

Course Outline STA2212H/453H1

from the private notebook
of
David Brenner

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office: Wed. 11-12

lectures:

Mon, Wed, Fri 10-11

ref./text:

Brenner, D. :
FROM THE PRIVATE NOTE BOOK:
Illustrated adventures in very (very) mathematical
probability & statistics, 2008-15

Fraser, D.A.S. :
PROB & STATS: THRY & APPS (1976/2002/8)

Knight, K. :
MATH STATS (2000)

Lehmann, E.L. :
TESTING STAT HYPs (1957/86) & THRY of PT EST (1986)

Silvey, D.F. :
STAT INF (1976)

- **caution*: all contents subject to shuffling, merging, expansion & (really serious) modification

- the general statistical model: confidence & likelihood
 - estimation theory: consistency, unbiasedness & minimum variance
 - sufficiency & the rao-blackwell theorem
 - exponential models
 - location-scale models

- the general linear model: correlation, regression & conditional expectation

- hypothesis testing
 - testing means, variances: differences & ratios
 - neyman-pearson theory & the likelihood ratio test

- bayesian theory

grading (G) :

test (T) = 40 - Wed. Mar. 25
3 assignments @ 20 each ($A = A_1 + A_2 + A_3$) = 60

$$G = T + A$$

(NOTE: test T will be held during class time.)