			Topic	Background Reading	Section	Assignments Due
September	5	W	Course Intro/Overview			
September	7	F	Cellular/subcellular organization	Byrne p 1-23	no section	
September	10	M	Vascular System & Neurometabolism	Byrne p 49-58 (optional: 58-80;91-97)		
September	12	W	The Membrane Potential	Byrne p 133-139 & **Nicholls p 99-109***	no section	
September	14	F	Active Transport/Ion Pumps	**Fain p 95-121***		
September	17	M	Neurons as RC circuits	**Nicholls p A2-A8***		
September	19	W	Passive Properties - Cable Theory	Byrne p 111-126	1	
September	21	F	Active Properties of the Membrane	Byrne p 139-144;181-185		
September	24	M	Hodkin & Huxley Gating Model	Byrne p 185-197		pset 1 due before class
September	26	W	Dynamical Systems Analysis of Action Potentials	Byrne p 198-213	2	
September	28	F	Ion Current Diversity and Function	Byrne p 145-155		
October	1	M	Ion Channel structure	Byrne p 159-176		pset2 due before class
October	3	W	Electrical Synapses	Byrne Ch 15	3	
October	5	F	Chemical Synapse: NT release - quantal analysis	Byrne Ch 8		
Columbus Day	8	M	no class			
October	10	W	Chemical Synapse: Vesicles I: Exocytosis	Byrne Ch 8	4	
Ocotober	12	F	Chemical Synapse: Vesicles II: Endocytosis**			
October	15	M	NT diversity	Byrne Ch 9 and 10	no section; optional review sesson TBA	pset3 due before class
October	17	W	**MIDTERM**			
October	19	F	no class			
October	22	M	Neuronal Polairty & Intracellular Trafficking	Byrne p23-48		
October	24	W	Direct Excitatory Synaptic Transmission I: Ach Receptor Structure and Function		5 - cover term paper guidelines	
October	26	F	Direct Excitatory Synaptic Transmission II: AMPA and NMDA Receptors	Byrne Ch 11, p 321-343		
October	29	M	Direct Inhibitory Synaptic Transmission: GABA and Glycine			
October	31	W	Indirect Syanptic Transmission I: Metabotrophic Receptors	Byrne Ch 11, p 343-355	6 - paper selection due	
November	2	F	Indirect Syanptic Transmission II: Second Messengers	Byrne Ch 12		
November	5	M	Superstorm Sandy	no class		pset 4 due before class
November	7	W	Intrinsic Plastiicty	no reading	7	
November	9	F	Short Term Plasticity	Byrne p 255 -258; 544-549		
November	12	M	Long Term Plasticity I	Byrne Ch 19		
November	14	W	Long Term Plasticity II	Byrne Ch 19	8	
November	16	F	Long Term Plasticity III	Byrne Ch 19		pset 5 due before class
November	19	M	no class			
Thanksgiving	21	W			no section - thanksgivng	
Thanksgiving	23	F				
November	26	M	Info processing in dendrites	Byrne Ch 4, p 126-130 & Ch 17		
November	28	W	Info processing in circuits	Ch 18	9	term paper rough draft due in section
November	30	F	Neurodegeneration	Byrne Ch 20		
December	3	M	Cutting Edge Research	no reading		
Reading Period	5	W				
Reading Period	7	F	**TERM PAPER DUE**			
Reading Period	10	M				
Reading Period	12	W				
Exam Period	14	F	**FINAL EXAM - date to be detemined**			
Exam Period	17	M				
Exam Period	19	W				
Exam Period	21	F				

** End of material for the midterm

*** Readings from Fain and Nichollis will be provided on the wesbite**