Time series models for ecologists: course pre-requisites

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In preparation for the course please install the following, preferably in the below suggested order. Remember you will need to bring your own personal computer for the duration of the course.

Step 1

Install the following using the corresponding links

- R: http://www.r-project.org
- Rstudio (optional but recommended): https://www.rstudio.com
- JAGS: http://mcmc-jags.sourceforge.net

Step 2

Now install the following packages by going into Rstudio (or R) and typing:

```r
install.packages(c('R2jags',
                   'rjags',
                   'lubridate',
                   'tidyverse',
                   'forecast'))
```

Step 3

Install `rstan` by going to this link and following the instructions for your operating system.

Step 4

Check that JAGS works by going to a command line terminal and typing `jags`. If it opens successfully type `exit`.

Now go into R and copy and paste the following text:

```r
library(R2jags)
model_code="
model {
  y ~ dnorm(mu,1)
  mu ~ dnorm(0,1)
}
"
model=jags(data=list(y=1),
           model.file=textConnection(model_code),
           parameters.to.save = 'mu',
           n.chains=1)
plot(model)
```

This should produce a plot.

Troubleshooting

If you run into any problems please drop us a line at andrew.parnell@ucd.ie.