

# Neurophysiology

**Class Hours:** 10:30-11:45 a.m., Tues. & Thurs.

**Class Units:** 3

**Lecture Room:** College of Electronics and Information #

**Instructor:** Tae-Seong Kim, Ph.D.

(Office) College of Electronics and Information, Dept. of Biomedical Engi., #717

(Tel) 031-201-3731

(Email) [tskim@khu.ac.kr](mailto:tskim@khu.ac.kr)

**Class Homepage:** [web.khu.ac.kr/~tskim](http://web.khu.ac.kr/~tskim)

## **Textbook**

Textbook of Medical Physiology, 10th Edition, Guyton & Hall, H.I.E. Saunders.

Principles of Neural Sciences, Eric Kandel, McGraw Pub. Comp.

**Lecture Methods:** lecture, discussion, homework, and handout

## **Class Schedule**

Week 1: Membrane Potentials and Action Potentials

Week 2: Organization of the Nervous Systems

Week 3: Sensory Receptors

Week 4: Somatic Sensation

Week 5: Optics of Vision

Week 6: Receptor and Neural Function of the Retina

Week 7: Central Neurophysiology of Vision

Week 8: The Sense of Hearing

Week 9: Midterm Exam

Week 10: The Chemical Senses

Week 11: Skeletal Muscles

Week 12: Excitation of Skeletal Muscle

Week 13: Contraction and Excitation of Smooth Muscle

Week 14: Motor Functions

Week 15: Cerebral Cortex

Week 16: Final Exam

**Homework:** Weekly homework assignments

**Grading system:** attendance (10%), homework (20%), midterm (30%), and final (40%)