



**NS301 Jan 3:0**

## **Topics in Systems and Cognitive Neuroscience**

### **Instructor**

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### **Teaching Assistant**

Email:

**Department: CNS**

Course Time: Wed 9-12

Lecture venue: CNS Conference Room

Detailed Course Page:

## **Announcements**

### **Brief description of the course**

This is mainly a paper reading course. Every week, students are given 2-3 papers to read, and these papers are critically discussed during the class. The class is divided into 4 modules - (1) sensory encoding, perception and object recognition, (2) attention, (3) decision making, and (4) movement planning and cognitive control.

They are also asked to write grant proposals based on the papers that they have read.

### **Prerequisites**

NS201

### **Syllabus**

1. Sensory encoding, perception and object recognition (12 hours)
2. Neurophysiology of attention: spatial and feature attention, contrast response functions and normalization, temporal and rate coding (12 hours)
3. Various aspects of decision making (12 hours)
4. Movement planning and cognitive control (12 hours)

### **Course outcomes**

After taking this course, students should be in a position to critically read and evaluate papers in cognitive and systems neuroscience. They should also be able to write grants on these topics.

### **Grading policy**

100% based on performance in class in discussing the papers and their performance in grant proposals

### **Assignments**

### **Resources**