

Syllabus

1. Course Title, style, and credit:

Physiological Evaluation, (x)lecture, () Discussions ()practice], 2 credit

2. Appropriate grade level and Eligible Departments:

(x)1, (x)2, (x)3, (x)4, (x)5: ()School of Cultural Sciences, () All Departments, () Other

3. Lecturer(s): NISHINA Emi

Contacts to the lecturer (e-mail address, Tel and Fax numbers, and the office):

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4. Time:

Intensive course

5. Place:

NIME R&D Building 8F, Lecture Room

6. Prerequisites and Styles

None

7. Contents:

To evaluate various kinds of effect of audio-visual media information, students learn the latest physiological, psychological and behavioral evaluation method. The research on the physiological, psychological and behavioral effect of high frequency components above the audible range will be shown as the application. Also, research ethics on physiological approach will be explained.

8. Course objectives:

1. To understand the basic principles of physiological, psychological and behavioral indexes, such as electroencephalogram, cerebral blood flow, etc.
2. To understand the effects of media information environment to these physiological indexes.
3. To understand the advantage and limitation of these physiological evaluation methods.
4. To understand the research ethics in the physiological approach.

9. Schedule:

Topics of the lecture

- (1) Outline of the Environmental Informatics
- (2) Equivalent effect of material and information for human brain
- (3) Physiological measurement of brain function to evaluate the effect of media information (EEG, PET, fMRI etc.)
- (4) Other measurement indexes to evaluate the effect of media information
- (5) Psychological evaluation method

- (6) Behavioral evaluation method
- (7) Measurement equipment as human interface
- (8) Material and the presentation system for experiment
- (9) Environment for measurement
- (10) Un-symmetric time course of physiological reaction
- (11) Research ethics in the physiological approach

10. Lecture materials and readings

All the materials will be provided at the lecture.

11. Grades:

The grades will be either “passed” or “failed”, which is determined by the quality of the paper, which must be submitted to the lecturer by the provided deadline. The subject(s) of the paper must be one of the four important aspects that are presented in the above Course Objectives.

12. Notes

None.