

Homework Assignment Week 1, due Thursday Oct 4, 2018 no later than 6P

Please email your answers in a .doc or .docx file by 6P to the [REDACTED], [REDACTED], and Prof Tramo – no need to print them out (except for the images)

[REDACTED]
[REDACTED]
[REDACTED]

1. Reading (posted on CCLE in Week 1 folder):

- “Brain and Music.” MJ Tramo (2003), *Harvard Dictionary of Music*
- “Music of the Hemispheres.” MJ Tramo (2001), *Science*

2. Go online and find images of the surfaces of the cerebral hemispheres (lateral, medial, superior, and inferior views) where each *gyrus and/or sulcus* are labeled. Select images you yourself find informative that you can use throughout the course as a reference when you read future papers. Then please email your images to the TAs and Prof Tramo, and also print them and bring them to class Thurs Oct 4.

3. Please complete the following and email the TAs and Prof Tramo:

- a) Name
- b) Year (e.g. junior, senior)
- c) Major
- d) Minor (if any)
- e) The probability (0%, 10%, 20%...100%) you will stay in the course
- f) Why do you want to take the course and what would you like to learn about Music & the Brain?
- g) Music background (if any)
- h) Research background (if any)
- i) Any other information you might like to convey

4. Review the list of seminars and email the TAs and Prof Tramo the three topics you would like to present in order of preference.

5. We simplified cerebrocortical structure-function correlates by categorizing the many functional areas of the cerebral cortex into three broad functional subdivisions. Type the letter on the line with the matching description.

A. Modality-specific areas

B. Multi-modal areas

C. Supra-modal areas

_____ neurons in these areas mediate sensory-sensory integration (e.g., auditory-visual integration) and sensory-motor integration (e.g., auditory-motor integration)

_____ neurons in these areas mediate processing in only one sensory modality or in only motor functions

_____ neurons in these areas participate in but can transcend processing of sensory stimuli at the interface between the self and the external world

6. Type the letter on the line with the matching description. (8 points)

- A. Modality-specific auditory cortex
- B. One of the cortical regions housing multi-modal neurons
- C. One of the cortical regions housing supra-modal neurons that bring the past into the present
- D. One of the cortical regions housing supra-modal neurons that bring the future into the present

_____ anterior frontal cortex (2 points)

_____ superior temporal cortex (2 points)

_____ medial temporal cortex (2 points)

_____ posterior parietal cortex (2 points)

7. Many cognitive functions are mediated by both cerebral hemispheres. The following two are strongly lateralized to one or the other hemisphere in right-handed people.

- A. propositional speech
- B. spatial navigation

_____ in a right-handed patient with a Stroke, deficits are typically caused by damage to the Left Cerebral Hemisphere (1 point)

_____ in a right-handed patient with a Stroke, deficits are typically caused by damage to the Right Cerebral Hemisphere (1 point)

MJT