Advanced Courses Data Analysis Using R

9th-13th of September, 2019 @ Biology Department, University of Aveiro

General information and aims

The generation and analysis of data are essential components of a scientists' routine work. Many tools are available to perform different types of analyses and it can be overwhelming to choose the most adequate software. In addition to this, some tools are more transparent than others in the tasks that are performed, and this is especially true in statistical analysis.

R is a free, open-source software that runs on different operating systems, is used world-wide for data analyses, and has an extensive online help system that can assist the users when they run into a bump on the road. The thousands of available packages allow users to perform a panoply of analyses on their data, and cite the exact methodology used.

The present course will consist of **introductory-level** lectures on command line-based data analysis, **using R and R-studio**. R will be introduced both as a console and as a part of the R-studio environment.

The lecturers will aim at teaching **basic concepts** of command line and simple programming, while exploring part of the realm of possibilities with R: from a simple calculator to a tool that can compute sophisticated plots, models and statistics.

Applicants should have a background in Biology or related areas, and be scientists or post-graduation students (MSc or PhD).

Confirmed lecturers

Cátia Fidalgo, PhD CESAM, DBIO @ UA

Paulo Cardoso, PhD CESAM, DBIO @ UA

Rafael Félix, MSc MARE-Politécnico de Leiria, REQUIMTE-FFUP

Eduardo Batista, MSc CESAM, DBIO @ UA Bring your own laptop!



Registration

Maximum participants: 20

Max. from PhD program @ DBio: 10 (free)

Fee: 50 € (UA) or 150 € (others)

Application form at: <u>https://forms.gle/BU28k4Fd6Eh8TR4H7</u>

Contact E-mail: cifidalgo@ua.pt













