

Scheduled to be in E504

Date	Instructor	Topic
8/27/12	Cotton	Course description and introduction
8/29/12	Schilling	Introduction to membrane physiology
9/03/12		Labor Day – University Holiday
9/05/12	Smith	Membrane potentials and passive membrane electrical properties
9/10/12	Smith	Active membrane electrical properties
9/12/12	Deschenes	Introduction to ion channels
9/17/12	Deschenes	Structure and function of ion channels I (Ca ²⁺ channels)
9/19/12	Deschenes	Structure and function of ion channels II (Na ⁺ and K ⁺ channels)
9/24/12	Chakrapani	Single channel kinetics
9/26/12	Jones/Smith	Excitability computer lab
10/01/12	Smith	Synaptic transmission – Exocytosis/endocytosis I
10/03/12	Smith	Synaptic transmission – Exocytosis/endocytosis II
10/08/12	Jones	Synaptic transmission – Postsynaptic mechanisms
10/10/12	Jones/Smith	Synaptic transmission computer lab
10/15/12		Mid-Term Exam
10/18/12	Jones	Modulation of ion channels I
10/23/12	Jones	Modulation of ion channels II
10/25/12	Jones	Modulation of ion channels III
10/30/12	Schilling	P-type ATPases
11/01/12	Schilling	Excitation-contraction coupling
11/06/12	Schilling	Na ⁺ /Ca ²⁺ exchanger
11/08/12	Schilling	TRP channels
11/13/12	Schilling	Stim, ORAI channels
11/15/12	Cotton	Water, ion homeostasis and cell volume
11/20/12	Boron	Regulation of cell pH – Exchangers
11/22/12		Thanksgiving
11/27/12	Cotton	Epithelial transport I
11/29/12	Cotton	Epithelial transport II
12/04/12	Cotton	Diseases of epithelial transport – Cystic Fibrosis and Liddles Syndrome
12/06/12		Final Exam