**Honor Thesis, 2016-17**

STATA COURSE,

Instructor: Vasil Yasenov (Vasco) - viyasenov@ucdavis.edu

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Days: (June) Monday 20th, Wednesday 22nd, Monday 27th, Wednesday 29th

Time: 10.30AM-12.00 PM

Location: Blue Conference Room, Economics Department, SSH 1113

The following is tentative plan which will almost surely change as we go along.

**LECTURE 1**

**How to import dataset from IPUMS.org**

1. Explore all the data that one can find at IPUMS and show how to browse the site
2. Create a selection of IPUMS variables (to generate average wages and employment in a panel of states/commuting zones).
3. Download and run the program creating a STATA data file.
4. Choose March and May CPS, talk about differences and variables.

**Getting familiar with a given dataset**

1. Load preloaded STATA dataset – saving and importing .dta files
2. Examples of other databases that one can import in STATA – The World Bank WDI – importing .csv an Excel files
3. Examine the data – summary tables, types of variables, etc
4. Histograms and kernel density
5. Generating new variables
6. Renaming and labeling variables
7. Cleaning and checks (calculate yearly, weekly, hourly wages)
8. Missing values (may be talk about top codes)

**LECTURE 2**

**Reorganizing datasets**

1. Collapse to obtain averages/medians/sums etc. of groups
2. Append several datasets
3. Doing some simple loops to select/extract/create some variables
4. Reshaping from large to long form and vice-versa

**Graphing**

1. Lines
2. Scatterplots
3. Local polynomial regression, lfit, lowess, lpoly
4. Twoway options – titles, labels, adding text, etc

**Basic regressions**

1. OLS
2. Robust and clustered standard errors
3. Regression tables
4. Weights

**LECTURES 3-4**

**Anything left from Lectures 1-2 and**

**More advanced regressions**

1. Instrumental variable estimation, 2SLS
2. Testing the strength of instrument (weak instrument problem)
3. Regression based difference-in-difference or event studies (panel estimate with dummies).
4. Creating fixed effects
5. Alternative ways of doing Panel estimates with fixed effects (xi., areg, include dummies)
6. Plot the effects on a chart with the event line

**Test of hypothesis and post-estimation**

1. Testing equalities in linear combination of coefficients
2. Collecting estimates from regressions and using them in calculations.
3. Sending the output of regression to tables