Running GAMS on PCs (BRB 4th Floor Lab) General Equilibrium Lab

Login Review:

- (1) Press <Ctrl>+<Alt>+ to bring up login prompt
- (2) Type in your UT EID and password
- (3) Select 'Austin' as the network (if the option appears)

Quick review on how to download files needed for the lab

- (1) Open a browser such as **Internet Explorer** or **Mozilla Firefox**.
- (2) Go to the class website at http://laits.utexas.edu/compeco/Courses/index392.html
- (3) Find the lab of interest (organized by date) in the program archive table on the website. The third column contains the necessary GAMS files, and have file extension ".gms"
- (4) Download the files in the code column by right-clicking on the file name and choosing "Save Link As..." (Firefox) or "Save Target As..." (Internet Explorer). Left-clicking on the code links will open the text in the browser, but will not download the file. Make sure to note where you saved the file (e.g. Desktop, My Documents, etc.).

Running GAMS on PCs

- (1) Double click on the **GAMS** icon on the desktop
- (2) If prompted, type any **project name** you choose and click **Open**. You do not need to create the project in the same location as your GAMS files although this is preferable if you are working with multiple files and projects. GAMS asks for a project name in order to create a list of files that were created, run, etc. Do not worry about this step.
- (3) Click on the "open" icon in the menu bar located at the top of the GAMS window. Navigate to your file location by clicking on Desktop or My Documents on the left panel and/or by double-clicking on the relevant folder(s) in the window that pops up. Highlight the GAMS file you wish to run (sam.gms, io-1.gms, io-2.gms, etc.). and click **OK**.
- (4) You can now see the GAMS program file in the main window. The editor color codes variables, commands, and comments for convenience. The name of the GAMS program ends with ".gms"
- (5) Before modifying the file, it is advisable to run it once. To **RUN** code, press the F9 key or click on the RUN icon.
- (6) GAMS executes the file and displays a window which shows all the details of the execution process. Check to see whether the last line on the window titled "No active process" is "***Status: Normal Completion." This window can be closed now.
- (7) The output of the GAMS code file is in the list file (.lst) which is also displayed in the main window
- (8) You can check the results in the list file
- (9) To modify the code, click on the button that has the name of the GAMS file. After modifying the file, you need to **run the program again** following steps (5)–(8). Changes can be seen in the output list file.

Ending a Session

- (1) Click on the <START> button on the bottom leftmost portion of the screen
- (2) Click "Logout"
- (3) NOTE: be sure to remove any CDs before logging out, and be sure to take any removable media (e.g. thumb drives) with you.

Lab Specific Notes

- (1) If you are using PCs in the 4th floor lab, remember to **back up your work**. Once you log out, all work saved to the local computer is gone. This means **email it to yourself, save it to webspace, backup to your personal Dropbox account, save it to a thumbdrive**, or use some other method to ensure you have backed up your work.
- (2) When editing GAMS files, avoid **<tab>**, and instead use **<space>**. GAMS recognizes spaces while reading columns in tables, etc., but has **syntax issues with <tab>**.
- (3) Also, please be sure to restrict the names of variables to 10 characters or less.
- (4) You may encounter a compilation error when you run a PC edited *,gms file on *NIX. This problem is caused because *NIX does not recognize DOS end-of-line characters. To run the GAMS file in *NIX, you need to change the file in DOS format to UNIX format. To do this, say if the GAMS file that's causing the errors is named *myfile.gms*, type

dos2unix myfile.gms newfilename.gms

Here *newfilename.gms* is the new file you want to run/open in GAMS. After this procedure you can use GAMS normally, substituting the new file name anywhere the old file name occurred.