# Statistics Workshops

### Summer 2024

The Center for Statistical Computing (CSC) welcomes all graduate students, staff, and faculty to participate in our statistics workshops. These sessions are held on **Zoom** or/and in **Green Labs** on the upper level (UL) of Healey Library. In Summer 2024, our workshops cover SPSS, Stata, R, Excel, and Python. Descriptions for each workshop, along with the schedule and Zoom links, are provided below.

#### **Statistics Workshop Descriptions:**

SPSS is a hands-on workshop designed to empower attendees with the skills to conduct meaningful data analysis using SPSS for Windows. Topics covered include entering and reading data, documenting variable and value labels, examining frequency and crosstab tables for individual and group data, recoding variables, performing independent sample *t*-tests, and conducting simple linear regression.

**Introduction to R** emphasizes conducting fundamental statistical analyses, including descriptive statistics, frequency distributions, Chi-square tests, independent sample *t*-tests, one-way ANOVA, and linear and logistic regressions. Additional topics cover downloading and installing R packages, reading, and writing data files, and creating R graphs. Notably, R is a free, open-source software supported by a strong user community.

Introduction to Python with SAGE Campus combines content from two consecutive SAGE Campus Course: Introduction to Python and Intermediate Python Skills. This is a beginner-level workshop that requires no prior experience. It introduces the fundamental concept of the Python programming language, focusing on practical applications in statistical analyses using practical examples in the social sciences. The workshop starts with the basics of Python programming, delving into various data types and methods encountered in statistical analyses. Topics covered encompass analysis of variance, linear regression, and logistic regression.

**Statistical Analysis Using Excel** provides valuable tips for enhancing efficiency in data analysis with Excel. Topics covered include entering data, organizing data and performing descriptive statistics, examining frequencies and crosstab tables, conducting independent and paired sample *t*-tests, correlation analysis, and linear regression.

**Stata** serves as an introduction to Stata, encompassing both the graphic user interface and intuitive command syntax approaches. It aims to efficiently teach fundamental Stata operations. Topics covered include browsing data, data management, descriptive statistics, independent samples *t*-test, and simple linear regression models.

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#### **Summer 2024 Statistical Workshop Schedule:**

Topic	Date	Day	Time	Registration
SPSS	Jun. 13	Thursday	12:00-2:00 P.M.	In-Person Register Virtual Register
Intro. To R	Jun. 18	Tuesday	11:00-1:00 P.M.	In-Person Register Virtual Register
Intro. To Python with SAGE Campus	Jun. 27	Thursday	12:00-2:00 P.M.	In-Person Register Virtual Register
Excel	Jul. 02	Tuesday	12:00-2:00 P.M.	In-Person Register Virtual Register
Stata	Jul. 11	Thursday	12:00-2:00 P.M.	In-Person Register Virtual Register

## **Registration Procedures:**

Seats and handouts are limited. Please register in advance.

- 1. Click the 'In-person Register' or 'Virtual Register' under Registration.
- 2. Fill up all the information request and submit your registration.
- 3. Join the workshops via Zoom link in the confirmation email or attend in-person session for hybrid workshops.

All Hybrid workshops will be held in the Green Lab on the upper level (UL) of Healey Library.

Please contact Center for Statistical Computing at <a href="mailto:csc@live.umb.edu">csc@live.umb.edu</a> for any questions regarding the workshops.

Web: <a href="https://www.umb.edu/academics/graduate/info">https://www.umb.edu/academics/graduate/info</a> for graduate students/center for statistical computing

**Location:** Healey Library, Green Lab. (From the main elevators in Healey Library, take the Upper level (UL). Turn

right out of elevator, and you'll find Green Lab on the left in the hallway)