

Required textbook: *Mathematical Statistics* (2nd edition, Vol. 1) by Bickel and Doksum.
Prentice Hall.

Assignments:

- **HW 1:** 1.1.1, 1.1.2, 1.1.3, 1.1.6, 1.1.7
- **HW 2:** 1.1.14, 1.2.1, 1.3.2, 1.3.9
- **HW 3:** 1.3.3, 1.4.1, 1.4.5, 1.5.1, 1.5.3
- **HW 4:** 1.2.15, 1.4.14, 1.4.18, 1.6.11(b), 1.6.18, 1.6.31, 1.6.36

Note:

- There is an errata in #1.6.36 (c).
Please change $\text{Var}(X) = \mu^{-3} * \lambda$ to $\text{Var}(X) = (\mu^3)/\lambda$.
- For #1.6.11(b), the notation used in textbook for the expression of the Gamma distribution is different from that in the distribution table posted at learn@uw.
Please use the formula (B.2.8) on page 488 in the textbook.

- **HW 5:** 2.1.1, 2.1.3, 2.1.5, 2.1.17, 2.2.1, 2.2.2, 2.2.16, 2.2.22

Note: In #2.1.17, Z_i in the denominator of \hat{b}_1 should be Z_i^2 .

- **HW 6:** 2.2.13, 2.2.15, 2.2.21, 2.2.24, 2.2.30, 2.2.39, 2.2.40, 2.3.3, 2.3.10
- **HW 7:** 2.4.1, 2.4.17, 2.4.18, 3.2.2, 3.2.3, 3.2.4, 3.2.9
- **HW 8:** 3.3.5, 3.3.7, 3.4.3, 3.4.5(b)

Note: In #3.3.7, change $\text{Gamma}(1/k, 1)$ to $\text{Gamma}(1, 1/k)$ in the hint. i.e., the prior you should consider is $\pi(\lambda) = e^{-\lambda/k}/k$.

- **HW 9:** 3.3.13, 3.4.22, 3.5.5, 4.1.1, 4.1.2, 4.1.10, 4.1.11

Note: In #3.3.13, $\sum_{j=1}^{k-1} \theta_j = 1$ should be $\sum_{j=1}^k \theta_j = 1$.

- **HW 10:** 4.1.5, 4.1.6, 4.2.5, 4.2.7, 4.3.1
- **HW 11:** 4.4.6, 4.5.1, 4.6.1, 4.7.1, 4.8.2, 4.9.9
- **HW 12:** 5.3.8, 5.3.17, 5.3.22, 5.3.28

Dates assigned and due dates: The following lists homework assignments of STAT-610, together with dates assigned for and due dates.

HW	Date (assigned)	Due Date
# 1	01/25	02/01
# 2	02/01	02/08
# 3	02/06	02/15
# 4	02/13	02/22
# 5	02/22	03/01
# 6	03/06	03/15
# 7	03/13	03/22
# 8	03/20	04/05
# 9	04/03	04/12
#10	04/17	04/26
#11	04/24	05/03
#12	05/01	05/09