

Learning Goals and Outcomes for REACH-DL Physiology Exercises

Human Psychology Chapter

EEG-Cortical Arousal

Learning Goals:

1. Students will learn to collect electroencephalogram (EEG) signals from the left and right cerebral hemispheres.
2. Students will learn to recognize common EEG artifacts caused by movements such as eye blinks, facial muscle contractions, and head movement.
3. Students should be able to recognize and analyze Alpha and Beta EEG patterns associated with closed and open eye conditions;
4. Students will observe the Alpha block.
5. Students will continue to be successful at using the LabScribe software to move cursors, analyze data, record data to the Journal, and add functions to the Analysis window.

Outcomes: Students who have successfully completed this exercise will:

1. have recorded recognizable EEG traces for Alpha and Beta waves on both the right and left cerebral hemispheres.
2. be able to recognize common EEG artifacts.
3. be able to determine the effects of eye conditions (open or closed) and Alpha block on an EEG recording.
4. have tested a hypothesis and reached a conclusion about psychological states and brain hemisphere dominance.
5. feel comfortable transferring data to the Journal and interpreting that data to answer questions about their recordings.
6. have used the functions available in the Analysis window to determine values necessary for this exercise.