

PERCEPTION, MOVEMENT AND THE CEREBRAL CORTEX

1. Reading

(in *Principles of Neural Science, 4th Edition*, by Kandel et al., 2000) is assigned by page according to the presentation of the topics in the outline below. Although the textbook discusses these topics, the lecture may present them in a different order.

2. Topics

A. Introduction (pp. 317-326)

Since we will not have time to cover most introductory principles in the lecture, it is the student's responsibility to read this material beforehand. Students are strongly urged to pay particular attention to pp. 319-324, which contains a useful elementary overview of the anatomical and cellular organization of the nervous system.

B. The cerebral cortex

(Elements of this discussion can be found scattered in the following chapters: 17-20, 33, 38, 41, 43, 50, 59)

a. Hierarchy

b. The cortical processing unit in (a) sensory and (b) motor pathways

c. Organization of cortical processing units, including their participation in the hierarchy.