

INSTALLING AND UPDATING R AND R STUDIO ON YOUR COMPUTER

For this course you will need BOTH R and R studio.

You have three options and you can jump between them from lab to lab.

1. Installing on your own computer (recommended if you normally bring a laptop)
2. Lab computers (hopefully!)
3. Online at Posit-cloud <https://posit.cloud/>

[Read if you already have R and R-Studio installed](#)

If you already have R and/or R-studio installed **on** your computer, it's important you update to the most recent version, because many of the large analysis packages updated recently. You should be running

- R: R 4.5.2 “[Not] Part in a Rumble” released on 2025/10/31
- R-Studio: “Apple Blossom”

If you already have the most recent version, jump down to Activity 2.4 (screenshots)

If your version is out of date, follow the instructions below as though you were installing for the first time. It's still possible to roll-back if needed. You will not lose your work! It just updates the underlying software. If you have any concerns, please let Dr G know.

Installing R and R-Studio for the first time (or Updating R and R Studio)

To install the lab software onto your own laptop, you need to complete two tasks:

- [1] First you need to teach your computer to ‘speak R’ by downloading/installing the R software.
- [2] **Then** need to install the software we use for the labs (R-Studio).

INSTALLING R

STEP 1

- Go to this website <https://posit.co/download/rstudio-desktop/>
- Scroll down and click on “Installing R”.

FIRST,
CLICK
HERE!

1: Install R

RStudio requires R 3.6.0+. Choose a version of R that matches your computer's operating system.

R is not a Posit product. By clicking on the link below to download and install R, you are leaving the Posit website. Posit disclaims any obligations and all liability with respect to R and the R website.

[DOWNLOAD AND INSTALL R](#)

2: Install RStudio

DOWNLOAD RSTUDIO DESKTOP FOR MACOS 12+

This version of RStudio is only supported on macOS 12 and higher. For earlier macOS environments, please [download a previous version](#).

Size: 617.71 MB | SHA-256: 46958FB84 | Version: 2024.12.0+467 | Released: 2024-12-16

STEP 2

- Clicking the link will take you to a scary looking website called Cran R.
- Click the “INSTALL R” for your computer type.

The Comprehensive R Archive Network

Download and Install R

Precompiled binary distributions of the base system and contributed packages, **Windows** and **Mac** users most likely want one of these versions of R:

- [Download R for Linux \(Debian, Fedora/Redhat, Ubuntu\)](#)
- [Download R for macOS](#)
- [Download R for Windows](#)

CLICK ONE OF THESE (EVEN IF YOU ARE UPDATING R)

R is part of many Linux distributions, you should check with your Linux package management system in addition to the link above.

Source Code for all Platforms

Windows and Mac users most likely want to download the precompiled binaries listed in the upper box, not the source code. The sources have to be compiled before you can use them. If you do not know what this means, you probably do not want to do it!

- The latest release (2024-10-31, Pile of Leaves) [R-4.4.2.tar.gz](#), read [what's new](#) in the latest version.
- The CRAN directory [src/base-prerelease](#) contains R alpha, beta, and rc releases as daily snapshots in time periods

The next part looks a little different depending on whether you are using a Windows computer or a Mac.

STEP 3 FOR WINDOWS PEOPLE

- Click “Installing R for the first time”, EVEN IF YOU ARE UPDATING R-STUDIO

R for Windows **CLICK THIS**
(EVEN IF YOU ARE UPDATING R)

Subdirectories:

- [base](#) Binaries for base distribution. This is what you want to [install R for the first time](#).
- [contrib](#) Binaries of contributed CRAN packages (for R >= 4.0.x).
- [old contrib](#) Binaries of contributed CRAN packages for outdated versions of R (for R < 4.0.x).
- [Rtools](#) Tools to build R and R packages. This is what you want to build your own packages on Windows, or to build R itself.

Please do not submit binaries to CRAN. Package developers might want to contact Uwe Ligges directly in case of questions / suggestions related to Windows binaries.

You may also want to read the [R FAQ](#) and [R for Windows FAQ](#).

Note: CRAN does some checks on these binaries for viruses, but cannot give guarantees. Use the normal precautions with downloaded executables.

- This will download a file.
- Double click to install.
- You do not need a shortcut on your desktop (because we will use R studio to access it)

STEP 3 FOR PEOPLE USING A MAC

- There are two potential options for you to download - only one will work and neither will hurt your computer, so it's easy to try both if you're not sure.
 - If your Mac is pretty new, try the top option.
 - If your Mac is more than a few years old, try the second option.

R for macOS

This directory contains binaries for the base distribution and of R and packages to run on macOS. R and package binaries for R versions older than 4.0.0 are only available from the [CRAN archive](#) so users of such versions should adjust the CRAN mirror setting (<https://cran-archive.r-project.org>) accordingly.

Note: Although we take precautions when assembling binaries, please use the normal precautions with downloaded executables.

R 4.4.2 "Pile of Leaves" released on 2024/10/31

Please check the integrity of the downloaded package by checking the signature:
pkutil --check-signature R-4.4.2-arm64.pkg
in the *Terminal* application. If Apple tools are not available you can check the SHA1 checksum of the downloaded image:
openssl sha1 R-4.4.2-arm64.pkg

Latest release:

For Apple silicon (M1,2,...) Macs: **R 4.4.2** binary for macOS 11 (Big Sur) and higher, signed and notarized packages.
[R-4.4.2-arm64.pkg](#)
SHA1: hash: 7832cb5d6cd686fd03cc54c8ab4c93c464540a944
(ca. 94MB, notarized and signed)

For older Intel Macs:
[R-4.4.2-x86_64.pkg](#)
SHA1: hash: f49ad56ce3a0ac569fd8f9668749bc861b965b5e

- This will download a file.
- Double click to install.
- It might say that you cannot open the file because of safety concerns. If that's the case, click the magnifying-glass on the top right of your screen, search for settings, click on the security tab and click that it's OK to open it. Then try again.

INSTALLING R-STUDIO

You installed R! Your computer can now understand R commands. But we don't yet have a good way of creating our programs and reports. R-Studio is designed to do this.

STEP 1

- Go back to this website <https://posit.co/download/rstudio-desktop/>
- Scroll down but this time click the button on the right. It should automatically download a file onto your computer. (if you're on a mac and not sure which version, keep reading below the screenshot)

1: Install R

RStudio requires R 3.6.0+. Choose a version of R that matches your computer's operating system.

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[DOWNLOAD AND INSTALL R](#)

2: Install RStudio

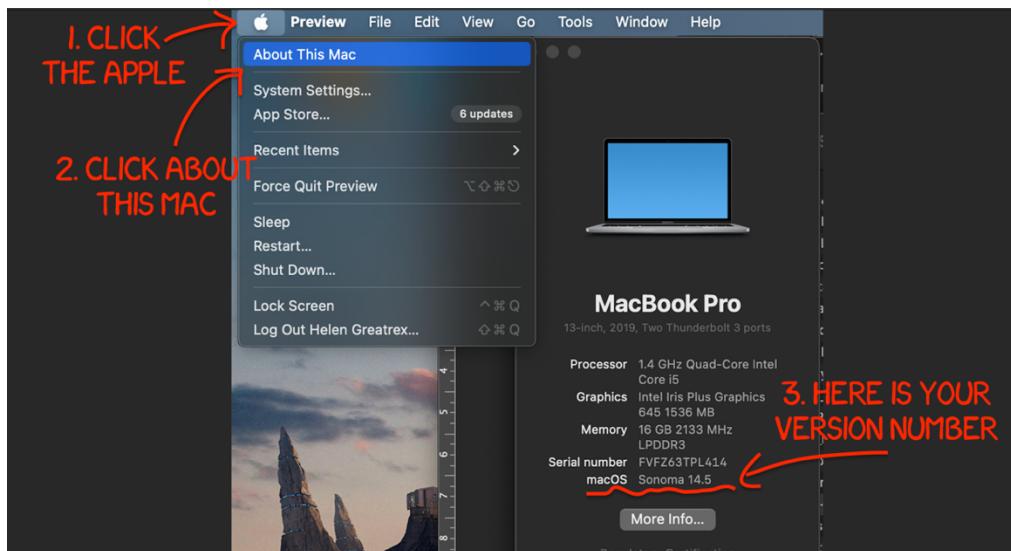
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*NOW CLICK HERE
(FOR YOUR TYPE
OF COMPUTER)*

If you're using a mac and need to check which version of the operating system you're using, follow these instructions.



STEP 2

Once you have downloaded the install file from R-Studio.

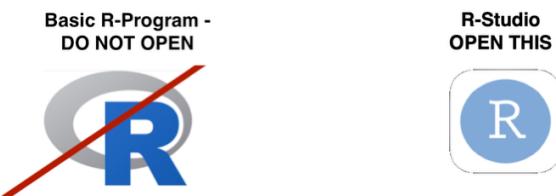
- IF YOU'RE USING A WINDOWS MACHINE: Double click and install as normal.
- IF YOU'RE USING A MAC, double click, then drag the icon into applications.
Nothing should happen!

If you have a very old mac this might be where the process breaks (Dr G can fix it)



WELCOME TO R!

Now everything is installed, open R-studio (NOT R!).



Or if you are on posit cloud, just start a new workspace. You should be running at least

- a. R: R 4.5.2 “[Not] Part in a Rumble” released on 2025/10/31
- b. R-Studio: “Apple Blossom”
- c. If you tried updating and it didn’t work, reach out to Dr G.

