# Course

## Repository for course files

### Session 1

* Galaxy
  + Introduction
  + Transcriptomics
    - Data loading
    - Quality control
    - Read trimming
    - Alignment
    - Counting features
    - DESeq2

### Session 2

* R & RStudio
  + Download and install
  + Using R notebooks
  + Introduction to R and Tidyverse

### Session3

* DESeq2 - RStudio
  + Reading in data
  + Experimantal design
  + Normalisation
  + Differential expression

### Session 4

* Visualising DESeq2 results
  + ggplot2
    - PCA plots
    - Dispersion plots
    - Heatmaps
  + Contrasts
    - Volcano plots
    - MA plots

### Session 5

* Pathway analysis
* Gene Ontology analysis