

# Mathematical Biology Part 1A

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The practical classes introduce the statistical programming language, R. **The goal is that by the end of the course, all students should be able to use RStudio to work comfortably with data, and to do some simple computer programming.** All students will need to download and install copies of R and RStudio on their own computers, so they can engage in practical sessions throughout the year and work on the assessed exercises.

## Instructions for installing R and RStudio

It is generally easier if you **install R before installing RStudio**

### Installing R

1. Go to the Comprehensive R Archive Network (<https://cran.r-project.org/>)
2. At the box at the top of the screen click on the option to download R for your operating system (Linux, Mac or Windows)
3. For Windows  
Click on the “install R for the first time” link next to the “base” subdirectory  
Then click on the download link to the current version of R at the top of the page (e.g. “Download R 4.2.1 for Windows”)
4. For Mac  
Click on the first pkg link, about halfway down the page (e.g. “R-4.2.1.pkg”).
5. For Linux  
Follow the instructions for your Linux distribution.
6. In each case, follow the on-screen instructions for installing the program

### Installing RStudio

1. Go to the RStudio website (<https://www.rstudio.com/>)
2. Click Download
3. Scroll down a bit and click on the Download Button under the "RStudio Desktop - Open Source Licence - Free" column in the table
4. You will be presented with a list of clickable links under the heading “Installers for Supported Platforms”  
The top two links are for Windows and Mac users respectively. Click on the name of the one that you need. (The rest of the links are for Linux users).
5. Follow the on-screen instructions.

At this stage if you launch RStudio everything should work.

*If you have any issues with installing R and RStudio please contact the demonstrators during the first practical session.*

If you do not have access to your own computer, note that R and RStudio are installed on all Managed Cluster Service (MCS) computers installed by the University Information Service: this will include computers in College libraries and computer rooms.