* Objectives of the course
  + To provide an introduction to Bayesian statisti
  + Instead of focusing on the specific equations, I hope to provide a synthesization of the literature discussing the core philosophy of Bayesian statistics first, then working out from there to provide a basic understanding of how it works and how to differentiate a Bayesian approach from a Frequentist approach.
* Getting started…
  + Layout a common example to use through the module.
* Sources
  + Gelman, A., and C. R. Shalizi. 2012. Philosophy and the practice of Bayesian statistics. British Journal of Mathematical and Statistical Psychology 66(1):8-38.
* Nomenclature and Symbols
  + Reading probability statements
* A broad definition
  + Probability theory
* Bayes Theorem
* A simple Example
* More Advanced Tools (MCMC)
* Differences and Similarities between Bayesian, Frequentist and Maximum Likelihood approaches
  + “**Frequentist inference and Bayesian Inference are defined by their goals, not their methods.” -**
  + What is Frequentist statistics?
  + P(D|theta) vs P(theta|D)
  + P values and posterior distributions – “tetrapoda”
* If you wish to further explore the concepts discussed in this module or for a deeper dive, I have provided a number of resources which I have found useful, primarily youtube channels where you can find …For more information on Bayesian or Frequentist statistical approaches…Additional Resources:
  + Youtube channels: Richard McElreath, ritvikmath
  + Dynamic Ecology (Blog)
    - Fox, J. 2011. *Frequentist vs. Bayesian statistics: resources to help you choose (UPDATED)* in Dynamic Ecology <https://dynamicecology.wordpress.com/2011/10/11/frequentist-vs-bayesian-statistics-resources-to-help-you-choose/>
    - Fox, J. 2011. *More resources on Bayesian vs frequentist statistics* in Dynamic Ecology <https://dynamicecology.wordpress.com/2011/10/14/more-resources-on-bayesian-vs-frequentist-statistics/>
    - https://dynamicecology.wordpress.com/2013/06/19/why-saying-you-are-a-bayesian-is-a-low-information-statement/