

BioSys PhD | Earthsystems PhD (2017)

STATISTICAL CONCEPTS REVIEW / INTRODUCTION TO R

Probability Theory

Part I - <http://www.youtube.com/watch?v=3ER8OkqBdpE> (Kahn Academy)

Part II - http://www.youtube.com/watch?v=6E_NVnboMB8 (Kahn Academy)

Part III - <http://www.youtube.com/watch?v=wBDOCvHYckE> (Kahn Academy)

Random Variables

Discrete - http://www.youtube.com/watch?v=mrCxEwEZ_22o (Kahn Academy)

<http://www.youtube.com/watch?v=0P5WRKihQ4E> (JBstatistics)

Att. The bars in the graphic should be separated (bar plot)

Continuous – http://www.youtube.com/watch?v=Fvi9A_tEmXQ (Kahn Academy)

http://www.youtube.com/watch?v=OWSOhpS00_s (JBstatistics)

$E(X)$ / $\text{Var}(X)$ – Discrete http://www.youtube.com/watch?v=g_AeTGaAu0c (David Waldo)

Continuous <http://www.youtube.com/watch?v=gPAxuMKZ-w8> (MrNichollTV)

Covariance / Correlation – <http://www.youtube.com/watch?v=plj4PklTuMc> (David Waldo)

Probability Distributions

Discrete – http://www.youtube.com/watch?v=Jm_Ch-iESBg (JBstatistics)

Binomial; Geometric; Hypergeometric; Poisson

Chi-Square – <http://www.youtube.com/watch?v=6Z4MBxye5VA> (JBstatistics)

Normal – <http://www.youtube.com/watch?v=iYiOViSWXS4> (JBstatistics)

Central Limit Theorem

http://www.youtube.com/watch?v=Pujol1yC1_A (JBstatistics)

Notes:

Empirical variance – <http://www.youtube.com/watch?v=9ONRMymR2Eg> (JBstatistics)

Introduction to R

<http://www.twotorials.com/2012/11/a-two-minute-introduction-to.html>

Short videos - check the first 10