Fundamentals of R Programming

HPRC Training

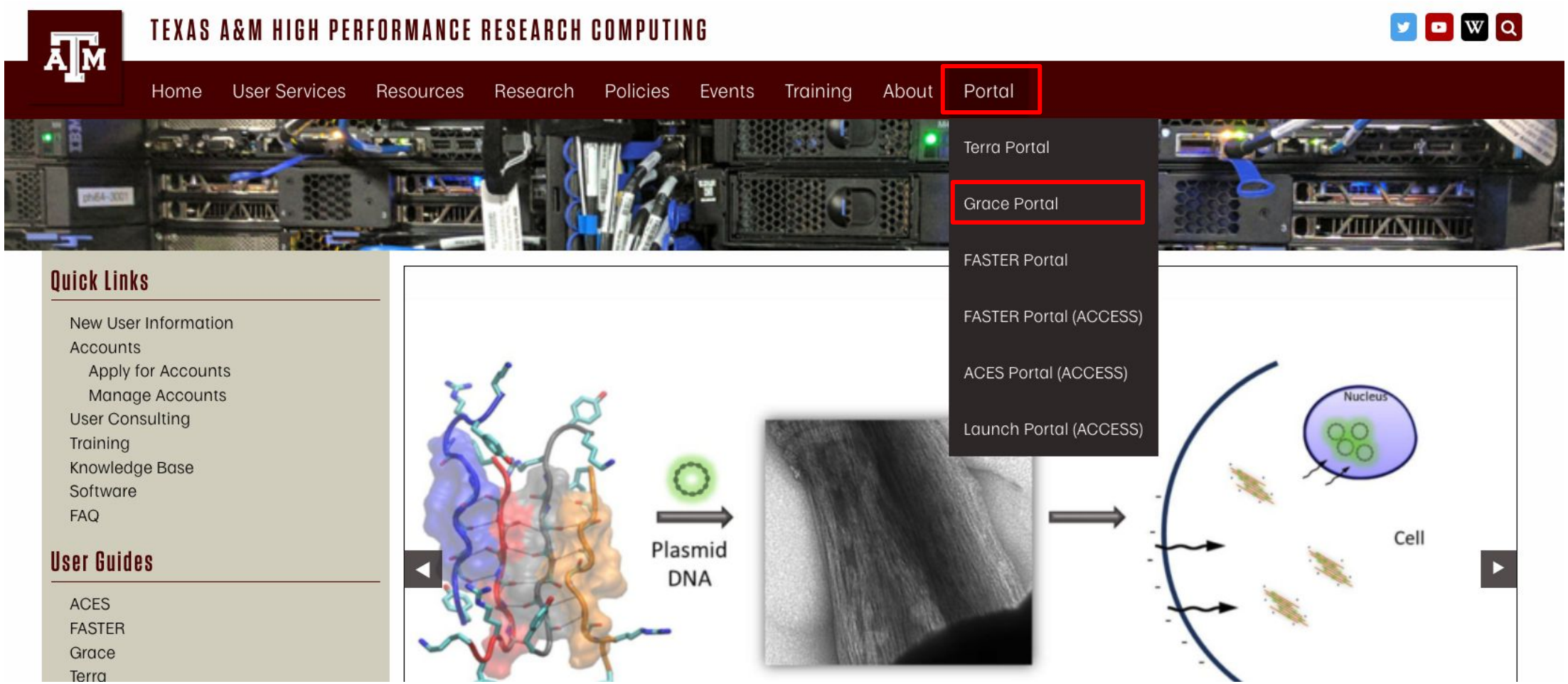
8 March 2024

High Performance
Research Computing
DIVISION OF RESEARCH

Course Outline

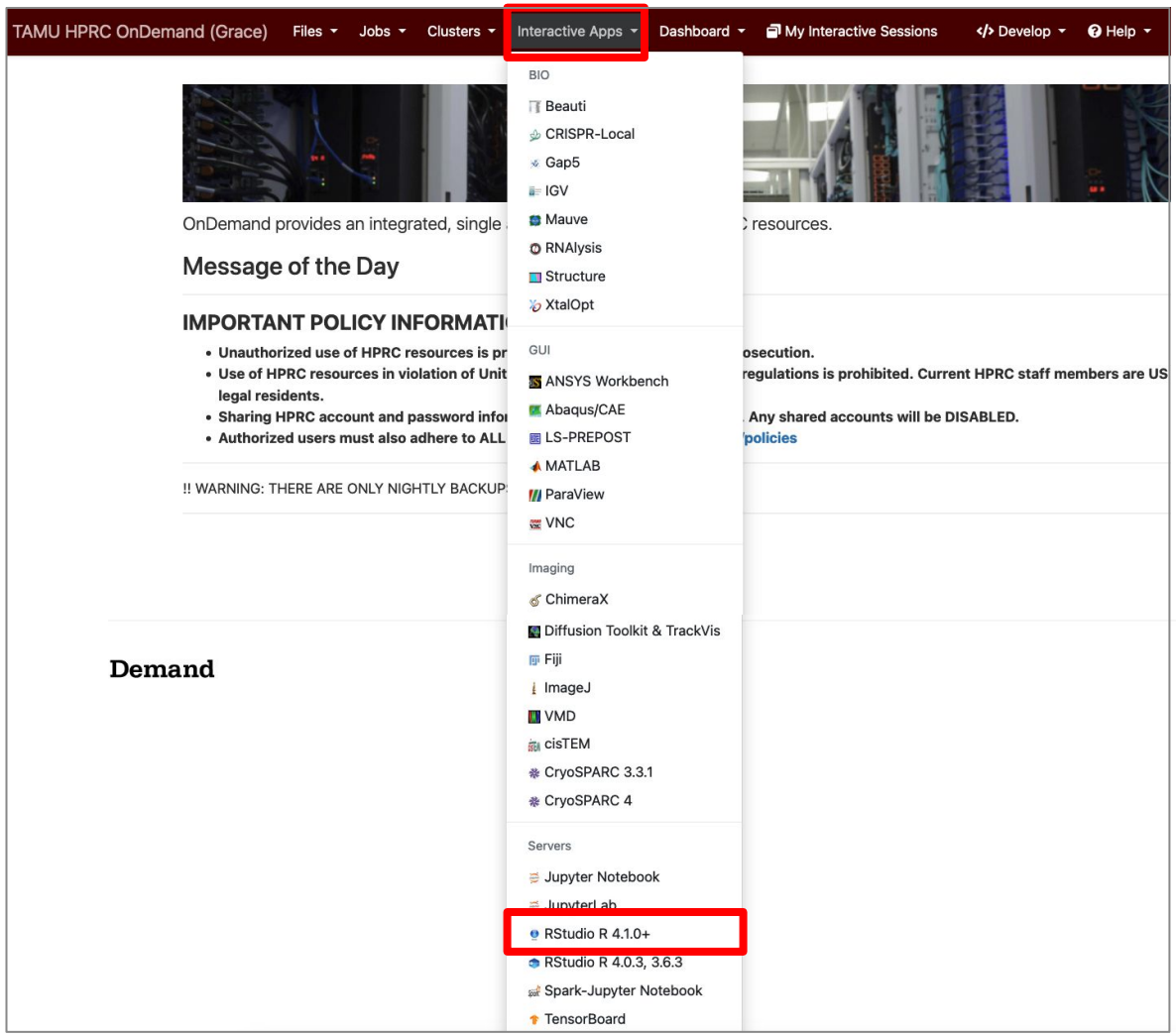
1. Accessing Grace
2. Launching RStudio
3. Arithmetic Operators
4. Data Types and Variables
5. Built-in Functions
6. Vectors
7. Matrices
8. Data Frames

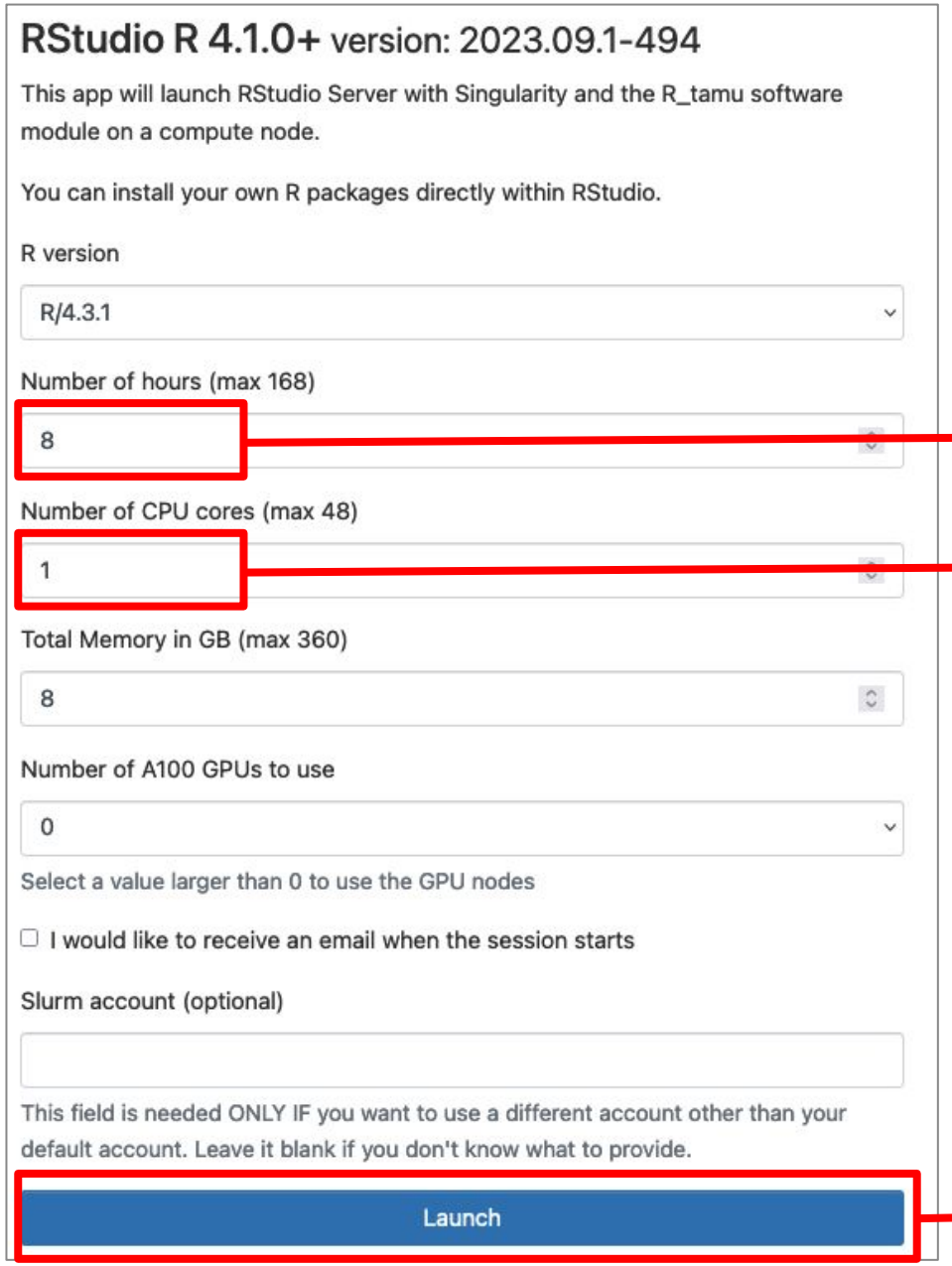
Accessing the HPRC Grace Portal



HPRC webpage: hprc.tamu.edu

Launching RStudio on Grace

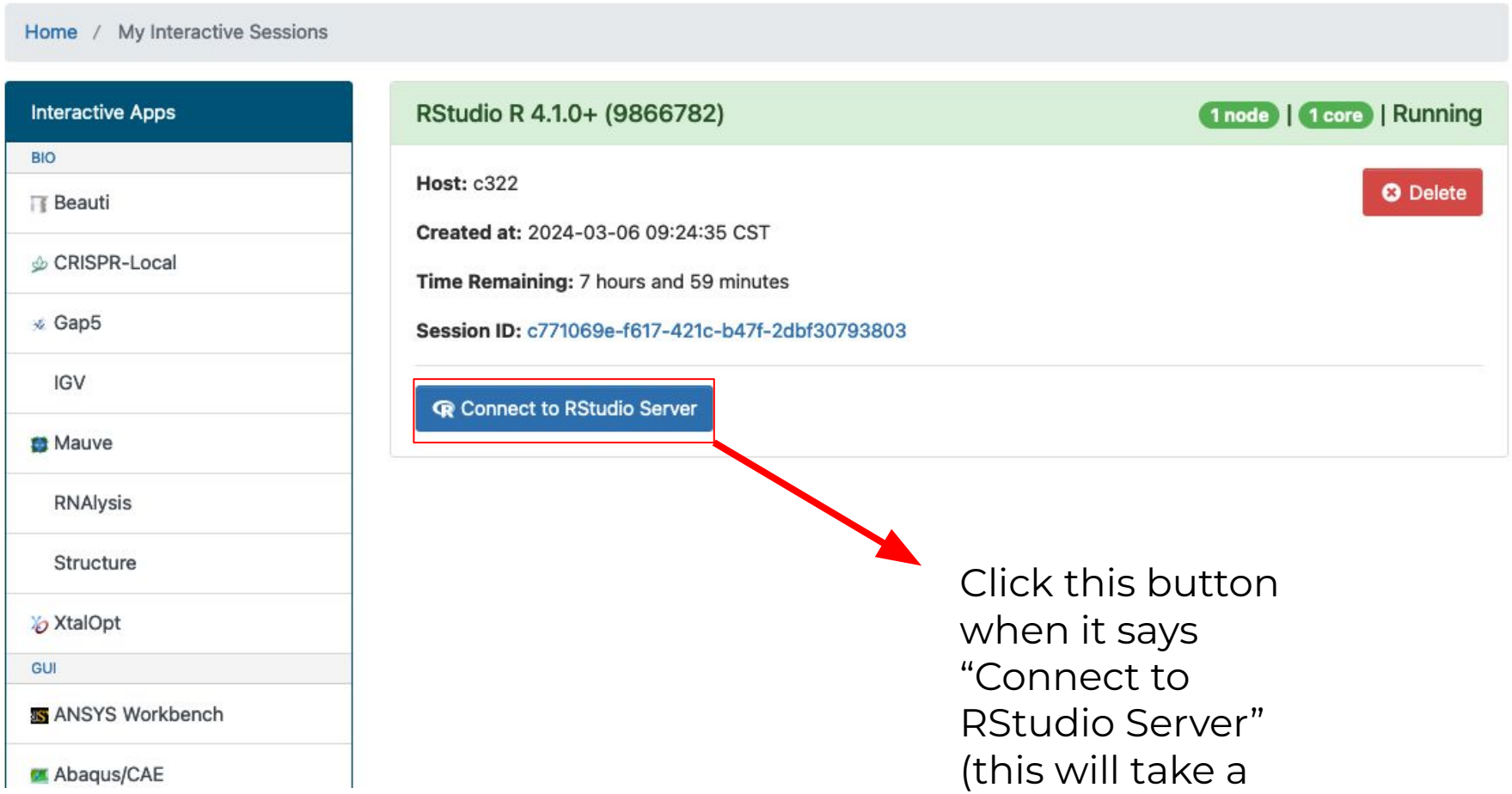




Set number of hours to 8

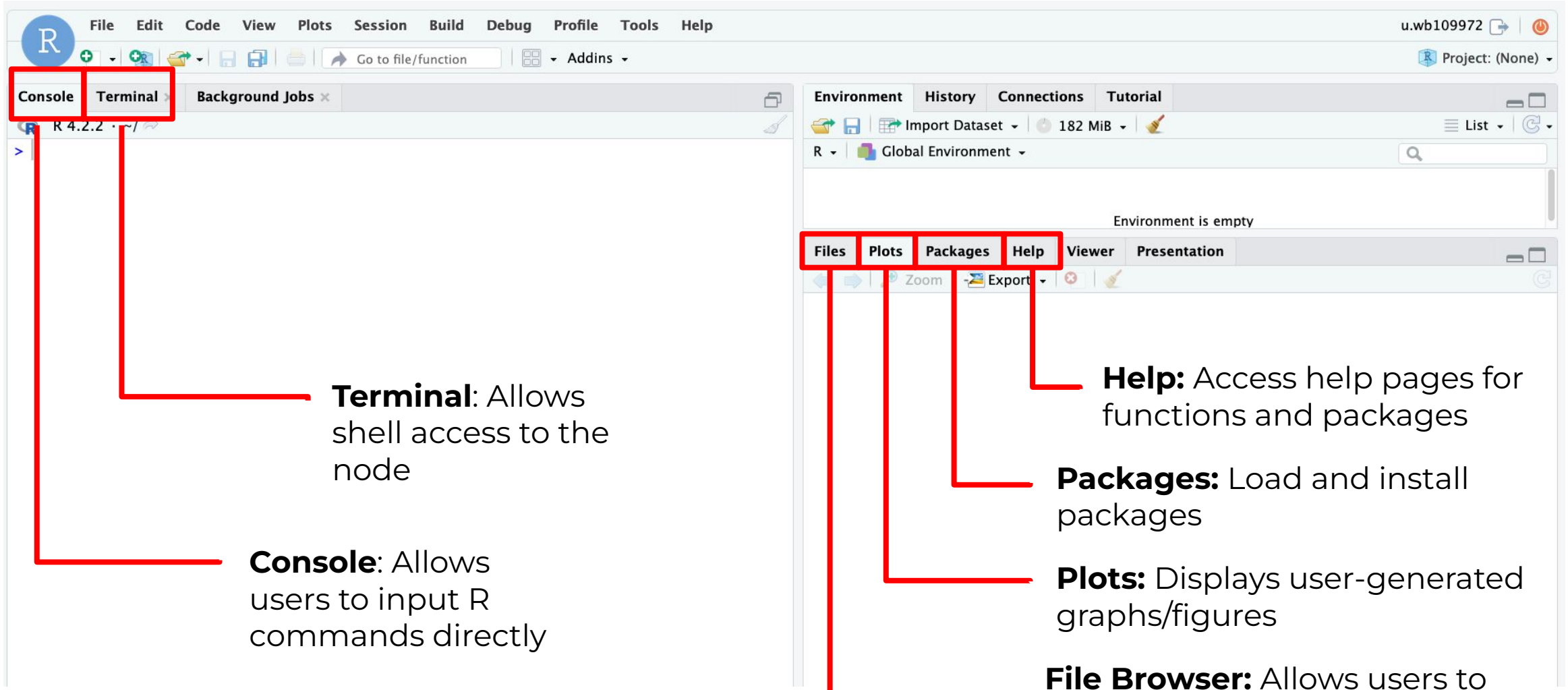
Set number of cores to 1

Click “Launch” once the correct parameters have been selected



Click this button when it says "Connect to RStudio Server" (this will take a minute)

RStudio Interface



Accessing the Course Materials

- Open the terminal tab in the portal (Clusters > ACES_shell_acces) and run the following commands:

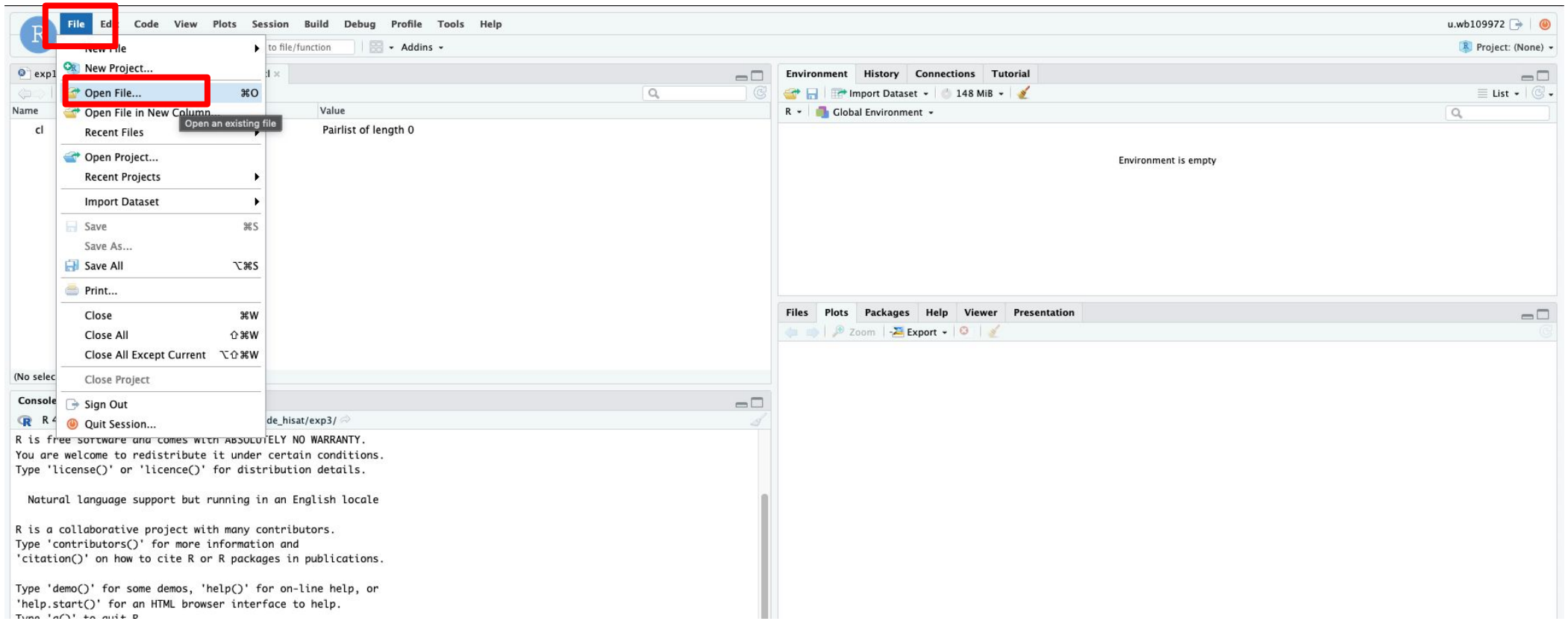
```
[user@grace1 ~]$ cp -r /scratch/training/FundamentalsOfR/ .
[user@grace1 ~]$ cd FundamentalsOfR/
[user@grace1 ~]$ ls
```

The output should read:

```
carnivores.csv  carnivores.xlsx  datascience.xlsx  FundamentalsOfR.Rmd
```

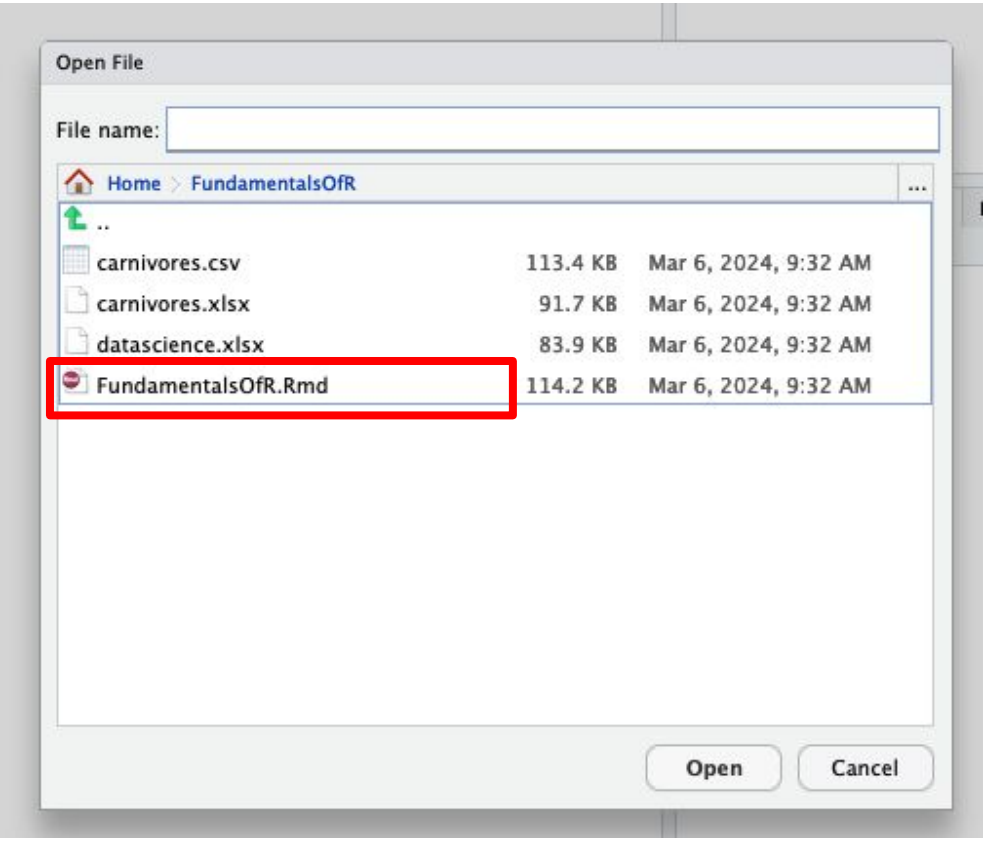
Accessing the Course Materials

- Next, in the upper left corner, select File > Open File



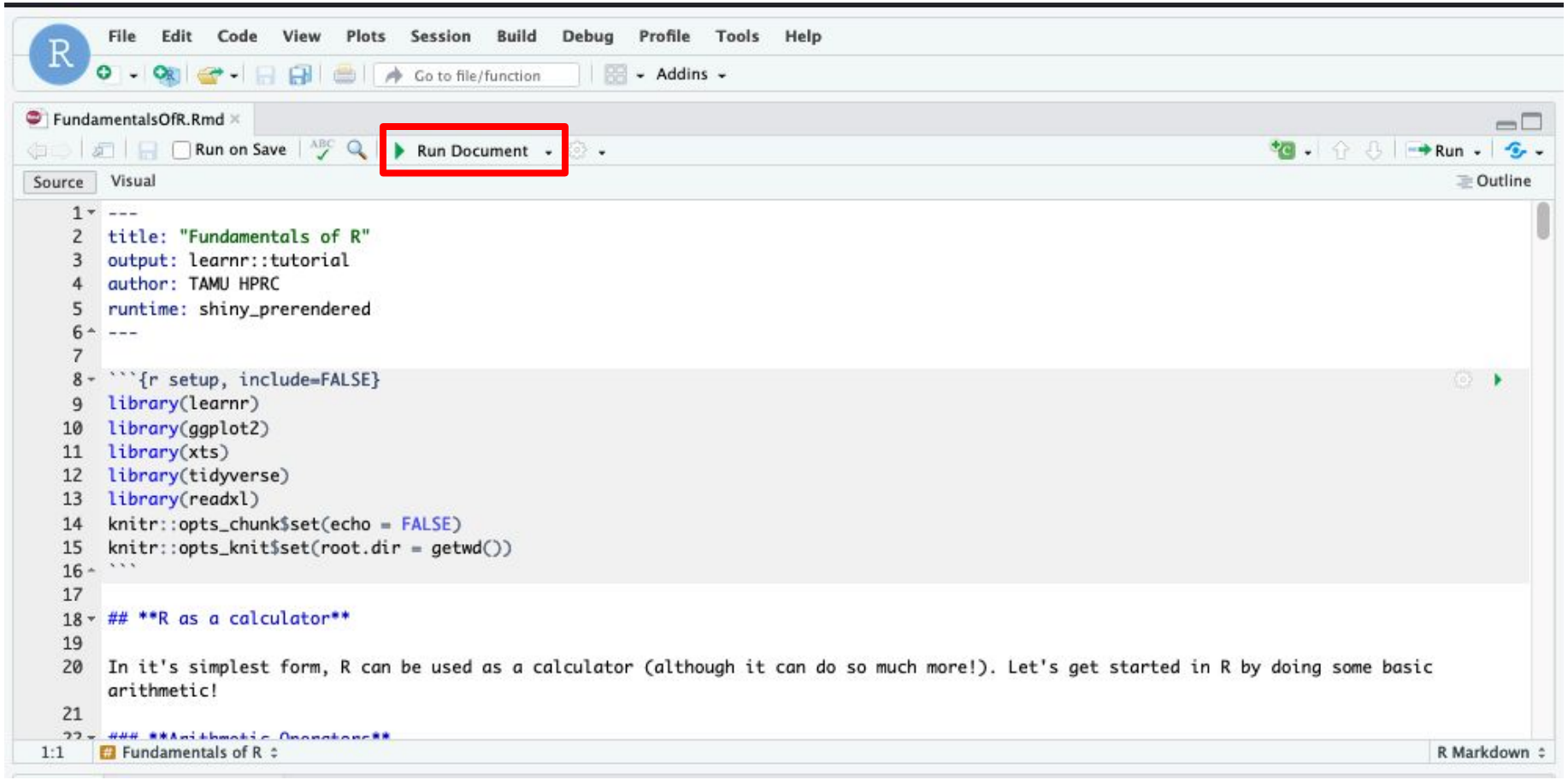
Accessing the Course Materials

- Navigate to the DataScienceR directory and select "IntroductionToDataScienceInR.Rmd"



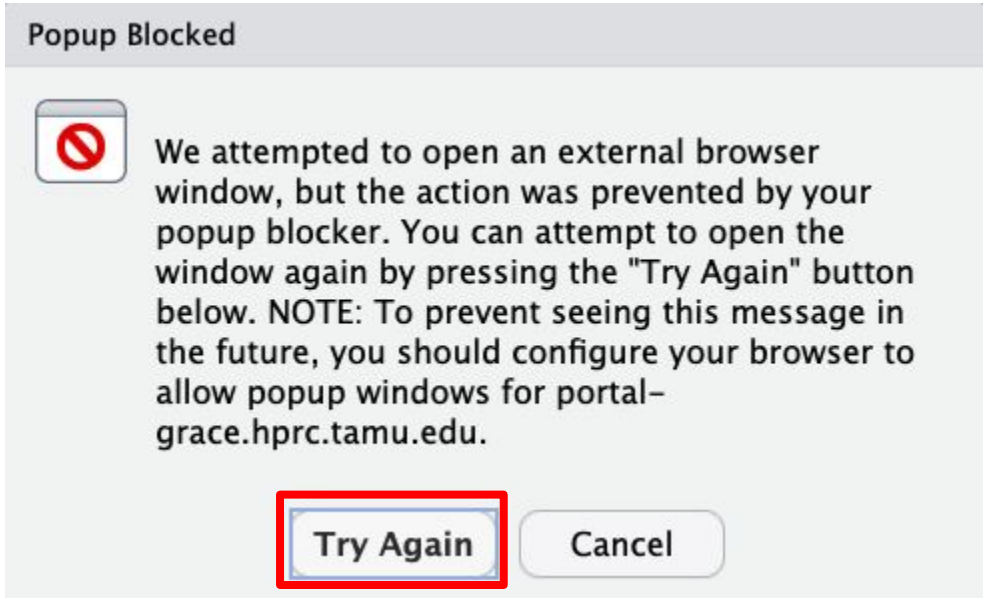
Accessing the Course Materials

- Select “Run Document” from the toolbar to launch the workbook.

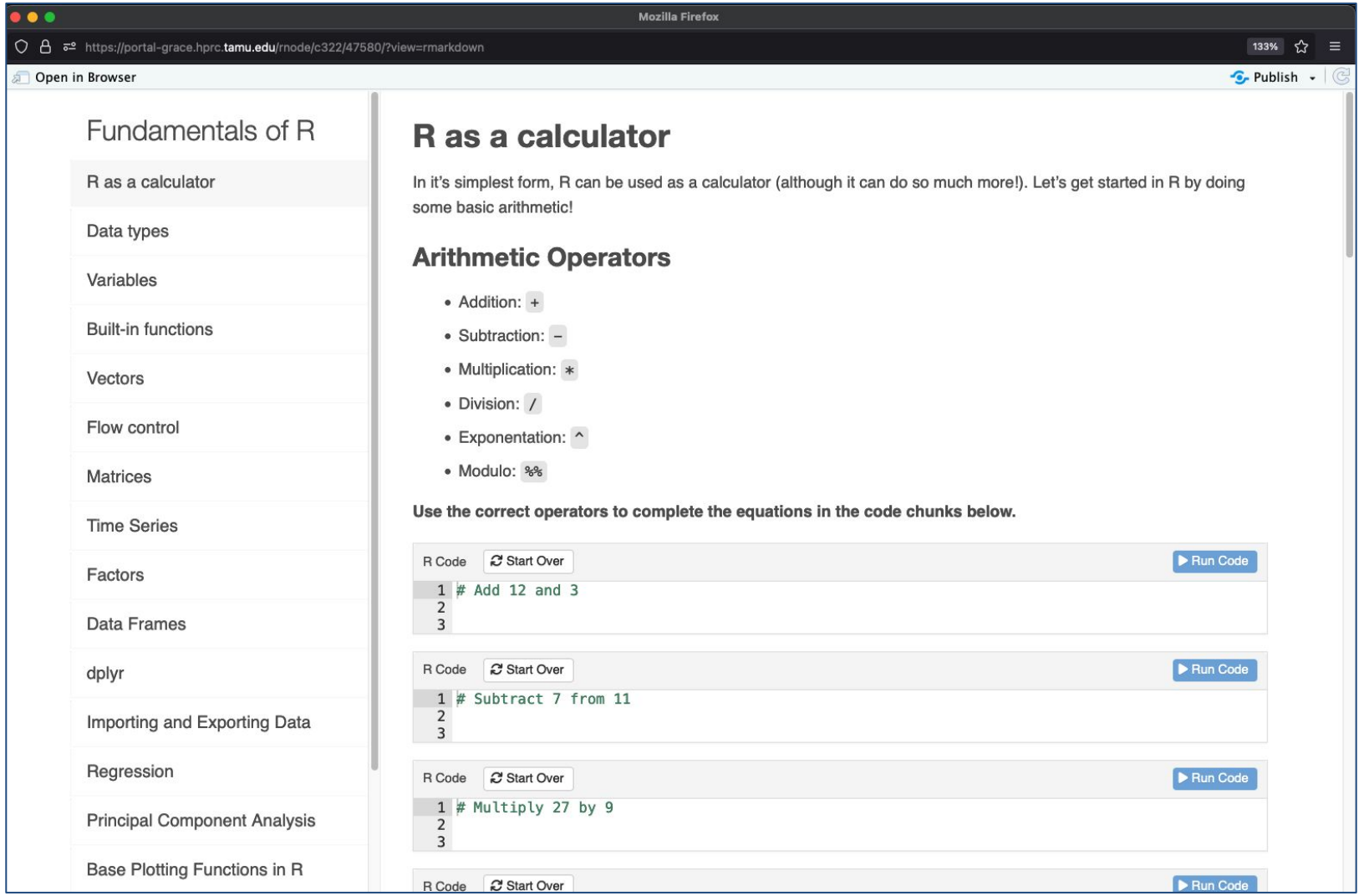


Accessing the Course Materials

- If you see a dialog box that says “Popup Blocked” click “Try Again”, and the workbook should open in a new tab.



Transition to Workbook



Need Help? Contact the HPRC Helpdesk

Website: hprc.tamu.edu
Email: help@hprc.tamu.edu
Phone: (979) 845-0219

Help us help you -- we need more info

- Which Cluster (ACES, FASTER, Terra, Grace)
- NetID (NOT your UIN)
- Job id(s) if any
- Location of your jobfile, input/output files
- Application used, if any
- Module(s) loaded, if any
- Error messages
- Steps you have taken, so we can reproduce the problem