

## **Econ 824, Computer Lab, Fall 2023 (Wed., Oct 25 – 2:30PM – 5:20PM, Kreeger 100)**

**Objective:** A fast tutorial and a more detailed practice of STATA (including the AU Remote Desktop). We will cover the basics of analyzing data (basic statistics and econometric modeling) including visual analysis in STATA.

**Instructions for students – to do before the Lab:** The Microsoft Remote Desktop client allows access to various software available in the campus computer labs without the need to install that software into your local computer. If you do not have Stata installed on your personal computer, please, make sure to have it ready for use through the Remote Desktop at the start of the class.

Keep in mind, that the Remote Desktop, does provides access to local computers to store work. Students can use their AU OneDrive account to access the files from the virtual apps or desktops via cloud storage. This is the best method for accessing personal files as documents can be opened and saved directly to OneDrive folder.

For more instructions on how to install the Remote Desktop and OneDrive on a local computer, see the links below.

1. [Virtual Applications and Desktops](#)
2. [OneDrive](#)

### **Part I – Basic AU Computer System (Virtual Lab)**

A brief tutorial of the AU Virtual Applications and Desktops system (The Microsoft Remote Desktop client and software)

### **Part II – Tutorial (STATA) and a Review**

1. The basics of working with STATA (10 min)
  1. Launching
  2. Interface: Output window, Command line, History
  3. Tabs: Data editor, Do-file editor
2. Creating artificial data (One example; no practice – 15 min)
  1. Linear regressions using artificial data (and testing)
3. Working with data (20 min)
  1. Read Data: import data.
  2. Simple Statistics (summary statistics, correlation)
  3. Graphical data analysis (histogram, scatterplot)
  4. Simple Regression analysis: LS

### **Part III – Using STATA for More Advanced Problems**

4. More Advanced Procedures (Approximately 1 hr. and 30 min)
  1. NLLS: Nonlinear regression analysis (LS)
  2. NLML: Nonlinear regression analysis (ML)  
*Note: For (1) – (2) above use exact same model and data*
  3. Simultaneous Equations (and IV)

4. Discrete Choice
  1. Unordered (Binary and Multinomial; Both Probit and Logit)
  2. Ordered (Logit)
5. Bonus problem: DSGP Modelling

Note to students: Code and the data will be provided after the Lab.