Become intimately familiar with all three components of Stata: data management, analysis, and graphics. This course is aimed at new Stata users, Stata users new to Stata 11, and those who wish to learn techniques for efficient day-to-day usage of Stata. Upon completion of the course, you will be able to use Stata efficiently for basic analyses and graphics. You will be able to do this in a reproducible manner, making collaborative changes and follow-up analyses much simpler. You will be able to customize your Stata environment both by installing user-written commands and writing your own simple customizations. Finally, you will be able to make your datasets self-explanatory to your co-workers and your future self.

The course will be hands-on throughout working through examples and topics in Stata 11. The course is self-contained; students will receive a notebook with all course materials, and all datasets will be available over the web.

The prerequisites for the course are minimal, though some familiarity with basic statistics and linear models will be assumed. No prior Stata experience is necessary, though seasoned Stata users will likely learn new techniques for making their work more efficient.

The topics for the course are divided so that each day concentrates on a separate task:

**Monday—Introduction and Data Management**

- Introduction to Stata
- Stata’s syntax
- Getting help
- Getting data into Stata
- From data to dataset
- Manipulating data
- Combining datasets

**Tuesday—Summaries and Basic Estimation**
• Creating tables
• Graphs and overlays
• Estimation and postestimation
  • Basic estimation
  • Specifying categorical and interactions (factor variables)
  • Alternative standard error estimates
  • Fitted values
  • Predictive margins
  • Marginal effects
  • Estimation and tests
  • Model-specific postestimation

Wednesday—Special Topics in Estimation
• Basic panel and multilevel modeling
  • Setting up panel data
  • Population-averaged models
  • Fixed effects models
  • Multilevel modeling
  • Data management: changing from wide to long datasets

• Basic analysis of data from complex survey designs
  • Setting up complex survey data
  • Analyzing complex survey data

• Basic survival analysis
  • Setting up simple survival data
  • Non-parametric, semi-parametric and parametric models
  • Different types of complex survival data

Thursday—Automation and Reproducibility
• Working with do-files
  • Modular do-files
  • Projects and subprojects

• Containers, looping and branching
• Customizing your Stata environment
• Basic user-written commands

Friday—Advanced Topics
• Simulation and other applications
• Reading complex data
• Writing arbitrary files
• Special topics