# List of R commands introduced in Tutorials

## Week1

|  |  |  |
| --- | --- | --- |
| Function | Package | Comments |
| data | utils |  |
| View | utils |  |
| write.csv | utils |  |
| read.csv | utils |  |
| head | utils |  |
| class | base |  |
| lapply | base |  |
| as.character | base |  |
| read\_csv | readr |  |
| read\_population | gstudio |  |
| df2genind | adegenet |  |
| dim | base |  |

## Week2

|  |  |  |
| --- | --- | --- |
| Function | Package | Comments |
| %>% | dplyr |  |
| group\_by | dplyr |  |
| summarize | dplyr |  |
| n | dplyr |  |
| filter | dplyr |  |
| left\_join | dplyr |  |
| ==, >, <= | base |  |
| != | base |  |
| sum | base |  |
| merge | base |  |
| names | base |  |
| slotNames | methods |  |
| coordinates | sp |  |
| proj4string | sp |  |
| bubble | sp |  |
| extract | raster |  |

## Week3

|  |  |  |
| --- | --- | --- |
| Function | Package | Comments |
| table | base |  |
| range | base |  |
| split | base |  |
| length | base |  |
| nrow, ncol | base |  |
| sapply | base |  |
| matrix | base |  |
| dimnames | base |  |
| Reduce | base |  |
| rbind, cbind | base |  |
| list | base |  |
| t | base |  |
| [ , ] | base |  |
| is.na | base |  |
| != | base |  |
| seppop | adegenet |  |
| propTyped | adegenet |  |
| apply | base |  |
| mean | base |  |

## Week4

|  |  |  |
| --- | --- | --- |
| Function | Package | Comments |
| ecoslot.SlotName | EcoGenetics |  |
| sort | base |  |
| order | base |  |
| row.names | base |  |
| rank | base |  |
| sample | base |  |
| is.numeric | base |  |
| cor | stats |  |
| plot | graphics |  |
| with | base |  |
| lm | stats |  |
| summary | base |  |
| abline | graphics |  |
| points | graphics |  |
| qplot | ggplot2 |  |
| ggplot | ggplot2 |  |
| aes | ggplot2 |  |
| geom\_point | ggplot2 |  |
| geom\_smooth | ggplot2 |  |
| xlab, ylab | ggplot2 |  |

## Week5

|  |  |  |
| --- | --- | --- |
| Function | Package | Comments |
| plot(asp = 1) | base |  |
| dist | stats |  |
| as.matrix | base |  |
| lower.tri | base |  |
| diag | base |  |
| dnearneigh | spdep |  |
| data.matrix | base |  |
| nb2listw | spdep |  |
| listw2mat | spdep |  |
| nbdists | spdep |  |

## Week6

|  |  |  |
| --- | --- | --- |
| Function | Package | Comments |
| str | utils |  |
| lmer | lme4 |  |
| geom\_boxplot | ggplot2 |  |
| facet\_wrap | ggplot2 |  |
| geom\_line | ggplot2 |  |
| stat\_summary | ggplot2 |  |
| geom\_errorbar | ggplot2 |  |
| theme\_bw | ggplot2 |  |

## Week7

|  |  |  |
| --- | --- | --- |
| Function | Package | Comments |
| gabrielneigh | spdep |  |
| graph2nb | spdep |  |
| log | base |  |
| coord\_trans | ggplot2 |  |
| par(mfrow) | graphics |  |
| par(mar) | graphics |  |
| residuals | stats |  |
| fitted | stats |  |
| geom\_histogram | ggplot2 |  |
| lm.morantest | spdep |  |
| errorsarlm | spdep |  |
| as.data.frame | base |  |
| gls | nlme |  |
| Variogram | nlme |  |
| corExp | nlme |  |
| update | stats |  |

## Week8

|  |  |  |
| --- | --- | --- |
| Function | Package | Comments |
| expand.grid | base |  |
| seq | base |  |
| plot(asp=1) | graphics |  |
| coord\_fixed | ggplot2 |  |
| rnorm | stats |  |
| runif | stats |  |
| LETTERS | base |  |
| paste | base |  |
| paste0 | base |  |
| sprintf | base |  |
| grep | base |  |
| substr | base |  |
| strsplit | base |  |
| gsub | base |  |