Lab Session 1: Introduction (Week 9)

1.11 Aims of this introductory session

As we will be working together for this academic year it would be very useful for all involved to establish some common practices and expectations. These are the aims of this introductory session, so today we will not be doing any programming in R or any statistical analysis. Instead we will be doing some basic files and folders tasks that will prepare us for the next weeks.

1.12 Common Practices

It will be a common practice in our PSYC3000 course to create a new **Project** every week. This will help us keep our work organised and it has a number of benefits.

1. It will be easier to communicate with your Associate Lecturers
2. It will be easier to communicate with your fellow students
3. It will get you into the habit to keep your work organised. This is crucial in data analysis and programming.

1.13 A Note About the Following Tasks

We encourage all students to work on their own laptops, if possible. However, for today's lab session we want you to complete the following tasks using a University computer first. Later if you want, you can repeat these steps in your own computer.

1.14 First Task: Create your PSYC3000 folder

Regardless of whether you are working on your own computer or on a University one you should create a folder that you will be using to create all future projects. On your desktop, create a folder called **PSYC3000 Labs**. There are many different ways to achieve that, the

quickest one is to *right-click* on your desktop, then select *new* and then *folder*. Make sure you name the folder **PSYC3000 Labs**.

1.15 Second Task: Create your first project

Run RStudio on a University Lab computer. We want you to create your first project in the newly created folder **PSYC3000 Labs**. On RStudio, click on **File**, then **New Project**. You will see a pop-up window with **three** options. Click on **New Directory**. You should always be creating New projects in their own new directory. Next, you will see a number of different options, click on the top one **New Project**. You will now be asked to name the directory of your new Project. We want you to name it **Week 9**. Furthermore, we want this directory to be in the **PSYC3000** folder. *By they way, **directory** is just an old school term for **folder**. **Folder** and **directory** are the same thing*. So, click **Browse** next, then find the folder **PSYC3000** on your desktop and select it and click **Open**. Finally, click **Create Project**.

1.16 Third Task: Have a look at how your RStudio looks

If all went well then you should be seeing three main *blocks* in front of you, called **panes**. The **Console/Terminal/Jobs** one, the **Environment/History/Connections/Tutorial**, and the **Files/Plots/Packages/Help/Viewer** one. Do not worry if they look a bit scary, we will talk more about them next week. For the time being we will only focus on the console. You should be able to see the **prompt** flashing next to an arrow. If you start typing you should be able to see the text appearing in front of you. Let us try to type the following “Hello There” and then press **ENTER**. *Below is the line of code we want you to type, this is how we will indicate this in future*.

```
Hello There
```

You should now be seeing a message in front of you - R’s response to your line of code.

1.17 Fourth Task: Labs are integrated with the Moodle Module Participation Component

As mentioned in our Drop-In session and in our Module Outline, PSYC3000 have an assessed Module Participation component. This means you will have to complete a number of tasks every week in order to receive 10% at the end of the Autumn Term. Please do not close your RStudio. Go on Moodle, in Week 9, and then in the **Moodle Module Participation** section you should be able to see an activity called **Week 9: Introductory Quiz**. Click on it and answer the first question. This will be one of the ways that you will have to complete the weekly module participation component through your lab session. There will also be other ways that we will discuss in the future. You can take this quiz as many times as you want.

1.18 Fifth Task: Let us go back to RStudio again

Back in RStudio, and in your **Console** type in **131 + 145** and hit **ENTER**.

```
131+145
```

You should be able to see a result now, this is because the RStudio console can compute mathematical operations by default. Go back to the **Week 9: Introductory Quiz** and answer the second question. The console can also run R commands and we will be using quite a lot in the next weeks.

1.19 Final Task: Let us create our first script

Before we wrap it up for today let us create our first basic script. We will be discussing next week what scripts are and why they are useful. For now, we only want to create one. Go back to RStudio and click on **File** then **New File** then **R Script**. How many **panes** do you see now on your screen? Type that answer in the Quiz, in Question 3.

1.20 And that is all for today

You should still have plenty of time left. We recommend that you spend time familiarising yourself with RStudio. One way to do that is to repeat all the above steps on your laptop. Another way to do that is try out different looks for RStudio. If you want to do that click on **Tools**, **Global Options**, **Appearance**. There you can select different RStudio theme, font, and

Editor theme. Feel free to experiment with different looks by clicking **Apply** and then going back and choosing another **theme**. If instead you are having difficulties installing RStudio on your laptop then ask our Associate Lecturers to direct to you to our tech support.