protein structure; protein thermodynamics and folding; nucleic acid structure and stability; principles of intermolecular recognition; and principles of ligand-binding analysis. Special emphasis is placed on understanding the relationships between structure and stability; the molecular origins of cooperative effects; and the relationships between covalent and non-covalent properties, in macromolecular systems.

Textbook/Readings:

Topical readings from current literature

Reading/Writing Assignments:

Students read primary research papers on a weekly basis and write up ideas for applying the methods learned.

Other information:

Weekly instruction is provided by the course instructor as well as other University faculty. In lieu of a final exam, students will develop a professional research proposal.

Course	Section	Time	Days	Room
23494	L01	7:00pm - 9:50pm	Tues	TBA

CHM 530 Synthetic Organic Chemistry

Erik Sorensen

A mechanism-based course on organic synthesis for advanced undergraduates and beginning graduate students who wish to learn chemical synthesis of organic compounds. Course deals with various classical and modern synthetic methodologies. Particular emphasis is placed on understanding scope, limitations, and selectivity based on the mechanism, with the goal to understand fundamental principles underlying each synthetic method. The knowledge and perspective acquired in this course is expected to provide sufficient foundation to understand and use the research literature in organic synthesis.

Required:

Maruzen 5000, *Biochem Molecular Modeling Kit*

http://www.maruzen.info/hgs/catalog/product_info.php?products_id=31

Recommended:

Kurti & Czako (Elsevier), *Strategic Applications of Name Reactions/Organic Synthesis*
Anslyn & Dougherty, *Modern Physical Organic Chemistry*
Carey & Sundberg, *Advanced Organic Chemistry - Part B: Reactions and Synthesis*

Course	Section	Time	Days	Room
20986	L01	7:00pm - 10:00pm	Thur	TBA