EEGInfo

Course Syllabus: 2012
(Schedule is subject to change)

Introductory Course in Neurofeedback

Neurofeedback: Scientific Basis and Clinical Practice

Course Description / Purpose

A comprehensive introduction to the clinical application of Neurofeedback, including demonstration, discussion and hands-on practical experience. You will acquire the knowledge and experience to begin working with this exciting technique for improving self-regulation and enhancing brain function. Earn **35 CE's*** by attending this course.

An intensive hands-on introduction to the clinical practice of Neurofeedback where you will:

» Learn mechanisms of neurophysiological self-regulation and how specific patterns of disregulation lead to physical, emotional and behavioral symptoms

» Gain experience with Neurofeedback instrumentation that exercises the brains mechanisms of self-regulation and improves brain function

» Learn about assessment tools that allow new insight into your client's symptoms and guide Neurofeedback training

» Begin empowering your patients to function better and increase their ability to benefit from other therapies

Presented by:

Siegfried Othmer, Ph.D., BCIAC

Chief Scientist, EEG Institute

Siegfried Othmer continues to be involved in the development of new clinical modalities to promote self-regulation, as well as to evolve a framework for the understanding of our methods. He also labors to promote the field in general, and to enhance professional training in Neurofeedback.

Susan Othmer, BCIAC

Clinical Director, EEG Institute

Susan Othmer is a leader in the clinical application of Neurofeedback. She has introduced thousands of professionals to the field of Neurofeedback and continues her clinical work and development of new assessment and training approaches as Clinical Director of the EEG Institute in California.

Kurt Othmer, BA

Owner/President, EEG Info

Kurt Othmer founded EEG Info in 2002 soon after graduating with honors from the Universtiy of Montana with degrees in Psychology and Economics. As the son of Sue and Siegfried Othmer, he brings the same passion, knowledge and commitment to the Neurofeedback field. Since opening its doors, EEG Info has grown into the leading organization for education and clinical development.

Registration Fee - $1295 (Registration fee covers course, materials/manuals and daily breakfast)

Who Should Attend?

Health and mental health practitioners who wish to add Neurofeedback to their practice:

- » Psychologists
- » Social workers
- » Family therapists
- » Psychiatrists
- » Educators
- » Nurses
- » PTs and OTs
- » Neurologists
- » MFTs
- » LCSWs
- » LPCs
- » LMHCs

Prerequisites:

Health and mental health practitioners ***with a Masters or above***

Familiarity with the content of the following books will be assumed:

Primer of EEG: With a Mini-Atlas by A. James Rowan, Eugene Tolunsky

The Neuroscience of Psychotherapy by Louis Cozolino

A Symphony in the Brain by Jim Robbins

ADD the 20 Hour Solution by Mark Steinberg and Siegfried Othmer

**** Continuing Education:***

MFT and LCSW - The course meets the qualifications for 35 hours of continuing education credit for MFTs and/or LCSWs as required by the California Board of Behavioral Sciences; provider #3628.

Psychologists - This course is co-sponsored by Amedco and the EEG Institute. Amedco is approved by the American Psychological Association to sponsor continuing education for psychologists. Amedco maintains responsibility for this program and its content. 35 credit hours.

Nurses - Provider approved by the California Board of Registered Nursing, Provider Number 15652 for 30 contact hours.

Satisfactory Completion: *Participants must have paid tuition fee, signed in and out each day, attended the entire seminar, and completed an evaluation, in order to receive a certificate of completion/attendance. Certificates will be sent after the seminar.*

Cancellation/Refund Policy:

Cancellations must be received 10 days prior to the workshop. Cancellations made within the 10-day period will be subject to a $200.00 course materials and processing fee. If you cannot attend, a qualified substitute may attend in your place or you can choose to attend one of the other scheduled workshops.

Contact Information:

To cancel your registration or sign up for a different workshop, call EEG Info at 866.334.7878.

Information for special needs participants:

This program will be accessible to individuals with disabilities, according to requirements of the Americans with Disabilities Act. Please contact EEG Info if you need further information or if you have requests for special needs participants.

Course Schedule *(Schedule is subject to change)*

Schedule Notes: *Breakfast is included from 7:30 - 8:30am each day*
Two 15 min. breaks are incorporated into each 4-hour morning/afternoon block
Lunch breaks are from 12:30 - 2:00pm each day (meal not included in course)

MONDAY:

8:30am - 12:30pm
Welcome and Introductions

Research, History and Results
Early research history in Neurofeedback
Results of research in field of Neurofeedback
Cases supporting the disregulation model

2:00 - 4:00pm
Neurofeedback Foundations
Building blocks
Assumptions
Instrumentation

4:00 - 6:00pm
Demonstration and Practicum 1
CPT (Continuous Performance Test) assessment

TUESDAY:

8:30am - 12:30pm
Theoretical Model of Neurofeedback
Emerging models of neurological regulation
Self-regulation, arousal and EEG
The disregulation model

2:00 - 6:00pm
Demonstration and Practicum 2
Introduction to Neurofeedback instrumentation
10-20 system of electrode placement
Symptom tracking

WEDNESDAY:

8:30am - 12:30pm
The Clinical Model
Neurophysiological mechanisms of self-regulation
Arousal and instability
Neurofeedback as learned self-regulation of state
Starting Neurofeedback protocols

2:00 - 6:00pm
Demonstration and Practicum 3
Demonstration of Neurofeedback session
Personal training (starting sites)
Optimizing reward frequency

THURSDAY:

8:30am - 12:30pm
Symptom Profiles and Basic Neurofeedback Protocols
Symptoms related to disregulation model
Clinical and peak performance applications
Basic Neurofeedback protocols

2:00 - 3:00pm
Discussion of Personal Training Results

3:00 - 6:00pm
Demonstration and Practicum 4
Personal training (optimizing starting site and reward frequency)

FRIDAY:

8:30am - 12:30pm
Neurofeedback Assessment and Training
Evaluation
Protocol development
Reassessment
Completion

2:00 - 3:00pm
Discussion of Personal Training Results

3:00 - 5:30pm
Demonstration and Practicum 5
Alpha-Theta demonstration
Personal training (AT session)

5:30 - 6:00pm
Next Steps after the Course

6:00pm
Course Ends - Evaluation forms and certificates of completion

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Learning Objectives:

Upon completion of this course participants should be able to:

Day 1

1.Describe Sterman's early work with SMR training impacting seizures in cats and humans.

2.Discuss the use of Continuous Performance Test data with Neurofeedback and results across diagnostic categories.

3.Describe results of the Peniston and Cri-Help studies of Neurofeedback for PTSD and addictions.

4.Discuss how symptom tracking data support the self-regulation model of Neurofeedback.

5.Describe how common-mode rejection with a differential amplifier allows extraction of small signals from large background noise.

6. Explain how to administer the QIK CPT and create a report on EEG Expert to be used as a pre-post Neurofeedback training measure.

Day 2

1.Compare and contrast classical peripheral biofeedback and EEG Neurofeedback.

2.Distinguish the frequency domain and the time domain descriptions of the EEG for purposes of display, analysis and reinforcement.

3.Use Neurofeedback instrumentation in simulation and live mode, and store and replay EEG session data.

4.Describe the International 10-20 System of electrode placement and locate sites indicated for EEG training.

5.Set up symptom tracking for a client on EEG Expert, and enter data over Neurofeedback sessions to produce graphs showing progress with training.

Day 3

1.Describe the role of the brainstem reticular activating system in managing brain states.

2.Explain the different action of reward and inhibit frequency bands in Neurofeedback.

3.Discuss the short-term and long-term effects of Neurofeedback in terms of state shifts and learned self-regulation of state.

4.Describe options and rationale for starting sites and reward frequency during initial Neurofeedback session.

5.Compare and contrast common symptoms that arise or increase when the reward frequency is either too high or too low.

Day 4

1.Describe symptoms indicating unstable arousal and appropriate training placement.

2.Contrast functions and dysfunctions of arousal, activation and reward, and discuss related choices of reward frequency and electrode placement.

3.Discuss the role of the pre-frontal cortex in inhibiting primitive sub-cortical behaviors and symptoms indicating need for pre-frontal training.

4.Discuss differences in left and right brain function and symptoms indicating the need to train the right hemisphere only.

5.Explain how Alpha-Theta training allows access to and resolution of sub-cortical fears and habits.

Day 5

1.Use information on symptoms, developmental and trauma history, treatment history and genetic history to characterize patterns of disregulation and appropriate starting protocols.

2.Describe basic training sites and their relationship to multimodal association areas.

3.Describe how brain imaging data might or might not be useful in determining reward frequency and/or training sites.

4.Discuss considerations regarding when to add Alpha-Theta training and how to combine it with awake-state training.

5.Discuss alpha, theta, delta and beta trend lines during Alpha-Theta training and how they might relate to state shifts during training.