

**BIOCHEMISTRY 403 CRN 10259: BIOCHEMISTRY OF SIGNAL TRANSDUCTION
COURSE OUTLINE – FALL 2019**

Biochemistry of Signal Transduction

The objective of this course is to examine in detail the biochemical basis of the transmission of molecular signals from a cell's exterior to its interior and how this can bring about changes in cellular behavior and gene expression. The course emphasizes the biochemical concepts underlying signal transduction and the types of experimental analysis that are employed to study signaling pathways.

Instructors: Drs. Perry Howard (coordinator) and John Burke

Dr. Howard:

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Office Hours: Monday & Thursday 3:00 PM- 4 PM (or by appointment) in Petch 207b

Dr. Burke:

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Office Hours: Monday Thursday 11:30-12:30 BIOC236

Schedule: Mondays and Thursdays, 10:00 am - 11:20 am, COR B143

Readings: Readings will be posted on the course spaces web site.

Topics (with approximate dates)

Dates important dates in bold	Topic	Instructor
Sept 5	Introduction Principles of Signaling pathways	Howard
9, 12	Modular domains and components; Specificity SH2	Howard
16, 19	Specificity SH2 ; In class assignment 1	Howard
23, 26	Receptor Tyrosine Kinases	Howard
30, Oct 3	Quiz 1 ; cytoplasmic kinases	Howard
7, 10	Monomeric G-proteins GEFs and GAPs	Howard
14, 17	Thanksgiving holiday ; Rewiring	Howard
21, 24	Midterm1; Lipid signalling	Howard/Burke
28, 31	G protein coupled receptors	Burke
Nov 4, 7 11,14	GPCRs / Quiz 2	Burke

DEPARTMENT INFORMATION AND POLICIES

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