

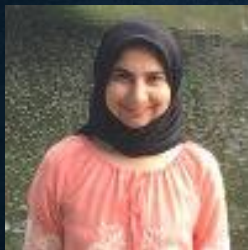


The First, Fully Interactive, Web-based, Distance EEG Learning Program for Neurologists and Neurology Residents



"The EEGonline program is one of the most useful learning tools I have ever used. The website layout is easy to navigate and the quality of EEGs is very good as compared to text books. The faculty are approachable and teach in a way that demystifies EEG learning. The content is excellent and progresses seamlessly from basic principles to clinical application. The exercises with review answers enabled us to learn from our errors. Overall, it has significantly improved my knowledge and application of EEGs and with more hands-on application, I feel that I can confidently teach EEG in the future! Thanks!"

Dr Herman Ekea, Specialist Physician and Neurology Registrar, Kenya



"A one of its kind course with excellent balance between theory and practical application. Lots of interactive learning with tutors giving it a "hands on experience" feel.. Highly recommended!"

Dr Sidra Aurangzeb, Neurologist, Oxford, UK



The Neurological Association of South Africa
The University of Cape Town
The World Federation of Neurology



In the past 3 years more than 300 Neurologists, Neurology Residents and Neuro-technologists have enrolled on the EEGonline Distance Learning Program from across the globe

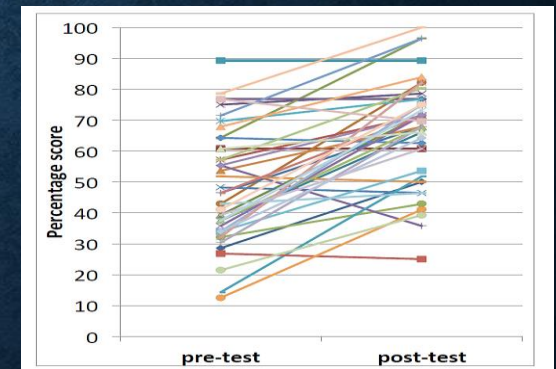
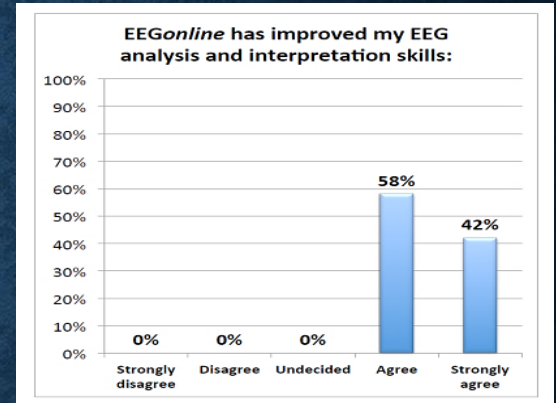


Figure 6: Individual participant scores in pre- and post-course tests showing that majority of participants improved in performance.



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About EEG Online

The Neurological Association of South Africa (NASA), in collaboration with the University of Cape Town, is developing online distance learning programs in the clinical neurosciences. These are expected to be especially useful in the context of resource-poor settings where conventional training may be challenging. EEGonline is the first result of this initiative and was made possible by a seed grant secured from the World Federation of Neurology (WFN). The EEGonline Distance Learning Program is primarily designed to assist in the training of career neurology registrars in the principles and practice of clinical electroencephalography

*The First, Fully
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EEG Learning Program*

EEG Online Programme

EEG remains an important component of neurological practice as it is a readily available test of brain function. In skilled hands, it may of great value, but misuse and poor interpretation may lead to an incorrect diagnosis and serious harm.

The purpose of the EEGonline Distance Learning Program is to assist trainees in clinical EEG by providing a supervised, interactive, learning experience. It is a part-time course, which runs for 6 months, and consists of 9 modules, each lasting about 3 weeks. The first 5 modules cover the basic principles of EEG, and the final 4 modules deal with its clinical application.

Each module consists of multimodal sections. Concise, informative text is provided, but the emphasis of the teaching is on the interpretation of many normal and abnormal EEG epochs which are presented in the course material. Interactive waveform software is utilised to demonstrate a systematic process of identifying and interpreting background rhythms, artefacts and both normal and abnormal waveforms of interest. There are online forums where participants discuss waveforms of interest with each other and with their tutors. Purpose-made videos demonstrate experienced tutors interpreting instructive EEGs and, at the end of each module, there are self-assessment quizzes with immediate feedback.

Links to useful resources on the Web are included and, to facilitate additional reading around the subject, references are provided

Participants who are successful in the End-of-course examinations will receive a certificate confirming successful completion of the EEGonline program.

"I would highly recommend this comprehensive course to both those starting out in the world of EEG and more experienced practitioners wanting to refresh their basic knowledge. The course reinvigorated my enthusiasm in EEG interpretation and the interactive platforms, media and guidance from tutors is excellent and an opportunity not to be missed."

Dr Michael Huth. Neurologist, Johannesburg

Course Structure (6 months)

PART 1 Basic Principles of EEG

- Module 1:** Basic Principles of Brain Signal Generation and Processing, Principles of Electricity and Electrical Safety. (3 weeks)
Module 2: EEG Features of Normal Wakefulness & Somnolence in Adults (3 weeks)
Module 3: Abnormal Epileptiform & Non-Epileptiform EEG Waveforms in Adults (3 weeks)
Module 4: Artefacts Affecting the EEG (3 weeks)
Module 5: Localisation and EEG Montages (3 weeks)

PART 2 Application of EEG in Clinical Practice

- Module 6:** Epilepsy and the EEG (4 weeks)
Module 7: Encephalopathy, Coma and the EEG (3 weeks)
Module 8: The EEG Report (1 week)
Module 9: Consolidation Phase & Examinations (2 weeks)

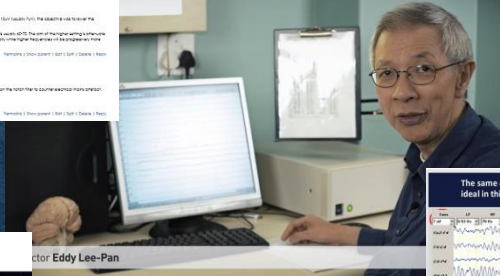


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Learning Resources

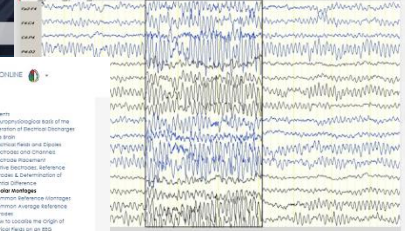
- Concise Illustrated notes
- Interactive epoch activities
- Purpose made videos
- Discussion forums
- Self assessment quizzes with immediate feedback
- Links to Useful resources on the Net



Professor Eddy Lee-Pan

The same epoch is again represented at a sensitivity setting of $7 \mu\text{V/mm}$ which is probably ideal in this case.

Longitudinal bipolar montage. Paper speed 30mm/sec. 10 sec/epoch.



Notes
In this case, a standard sensory setting of $7 \mu\text{V/mm}$ is probably ideal for accurate assessment. Note how a sensitivity setting of $3 \mu\text{V/mm}$ represents over-amplification, while a setting of $30 \mu\text{V/mm}$ represents under-amplification.



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