

## **Clinical Psychophysiology (Psych 367, W99)**

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|-------------------|--|------------------------|--|
| <u>Professor:</u> | Dr. Hackley<br>McAlester Hall, Room 20<br>shackley@showme.missouri.edu<br>Office phone: 882-3277<br>Office hours: 3:30-4:30 Mon. | <u>Class Meetings:</u> | 2:00 - 3:15, Tues & Thurs<br>McAlester Hall, Room 206                  |
|                   |  | <u>Textbook:</u>       | B. Fisch, author;<br>"Spehlmann's EEG Primer"<br>Elsevier Press, 1991. |

The topic of this laboratory class is the application of electrophysiological methods to the diagnosis of neurological and psychiatric disorders. The course content will be covered by means of lectures, readings, laboratory projects, and homework assignments. Students will be encouraged to volunteer their service as experimental subjects for the lab projects conducted by their classmates.

Your semester grade will be based on two intrasemester exams (22% each), a comprehensive final exam (30%), a term paper (14%), homework (10%), and miscellaneous factors, including attendance and class participation (2%). Some of the grading criteria are necessarily subjective in nature and will involve comparisons with the performance of other students at a similar academic level. In other words, your grade will be based partly on a curve and partly on absolute indices of performance. The plus/minus expansion of the traditional grading system will not be employed.

The format for the exams will be mainly short answer and quantitative problem solving. These examinations will cover material presented in the lectures, readings, and labs. Students are discouraged from requesting make-up examinations or other individualized testing arrangements. However, exceptions will certainly be granted for medical, family, or other legitimate reasons. Attendance at all lectures and labs is expected.

Reasonable and prudent efforts will be made to accommodate the special needs of students with disabilities (contact Dr. Hackley and the Access Office, A084 Brady Commons, 882-4696). Cheating on an examination or plagiarism of written submissions will result in expulsion from the class, a grade of "F," and a written report to the Provost. Plagiarism will be defined as copying more than seven sequential words from anyone else, including a lab partner, without attribution (e.g., quotation marks). Please do not talk, eat, or otherwise disturb your classmates during lectures. This course is not offered as part of an accredited program in neurodiagnostics and its successful completion in no way implies certification as a neurodiagnostic technologist.

## Schedule for Winter Semester 1999

|       |                         |  |
|-------|-------------------------|--|
| Jan.  | 12                      | Basic Electrical Theory                    |
|       | 14                      | Action Potential (video: Nerve Impulse)    |
|       | 19                      | Normal EEG (chs. 1, 8, & 9)                |
|       | 21                      | Filters (ch. 3)                            |
|       | 26                      | Rectifiers & Amplifiers                    |
|       | 28                      | Electrode Application Lab (ch. 2)          |
| Feb.  | 2                       | Display/Recording Devices                  |
|       | 4                       | Cardiovascular Physiology                  |
|       | 9                       | Lie Detection Lab                          |
|       | 11                      | <b>Exam I</b>                              |
|       | 16                      | Neuroanatomy Slides (encyclopedia)         |
|       | 18                      | NeuroImaging Methods                       |
|       | 23                      | Brain Dissection Lab                       |
|       | 25                      | Montages & Epilepsy (chs. 4, 14-18)        |
| March | 2                       | Guest Lecture                              |
|       | 4                       | Pathologies of Sleep (chs. 11 & 12)        |
|       | 9                       | Polysomnogram Scoring Lab                  |
|       | 11                      | Sleep EEG Lab (meet Fri. night, 10:00)     |
|       | 16                      | Auditory Neurophysiology                   |
|       | 18                      | Auditory Evoked Potentials (chs. 6 & 7)    |
|       | 23                      | <i>Spring Break</i>                        |
|       | 25                      | <i>Spring Break</i>                        |
|       | 30                      | Audiometric Testing Lab                    |
| April | 1                       | <b>Exam II</b>                             |
|       | 6                       | Somatosensory Evoked Potentials            |
|       | 8                       | Motor Physiology ( <b>Term Paper Due</b> ) |
|       | 13                      | Clinical EMG (Kolb & Whishaw chapter)      |
|       | 15                      | H Reflex & NCV Tests (ch. 26)              |
|       | 20                      | EMG Lab (meet at Rusk Rehab Center)        |
|       | 22                      | Movement-Related Potentials (TEQs)         |
|       | 27                      | Vision Tests: Perimetry & Reflexes         |
| 29    | Vision Tests: VEP & ERG |  |
| May   | 8                       | <b>Final Exam</b> , Sat., 10:30-12:30      |

