

Chemistry 474: Neurochemistry**CRN: 39000**

Instructor:	Dr. Kelly Drew
Office/office hrs:	104 Irving I, MWF 10-12:00
Telephone:	474- 7190
e-mail:	kdrew@alaska.edu
fax:	474-6967
Lecture:	MWF 3:30-4:30, Reichardt Room 165
Homework:	Assignments posted on course schedule are due at the beginning of the next class unless otherwise indicated. Homework turned in after the deadline will not be accepted

- Know

Course Schedule

Last Updated: 2/6/2013 5:55 PM

Date		Lecture #		Topic and Reading Assignments (Reading assignments will usually be discussed in the next class)	Hand-outs and Homework (HW is due at the beginning of the next class period after it is assigned and listed below)
Jan	20	F	1	<p>Introduction to chemistry and the brain http://www.youtube.com/watch?v=bqkUbiUkR5k&feature=relmfu Read http://www.nature.com/nature/journal/v467/n7319/full/nature09510.html</p>	<p>HW: Write a review of http://www.nature.com/nature/journal/v467/n7319/full/nature09510.html 1. Briefly summarize the findings 2. Note what aspect of the report makes you trust the results or conclusions. 3. Note what aspect of the report makes you doubt the results or conclusions.</p>
	23	M	2	<p>Review Chapter "Synaptic transmission and cellular signaling" Techniques Optogenetics http://www.youtube.com/watch?v=I64X7vHSHOE Immunohistochemistry http://en.wikipedia.org/wiki/Immunohistochemistry</p>	<p>HW: 1. Explore professional access to topics in neuroscience and neurochemistry (Handout) 2. Short essay: Is science truth?</p> <p>Recommended: Lies, Damned Lies, and Medical Science http://m.theatlantic.com/magazine/ar.4.533.88osv9(a)6(/a2.88o</p>

8	W		<p>Quiz 1 (take home) and meet with groups to select a paper for projects and prepare a timeline for preparing for presentation on 2/17</p> <p>Read: http://www.nature.com/nature/journal/v447/n7143/full/447368a.html</p>	<p>Group meeting/select paper. Title, time line and copy of paper due by end of class.</p> <p>Take home quiz due Friday</p>
10	F	9	<p>Catecholamines Read chapter on catecholamines</p>	

Glutamate finale

Article 5

Scannevin and Haganir, 2000

http://www.nature.com/nrn/journal/v1/n2/full/nrn1100_133a.html

or

MacGillavry et al., 2011

	23	M	33	Endocannabinoids	
	25	W	34	Endocannabinoids and energy regulation Gamage and Lichtman, 2012 http://onlinelibrary.wiley.com/doi/10.1002/pbc.23367/pdf	
	27	F	35	Gaseous neurotransmitters (NO, CO, H ₂ S) Kilduff et al., 2011 http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3014438/?tool=pubmed	
	30	M	36	Group Presentations (3)	
		W	37	Quiz 3	
		F	38	Review	
May	7	3:15-5:15		Comprehensive Final Exam	
					All make up assignments are due, 10:00 am Grades must be posted by May 16, 12:00pm