

Fall 2019
Bio 439 Syllabus: Introduction to Signal Transduction

TuTh 9:30-10:45 Wilson 202

Prof. Joe Kieber GSB 4163 (jkieber@unc.edu)

<u>Date</u>	<u>Topic</u>
Tues 8/20	Intro to course
Thurs 8/22	Intro to signaling
Tues 8/27	Receptors
Thurs 8/29	Prokaryotic signaling
Tues 9/3	Receptor tyrosine kinases (RTKs)
Thurs 9/5	G-protein coupled receptors and signaling
Tues 9/10	Monomeric G-Proteins
Thurs 9/12	Paper discussion – Prokaryotic signaling
Tues 9/17	TGF β , cytokines and JAK/STAT pathway
Thurs 9/19	Lipid Signaling
Tues 9/24	Second messengers/calcium signaling
Thurs 9/26	MAP kinases
Tues 10/1	Exam 1 (covers through Thurs 9/17)
Thurs 10/3	Notch Hedgehog; Signaling during development: The eye
Tues 10/8	Sensory signaling
Thurs 10/10	Insulin signaling
Tues 10/15	Catch-up/review

Thurs 10/18	Fall Break
Tues. 10/22	Cell cycle
Thurs 10/22	Paper discussion – RTKs
Tues 10/29	Apoptosis
Thurs 10/31	Apoptosis Movie: “Death by Design”
Tues 11/5	Plant Hormone Signaling
Thurs 11/7	Paper discussion – G-protein signaling
Tues 11/12	Paper discussion – TGF β , cytokines
Thurs 11/14	Paper discussion – lipid signaling
Tues 11/19	Paper discussion – MAP kinase signaling
Thurs 11/21	Paper discussion - Signaling in development
Tues 11/26	Paper discussion – Cell cycle/apoptosis
Thurs 11/28	Thanksgiving break
Tues 12/3	Paper discussion – Plant hormone signaling

Final Exam: Tuesday, December 10th at 8:00 am, comprehensive.