1 **Director of Statistics Program:**
   
   Associate Professor Neville Weber (Carslaw 818)

2 **Third Year Coordinator:**
   
   Dr Shelton Peiris (Carslaw 819)

3 **Lecturers:**
   
   Dr. S. Peiris (Carslaw 819) - STAT3003  
   Professor E. Seneta (Carslaw 827) - Add-on STAT3903 (ADV.)

4 **Objectives:**
   
   Establish some methods of modelling and analysing (ie. identification, estimation, decision making, and prediction) of autocorrelated data (ie. data containing some dependence structure) which depend on time. In addition, consider the Spectral methods in time series (STAT3903 only).

5 **Method of Teaching and Learning:**

   **Lectures:**
   
   Monday 9.00am (Carslaw 452)  
   Monday 1.00pm (Carslaw 452) (**STAT3903 only**)  
   Wednesday 9.00am (Carslaw 452)

   **Tutorial:** (One tutorial a week)
   
   Thursday 1.00pm (in Carslaw 453)

   **Practical:** (One practical a week)
   
   Friday 11.00am (Carslaw 729)

   **Assessments:**
   
   4 Assignments* 10%  
   Computer Work 10%  
   June/July Examination 80%

   *Due dates: April 2, April 30, May 21, and June 9

6 **Reference:**

   

   **Recommended Readings:**
   
   
   
7 Course Outline (Common Material for STAT3003/STAT3903)

- Descriptive procedures of time series analysis. Ch. 2
- Stationary time series, Autocorrelation function. Ch. 2
- Probability models for stationary time series. Ch. 3
- AR, MA, ARMA and ARIMA models. Ch. 3
- Time domain analysis. Ch. 4
- Forecasting using ARIMA models (Univariate procedures only). Ch. 5

8 Consultation Time:

Dr S.Peiris : Wednesday 1 - 2 p.m. (Carslaw 819)
Professor E.Seneta (by appointments)

Note: Completion of assignments and practicals and understanding of their contents is essential to success in this module. Please consult your lecturer/tutor at once in case of any difficulty.