PRINCETON UNIVERSITY

DEPARTMENT OF CHEMISTRY

Industrial Associates Program Course Offerings, Spring 2021

To register, contact:
Regina Perry, Admin. Office Coordinator
609-258-3900
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GENERAL INFORMATION:

Visitor Parking:
Intersection of Faculty Road and Fitzrandolph Road, Lot 21

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

Important Dates:
First Day of Classes: Monday, Feb. 1
Spring Recess: Mar. 13-16
Last Day of Classes: Tuesday, Apr. 27
Reading Period: Apr. 28 – May 5
Final Exam Period: May 8 – May 14

CHM 516 Biophysical Chemistry II

Jannette Carey, V. Vandavasi

Broad introduction to major contemporary techniques used to study structures, functions, and interactions of biological macromolecules, including quantitative theory of molecular interactions. Aims to convey to students with diverse backgrounds and interests the utility of various experimental methods for solving molecular problems. Emphasis is on applications, practical aspects, and experimental design, and on the strengths and limitations of individual methods and complementarities among them.

Reading List:
Cantor & Schimmel, *Biophysical Chemistry - Parts I, II, & III*
Freifelder, *Physical Biochemistry*
Klotz, I.M., *Ligand-receptor energetics: A guide for the perplexed (1997)*
J.M. Berg & J.L. Tymoczko, *Biochemistry*

Course	Section	Time	Days	Room
41140	**L01**	07:00 pm - 10:00 pm	**Tues**	**Zoom**

CHM 541 Chemical Biology II

Mohamad R. Seyedsayamdost

The course provides an in-depth treatment of protein chemistry, natural products biosynthesis, and biophysical chemistry.

Reading List:
No Textbooks Required

Course	Section	Time	Days	Room
41142	**L01**	7:00 pm – 10:00 pm	Wed	**Zoom**

CHM 536 Topics in Organic Chemistry: Methods for Complex Organic Synthesis

David MacMillan, Abigail Doyle

This course provides an overview of contemporary methods in synthetic organic chemistry for first year graduate students and advanced undergraduates. Special emphasis will be placed on understanding mechanisms, scope, limitations, and selectivities of some of the most important synthetic methodologies developed in the 21st century. Selected topics will include advances in cross coupling, olefin metathesis, pi acid catalysis, organocatalysis,photocatalysis,piallyl chemistry, hydrogenation,C-H activation and hydrogen-bonding catalysis.

Reading List:
John Hartwig, University (Science Books 2010)
Organotransition Metal Chemistry: From Bonding to Catalysis

Course	Section	Time	Days	Room
41141	**L01**	1:30 pm - 4:20 pm	**Mon**	**Zoom**