

Integrating a new Derive 6 Video User Guide into Virtual Teaching

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Lecture Proposal for the TI-Nspire & Derive Strand

ABSTRACT

The main goal of this Derive 6 online tutorial is to set up a video user guide for its content, functionality and applications. Our initial objective was to provide the Telecommunication Engineering College students at the University of Malaga with a tool to help them to cope with the incremental homework overload after the implementation of the new Bologna academic syllabus for 2010-11. However, this online tutorial has proven to be an excellent tutorial for any person willing to use Derive 6 in a daily basis.

The Derive 6 online video user guide has been firstly drafted in Spanish because it is a program widely used in courses such as “*Ampliación de Matemáticas*”, “*Fundamentos del Cálculo*”, “*Análisis Vectorial y Ecuaciones Diferenciales*” and the online course of “*Fundamentos básicos de variable compleja con un programa de cálculo simbólico*”. But afterwards, it was translated into English to make accessible to any Derive 6 user internationally.

This Derive 6 online video user guide environment is within a web-page format for the user to browse through its content and/or to look for specific applications in an easy way. The Derive 6 online tutorial consists of an index dividing its content in different tabs. Furthermore, the user can find some videos that explain how to use Derive 6 to make different calculations. These videos have the same structure of previous Derive 5 videos already available in internet such as the ones developed by Terence Etchells and Theresa Shelby allocated at:

(<http://www.cms.livjm.ac.uk/etchells/Derive%20Avi's/DeriveTutorials2.htm>),

but in Spanish. The next stage of this Derive 6 video user guide will be to translate these videos into English. The Spanish version is allocated at:

http://www.matap.uma.es/profesor/jl_galan/Derive/VideoTutorial/.

In this lecture we will show how this Derive 6 video user guide has been integrated into the completely online subject “*Fundamentos básicos de variable compleja con un programa de cálculo simbólico*”. We will describe how this subject has been developed in the last three academic years and the resources, together with this video user guide,

that have been used. The tasks developed, the evaluation method and the different resources used within this online subject, could be considered as a model for teaching in the new Bologna syllabus which will be start next academic course.

We will finish with the conclusions obtained from the point of view of both: students and teachers.

Keywords

Derive user guide, Video tutorials, Online and Virtual teaching Resources, Bologna syllabus.