

# PHBI 599 Sensory Transduction (40982D)

**Course Organizer: Dr. Alapakkam P. Sampath**

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**Schedule: Fridays, 1-3 p.m., MMR 608**

## **Course Information:**

PHBI 599 is a graduate level seminar course on Sensory Transduction, offered on the Health Science Campus. The course will begin with an introductory lecture on sensory reception and subsequently move in 2-week blocks covering all the major sensory systems, including phototransduction, olfaction, taste, hearing, mechanoreception, and nociception. The course will be aimed at providing students with an overarching concept of sensory signaling, by comparing the properties of these different systems. Student participation will focus on the presentation of seminal work as well as more recent publications.

## **IMPORTANT!**

Throughout the course: STUDENTS WILL BE COMMUNICATED WITH BY EMAIL and CLASS INFORMATION WILL BE DISSEMINATED IN BLACKBOARD. ACCESS BLACKBOARD AT <https://totale.usc.edu/> ! You need to have registered for the course in order to access the documents posted there. If you cannot access the course, inform Dr. Sampath at [asampath@usc.edu](mailto:asampath@usc.edu)

## **Course format:**

The course will consist of one, two-hour sessions per week, and will consist of alternating weeks of a lecture on the sensory modality of interest and student presentations of seminal research in the field. Lecture dates are yet to be determined.

## **Text:**

The required text is *Sensory Transduction*, by Gordon Fain (Sinauer). The students may also use *Excitable Channels of Ionic Membranes*, by Bertil Hille (Sinauer), as a reference.

## **Grading:**

Students will be evaluated on their participation in class discussion (10%), the quality of their classroom presentations (50%), and on a few short written homework assignments on the key literature (40%).

## **Statement for Students with Disabilities**

Any student requesting academic accommodations based on a disability is required to register with Disability Services and Programs (DSP) each semester. A letter of verification for approved accommodations can be obtained from DSP. Please be sure the letter is delivered to me (or to TA) as early in the semester as possible. DSP is located in STU 301 and is open 8:30 a.m. - 5:00 p.m., Monday through Friday. The phone number for DSP is (213) 740-0776.