

37458

Advanced Bayesian Methods

Professor Matt Wand

University of Technology Sydney

Major Goal for this Subject

By Week 6, tool you up to be able to do

ANY*

data analysis, no matter how complex,

– and **UNDERSTAND THE UNDERLYING MATHS.**

CENTRAL CONCEPT: DETERMINATION OF FULL CONDITIONAL DISTRIBUTIONS → THIS HOUR'S FOCUS!

Hand-outs of two hand-written sheets re Assignment 1.

Continuous Random Variable Jessica the DAG

$$x_1 \sim N(3, \frac{1}{4}), \quad x_3 \sim \text{Gamma}(6, 1).$$

$$x_2|x_1, x_3 \sim N(47 - 11x_1, 1/(2x_3)).$$

WANTED

1. $p(x_1|x_2, x_3)$
2. $p(x_3|x_1, x_2)$

KNOWN AS THE FULL CONDITIONALS