

# Introduction to the Statistical Software R

## Description

This course is a practical introduction to R, a free open-source software environment for statistical computing. Besides an introduction into the software, the following topics will be covered: data import and export, data manipulation, statistical analysis, graphical representation and advanced programming concepts as conditional branching and loops. Students should bring their own laptop for the practical work.

In contrast to other statistical software solutions, R is designed around a true computer language. This has the implication that R is characterized by an enormous flexibility that enables the user to perform sophisticated statistical procedures or simulations. R might be less intuitive to scientists without prior programming skills. However, there are some tools available to make the user's life easier as graphical user interfaces and editors with syntax highlighting.

Participants should have basic statistical knowledge. Programming skills are not required.

## Objectives

By the end of this 2 day course, students will be able to use R for statistical analysis and graphical representation. They will be aware of the common mistakes and will get familiar with additional tools to use R more efficiently.

## Dates

**10 – 11 September 2019**

## Eligibility

Open to PhD students of SSPH+ public health program; other students and external participants are welcome to apply for limited spaces.

Participants must bring their own laptops.

## Course Structure

Lessons and practical exercises.

## Assessment

Active participation in the exercises, homework assignment.

## Credits

**1 ECTS**

Preliminary Work: 2 h, Contact: 16 h, Wrap-Up Work: 8 h

(1 ECTS corresponds to approx. 25-30 hours' work)

## SSPH+PhD Program:

Program Coordination Ann Walser

Academic Lead Prof. Matthias Egger  
Prof. Thomas Abel

## Contact:

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## PhD Program in Public Health

<b>Facilitator</b>	Dr. Jan Hattendorf, Swiss Tropical & Public Health Institute										
<b>Location</b>	Swiss Tropical & Public Health Institute, Entrance Socinstrasse 57, lecture room: Kilimanjaro										
<b>Course Fees</b>	<table><tr><td>SSPH+ PhD Students</td><td>30.- CHF</td></tr><tr><td>PPHS PhD Students</td><td>30.- CHF</td></tr><tr><td>External MD/PhD Students</td><td>300.- CHF</td></tr><tr><td>External Academics</td><td>850.- CHF</td></tr><tr><td>Other Participants</td><td>1250.- CHF</td></tr></table> <p>(The cost scheme depends on the Number of ECTS. Per ECTS participants are asked to pay 300,- CHF, 850,- CHF or 1250,-CHF, respectively)</p>	SSPH+ PhD Students	30.- CHF	PPHS PhD Students	30.- CHF	External MD/PhD Students	300.- CHF	External Academics	850.- CHF	Other Participants	1250.- CHF
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<b>Registration</b>	<a href="#">Please register online on our homepage</a>										
<b>Deadline</b>	<b>10 August 2019</b>										
<b>Max. Attendance</b>	<b>20</b> (preference is given to SSPH+ PhD Students)										

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Program Coordination	Ann Walser
Academic Lead	Prof. Matthias Egger Prof. Thomas Abel

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