



Developer Tools 1 Online Course This online course is targeted at clinicians, researchers and other health professionals who are power users of the BioGraph Infiniti environment. You will receive an overview on the key concepts behind the Screen and Script editors, opening the door to further learning in this exceptionally powerful development environment.

All online courses are accredited by BCIA to fulfill the continuing education requirements for recertification.

Online Course Benefits

- No travel expense- learn from the comfort of your own home or office.
- All courses are limited to a maximum of 3 participants to ensure individual attention.
- Rotating monthly courses allow for greater flexibility with your schedule.
- This online course introduces the user to the functionality, power and versatility that the Developer Tools of the Infiniti platform has to offer.
- The participants will get the benefit of a “hands-on” learning experience of this powerful physiological tool.
- The online course has a total of 6-hours of instruction given over the internet. The six hours are divided into four 1.5-hour lessons given twice a week for two weeks.

CHANNEL EDITOR - Collect the psychophysiological data YOU want:

The Channel Editor is a very flexible tool that allows you to create sophisticated signal-processing methods for extracting clinically relevant information from raw sensor data. The Channel Editor includes an Expert mode and a Wizard mode, which are designed to help beginner and expert users rapidly develop simple or complex channel sets, by guiding them through every step of the building process.

SCREEN EDITOR - See your ideas come alive on screen:

The Screen Editor is a visual tool that enables you to build any number of new display screens for biofeedback and data acquisition purposes. With a toolbox of over 20 instruments to select from, creating a single or multi-monitor display is as easy as clicking on an instrument and placing it on the screen. The toolbox includes standard graphs, event counters, a correlation graph, multimedia tools, and new logic instruments that will allow you to create sophisticated feedback environments with selective inhibiting and immediate or discrete rewarding capabilities.

SCRIPT EDITOR - Build your own assessment and training scripts:

The Script Editor is a powerful programming tool for creating session scripts (also known as protocols), which can automatically load display screens, and give instructions, play media events and pause recording. Time-based or event-based script sessions can save you from having to perform many repetitive and tedious tasks. A script is defined as a sequence of activities and can be used for performing standardized assessments and breaking down data into statistically significant segments. Sessions recorded from scripts can be trended in the BioGraph Infiniti software. The Script Editor offers a Wizard Mode, which guides beginner users through the sequence of steps involved in creating simple or complex session scripts.

COURSE OBJECTIVES

Objectives are set at the beginning of the course with the instructor and with the goal being to meet the objective before the end of the Course. Participants will be introduced to the basics of **Channel Editor**. This includes the ability to make an intelligent choice from a list of computations and statistics to create new, or adapt existing, “channel sets” used to collect data. Participants will also learn to use the **Screen Editor** to modify or create display screens. They will be shown how to create review and report screens for saved sessions. The course also covers how to use the **Script Editor** to create structured sessions and have the opportunity to develop scripts if they wish to do this.

STUDENT OUTCOMES:

Participants Will Learn How To:

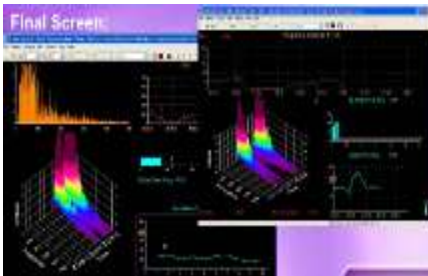
- Explain key aspects of psychophysiological instrumentation recording such as artifact, amplitude, bandpass, and frequency response curve.
- Demonstrate knowledge of the aspects of signal processing such as time constant, impedance, and signal-to-noise ratio.
- Build and edit channel sets and display screens that use peak-to-peak voltage, root mean square voltage, and power spectrum.
- Identify and briefly describe characteristic signals and signal processing for feedback displays

Lesson 1: Learn how to Evaluate Channels, Edit Existing & Build New Channel Sets - Here the signals are rectified and one can give specific direction to the software as to how one would like the signal interpreted.



You will learn how to manipulate Virtual Channels, adding instruments, creating a label, changing text color, and much more. You will learn how to access Biograph Infiniti documents to modify or create new channels. You will find out how to create, delete or modify virtual channels or virtual channels series. You will be able to associate an old screen to a new channel.

Lesson 2 and 3: Adding and Configuring Instruments & Building New Display Screens - Most of the work takes place within these screens and translate training ideas into concrete feedback



You will learn about the following: Screen Background, Using Different Instruments; Growing Shape, Scale, Correlation, Synchronized Event Average, Multiple Colour Selection Dialog Box, Counter, Target Counter, Percentage of Time Condition is True Counter, Numeric, Spectrum (2D), Frequency Settings, Spectrum (3D), AVI Animation, Creating your own AVIs document, Palette Animation, Video, Link, Interface Switch, MIDI Splitter, Child Bar Graph, Percentage Instrument, Setting Sound Feedback, Audio File Selection

LESSON 4: Editing Existing and Building New Scripts - take screens and assemble them giving them a structure



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This course is intended for licensed health professionals and those participants seeking BCIA certification if they are not already certified. As this online course is a "hands-on" learning experience, you are required to use your equipment online including computer with software, encoder and sensors. Also required are: High speed internet, Skype™ and GoToMeeting software and user ID, headset and microphone.

COURSE PREREQUISITES:

Participants at this course must have completed the Introduction Online course or attended the first two 1-day workshops.

INSTRUCTORS:

The following is a list of the outstanding presenters who instruct the online courses and will guide you to a better understanding of your instrumentation:



Linda Walker, MHR, LPC, BCIA-EEG Linda Walker holds a master's degree in Human Relations and Counseling from the University of Oklahoma and post graduate certificates in substance abuse and school counseling from Western Michigan University. She is licensed as a professional counselor in Oklahoma and Michigan, and as a school counselor in Michigan. She has worked with troubled youth and their families for over 12 years, most notably at Nokomis Challenge Center, a state training school for juvenile offenders in Michigan. At Nokomis, Linda has been dedicated to developing and implementing the agency's neurofeedback program. She also specializes in EMDR and substance use issues, serves as an instructor in the experiential wilderness therapy program and acts as a treatment group leader. Linda is certified in EEG biofeedback from the Biofeedback Certification Institute of America and is presently studying within a doctoral program in psychophysiology.



Elizabeth Tegan, M.S., R.N., C.S. Elizabeth Tegan is a Clinical Nurse Specialist in private practice. She is a psychotherapist and uses neurofeedback and peripheral biofeedback as a part of an holistic approach to mental health issues. She has used neurofeedback extensively for 5 years and is pursuing BCIA-EEG certification. The population she works with are primarily adults with mood disorders, anxiety, stress related physical problems and trauma survivors.



Brendan Parsons, M.Sc. Candidate, BCN Brendan Parsons combines a thorough knowledge of the Thought Technology Infiniti system with more than 2 years of workshop and online instruction in bio and neurofeedback for the Biofeedback Foundation of Europe. Brendan is Board Certified in Neurofeedback (BCN) by the Biofeedback Certification International Alliance (BCIA). He works for NeurodeZign, a Montreal-based clinic specializing in the treatment of children and adolescents with disorders including ADHD, Asperger's Syndrome and Autism Spectrum Disorders, learning disabilities as well as anxiety and depressive syndromes. The clinic also offers services to athletes and professionals of all ages. Brendan also works with CogniSens Athletics, another Montreal-based company that develops technology to train athletes in perceptual and informational processing, decision making, and reaction time. Brendan serves part time as a neuropsychology consultant for the Vancouver Canucks of the National Hockey League. He is currently pursuing graduate studies in neuropsychology at the University of Montreal in Canada.

Pedro Teixeira is a Licensed Physical Therapist (Licenciado em Fisioterapia) in Oporto, Portugal. Pedro is the Biofeedback Foundation of Europe Project Manager for International Research & Education Projects that focus on surface Electromyography. Pedro is the co-author of an 80-hour Post Graduate Course entitled "Introduction to Surface Electromyography". In addition to completing a first year towards a Masters Degree in Science of Physical Therapy at the Technical University of Lisbon, Pedro has successfully completed European continuing medical education courses on movement dysfunctions and biofeedback. Pedro then worked in rehabilitation and sports with the Portuguese National Team in Basketball, and in other high level sports teams in Rugby, Tennis, and Surfing. For the last four years Pedro's clinical work has focused on pain management and rehabilitation using surface electromyography and other physiological signals that provide information on psychosomatic symptoms. Pedro instructs BFE online courses on Surface Electromyography in English and Portuguese.

Geneviève Moreau: Before pursuing her studies in psychology, Geneviève was an occupational therapist. She then trained in neurofeedback at the ADD Center near Toronto as part of a clinical internship with Lynda Thompson, a leader in the field of neurofeedback development in Canada. Her doctoral research seeks to document how neurofeedback can optimize one's performance during IQ evaluations, and examines the ways in which one may diminish the need for stimulants such as Ritalin when treating children with various attention deficit disorders.

FOR MORE INFORMATION OR TO REGISTER VIA TELEPHONE:

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CANCELLATION POLICY: Cancellations must be received in writing if requested **prior to 1 week before the course date**. You will receive credit towards a future course minus an administration fee of US\$ 50. Cancellations after this date forfeit registration fee. Thought Technology Ltd. reserves the right to cancel the course with full refund.