ST MARY'S COLLEGE

FORM 6

Upper 6 Applied Mathematics

Advanced Level Statistics: Crawshaw & Chambers
Additional Mathematics: Talbert & Heng
Discrete Math: see file folder AM-U6/Books

6 weeks	Mod 2 Probability & Distributions	(a) Perms & Combs (b) Discrete Random Variables (c) Continuous Random Variables (d) Chi Squared Goodness of Fit test	• Sec 3f, pgs 206-219. My Notes are better • Combination of Random Variables (Sec 4c-e, pgs 245-261) • All of Chapter 5: Uniform, Geometric, Binomial, Poisson • Sec 6a-d (Only integration of polynomials) • Normal Distn. Chapter 7 (repeat of Unit 1 except includes Sec 7g Normal Approx to Poisson) • Sec 12a-b, pgs 560-579-
6 weeks to end of term	Mod 1 Discrete Math	(a) Linear Programming (b) Hungarian Algorithm (c) Graph Theory& Critical Path Analysis (d) Logic & Boolean Algebra & Switching &Logic Circuits	• Chapter 5 Sec 5.1-.2 • Not In book see **https://www.hungarianalgorithm.com/** • Graph Theory Chapter 1 Sec 1.1-1.3 • Critical path Analysis Chapter 7 Sec 7.2-7.3 and Chapter 12 all sections • Repeat of Pure Math plus Boolean Algebra Chapter 10 & Switching &Logic Circuits Chapter 11 Sec 11.1-11.4
11 weeks	Mod 3 Mechanics	(a) Forces (b) Kinematcs & Dynamics (c) Projectiles (d) Work, Energy & Power	• Chapter 23 • Chapters 20, 24 &26 • Confidence Intervals (Sec 9e-g, pgs 449-471) • Chapter 22 • Chapter 25