

A gentle introduction to R and R Markdown

Stephen Cook*

R is a programming language that is used by scientists in a wide variety of fields. It is open source (free to use and driven by community development) and able to be installed on all major operating systems. RStudio is a desktop program that provides a graphical wrapped to the R language. The technical term for this type of program is *integrated development environment* (IDE), and it makes life much easier when using R.

This document will get you up and running in R and RStudio on your personal machine. You will need installation permission on your computer (if installing on your home computer you will almost certainly have this).

Installation

R

We will use R primarily for calculations, statistical analyses, and plotting data. R is generally more powerful than Excel or other 'point-and-click' programs, and once you generate code to perform a certain calculation or generate a graph, you may quickly reuse that code throughout the semester.

There are numerous online resources (including YouTube videos) that outline how to install R. Below are general instructions for a normal installation in Windows 10.

1. Navigate to the [R project homepage](#).

R Markdown

Obligatory 'hello world' example

*Baylor University, Department of Biology