## 國立清華大學 99 學年第 1 學期課程大綱

科號	09910LSSN510900	組別		學分	2	人數限制	8
修課年級	<ul><li> □ 大學部 年級以上</li><li> ■ 碩士班一年級以上(含博士班)</li><li> □ 碩士班二年級以上(含博士班)</li></ul>						
上課時間	F3 & F4			教室 生二 107			
科目中文名稱	神經傳導與精神分析特論一						
科目英文名稱	Neurotransmission and Psychoanalysis						
任課教師	張慧雲						
擋修科目	N/A		指	當修分	數N	I/A	

## ※下列各欄由任課教師提供※

一、課程說明	This course aims to assist graduate students to understand the neurochemistry associated with animal mind and behaviors, in addition with special focus on association with molecules, neurons and brains
二、指定用書	The instructor will prepare handouts for students. There is no assigned textbook. However, we encourage graduate students to read and familiar with books listed here and several others toward to understand the basis neuroscience and life science
三、參考書籍	Short Protocols in Neuroscience: Systems and behavioral Methods 2007 by Crawley Neuroanatomy and related Neuroscience 4/e by FitzGerald et al., 2007 圖解臨床神經解及神經科學 簡基憲等 Neuroscience (4/e) by Purves D. et al., 2008 The cognitive neurosciences (4/e) by Michael S. Gazzaniga, 2009. The biochemical Basis of Neuropharmacology (7/e) by Cooper J et al., 2003 神經生物 by 壽天德 & 郭重雄 2003 Journals of nature, nature clones, neuron & cell and cell clones.
四、教學方式	Lectures + discussion + lab demonstration
五、教學進度	Week 1: Introduction Week 2: Analysis of Animal behaviors (I) Week 3: Analysis of Animal behaviors (II) Week 4: Late brain development (I)

	Week 5: Late brain development (II)			
	Week 6: Synaptic transmission (I)			
	Week 7: Synaptic transmission (II)			
	Week 8: Short protocols in neuroscience			
	Week 9: Visualization of neural circuits (I)			
	Week 10: Visualization of neuronal circuits (II)			
	Week 11: Analysis of thought (I)			
	Week 12: Analysis of thought (II)			
	Week 13: From Genes to social behavior (I)			
	Week 14: From Genes to social behavior (II)			
	Week 15:The Cognition (I)			
	Week 16: The Cognition (II)			
	Week 17: Discussion and closing plus final examination			
	40% examinations + 30 % written reports + 20 % oral reports +			
六、成績考核	10% experimental studies			
八、双领石物	10 /0 experimental studies			
七、講義位址	Construction			
http://				