

SPME 430 Biomechanics Projects Graphical Printouts - KinTrak System

1. On the counter, turn on the inkjet printer – DESKJET 1600 CM.
2. Turn on the computer monitor (if necessary).
3. Turn on the peppermint computer.
 - A. Select the first option during startup (Select Windows 2000 Operating System) by pressing the Enter (↵) key or wait for the timer to count down.
 - B. Allow the system to start. When the start up is complete, you will see a screen that says "press CTRL-ALT-DEL to log on".
 - C. **CTRL-ALT-DEL**
 - D. Enter your user name. The user name for our class is SPME430
 - E. Enter your password. The password for our class is Biomechanics
 - F. **OK**
4. Double-click the "KT62 Server" icon on the computer's desktop. A window labeled KT6 Server will open.
5. Double-click the "KinTrak KT62" icon on the computer's desktop. The KinTrak 6.2.2 program will open.
6. From the **Project** menu, select **Load Project**
7. Single-click to highlight the project 40 09:03:12 SPME 430 Projects 2009, and single-click on **Load**.
8. Single-click the **Graphical** icon.
9. In the *KinTrak 6.2.2 – Graphical Analysis – Project 40* window that opens, from the **Graph** menu, select **Load Format**
10. Select the format for your first graph and single-click on **Load**.
11. The Specify Data for Load window will open. (*You must click in a box to make it active before you can type in it.*) Do not change any other settings in this window!
 - A. Single-click the diamond next to the first occurrence of Trial List File.
 - B. In the first Trial List File Name box, type the name of the group you desire.
 - C. In the first Legend box, type an appropriate legend name for this group.
 - D. Single-click the diamond next to the first occurrence of Trial List File.
 - E. In the second Trial List File Name box, type the name of the group you desire.
 - F. In the second Legend box, type an appropriate legend name for this group.
 - G. Single-click **Apply**
12. The program will now start to execute and prepare your graph, this may take some time, be patient! A graph will be displayed when the program completes execution.
13. **Edit – Graph Setup ...** - In the first or X-Axis column, make the following changes.
 - A. Minimum Value: -150
 - B. Maximum Value: 125
 - C. Tic Increment: 50
 - D. Single-click **Apply**.
14. If you wish, you may make other changes to the graph format using the features in the Edit Menu of the Graph Window. The selections are self explanatory for the most part.

15. If you wish to print the graph <NOT RECOMMENDED>
 - A. In the graph display window, from the **Graph** menu, select **Print**, and then select **Print Options**
 - A. Make the following selections in the Graph: Printing window
Print to: Windows NT / Printer
Printer: HP Desk Jet 1600CM/PS
Make certain the box next to Print Banner is unchecked (light color).
Page Size: Letter
Page Orientation: Landscape or Portrait (*Landscape may work better*)
Font Size: 12
Type of Postscript: Monochrome or Colour
 - B. Single-click **Print**.
 - B. The graph will print.
16. If you wish to save the graph to a file.....
 - A. In the graph display window, from the **Graph** menu, select **Print**, and then select **Print Options**
 - A. Make the following selections in the Graph: Printing window
Print to: Postscript File
Page Size: Letter
Page Orientation: Landscape or Portrait (*Landscape may work better*)
Font Size: 12
Filename: *Enter a Unique Filename for the file, the extension for the filename must be ".ps"*
Type of Postscript: Colour
 - B. Single-click **Print**.
 - B. The file will be saved.
 - C. See the section on change from .ps to .jpg format to change the format of the output file. You must complete the step in order to import your graph file into MS Word or PowerPoint.
17. In the graph display window, from the **Edit** menu, select **Clear Graph**
18. Return to step 9 to plot another graph.
19. When all graphs are complete, click the "X" in the upper right-hand corner of all open KinTrak program windows to shut down the program.
20. **CTRL-ALT-DEL**
 - A. Shut Down
 - B. Shutdown
 - C. OK
21. Turn off all items listed in Step #1 and Step #2 on page 1.
22. Lock the door to the lab on your exit.

IF THE PRINTER BEHAVES ODDLY, DOESN'T PRINT, OR SEEMS TO NOT WORK, TURN IT OFF AND THEN TURN IT BACK ON. THE POWER BUTTON IS WHITE AND LOCATED ON THE LOWER LEFT FRONT OF THE PRINTER.

Changing Graph Format From .ps To .jpg

1. From the Desktop, double-click the GSview 4.9 icon.
2. Select **OK**
3. **File – Open**
 - A. Select Desktop from the left menu
 - B. Double-click the PS Graph File Location Folder
 - C. Select your .ps graph file from the list of files that appear
 - D. Select **Open**
4. **File – Convert**
 - A. Under Device: select jpeg
 - B. Under Resolution: Select 600
 - C. Select **OK**
 - D. If the Save In: location is JPG Graphs for Output, skip to step 4E; otherwise, select Desktop from the left menu and double-click the JPG Graphs for Output Folder.
 - E. In the FileName box, type the filename for your .jpg file. The filename must end with an extension of “.jpg”.
 - F. Select **Save**
5. **File – Exit**

6. Return to the Desktop
7. Your .jpg graphs will be in the folder JPG Graphs for Output
8. You can use a CD or a jump drive to copy your graph files from the JPG Graphs for Output folder to your computer. USB ports are located on the left-side of the computer monitor.
9. Once you have imported the .jpg file into PowerPoint, you can add labels to the axis, etc.

Graph Formats

All graphs will plot the data for 2 groups on a single variable.

Ankle Angle
Ankle Omega
Ankle RJT

Plantar/Dorsiflexion Angle @ Ankle
Plantar/Dorsiflexion Angular Velocity @ Ankle
Plantar/Dorsiflexion RJT @ Knee

Hip Angle
Hip Omega
Hip RJT

Flex/Extension Angle @ Hip
Flex/Extension Angular Velocity @ Hip
Flex/Extension RJT @ Hip

Knee Angle
Knee Omega
Knee RJT

Flex/Extension Angle @ Knee
Flex/Extension Omega @ Knee
Flex/Extension RJT @ Knee

VertVel CM

Vertical (Z) Linear Velocity of CM

VGRF-L
VGRF-R

Vertical GRF Left Leg
Vertical GRF Right Leg

Shoulder Angle
Shoulder Omega

Flex/Extension Angle @ Shoulder
Flex/Extension Omega @ Shoulder

Elbow Angle
Elbow Omega

Flex/Extension Angle @ Elbow
Flex/Extension Omega @ Elbow

Trunk Angle
Trunk Omega

Flex/Extension Angle @ Trunk
Flex/Extension Omega @ Trunk

Group Filenames

C_Skilled.txt	All Motivated Countermovement Jump Trials by Skilled Subjects
U_Skilled.txt	All Unmotivated Countermovement Jump Trials by Skilled Subjects
W_Skilled.txt	All No Arm Swing Countermovement Jump Trials by Skilled Subjects
S_Skilled.txt	All Countermovement Jump Trials by Skilled Subjects from Sand
F_Skilled.txt	All Fatigued Countermovement Jump Trials by Skilled Subjects
T_Skilled.txt	All Two Step Jump Trials by Skilled Subjects
C_Unskilled.txt	All Motivated Countermovement Jump Trials by Unskilled Subjects
U_Unskilled.txt	All Unmotivated Countermovement Jump Trials by Unskilled Subjects
W_Unskilled.txt	All No Arm Swing Countermovement Jump Trials by Unskilled Subjects
S_Unskilled.txt	All Countermovement Jump Trials by Unskilled Subjects from Sand
F_Unskilled.txt	All Fatigued Countermovement Jump Trials by Unskilled Subjects
T_Unskilled.txt	All Two Step Jump Trials by Unskilled Subjects
All_C.txt	All Motivated Countermovement Jump
All_U.txt	All Unmotivated Countermovement Jump Trials
All_W.txt	All No Arm Swing Countermovement Jump Trials
All_S.txt	All Countermovement Jump Trials from Sand
All_F.txt	All Fatigued Countermovement Jump Trials
All_T.txt	All Two Step Jump Trials