



## MAT4 - Spring 2001

28 May 2001

### Multivariate Analysis

#### Textbook:

G. A. F. Seber, *Multivariate Observations*.

#### Examination requirements:

Chap 1, section 1.1 – 1.7

Chap 2, section 2.1 – 2.6, except  
 p. 36<sub>12</sub> – 37<sub>10</sub>  
 p. 40<sub>12</sub> – 42<sub>10</sub>

Chap 3, section 3.1 – 3.6, except  
 p. 61<sub>12</sub> – 63<sub>3</sub>  
 section 3.3.3  
 section 3.4.5  
 section 3.5.7 – 3.5.9  
 p. 104<sub>8</sub> – 105<sub>10</sub>  
 p. 105<sub>4</sub> – 106<sub>13</sub>  
 section 3.6.1 c, d  
 section 3.6.2 c

Chap 8, section 8.1 – 8.9, except  
 section 8.5  
 p. 413<sub>12</sub> – 413<sub>9</sub>  
 section 8.6.2 c, d, e  
 section 8.6.5 – 8.6.7  
 p. 430<sub>3</sub> – 431<sub>16</sub>

Besides this: appendices, exercises and data analysis.

#### Examination questions:

1. The Wishart distribution with applications.
2. Hotellings  $T^2$  with applications.
3. The  $U$ -distribution with applications.
4. Application of different principles of estimation.
5. Application of different principles of testing.
6. Comparing normal populations.