1 Director of Statistics Program:
Dr Shelton Peiris (Carslaw 819)

2 Third Year Coordinator:
Dr Marc Raimondo (Carslaw 817)

3 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.

4 Lecturers:
• TSA is considered as Section 2 of STAT3011/3911
• Lectures begin in week 7 (ie from 24 April)
• All enrolled students must attend the following method of teaching and learning

5 Method of Teaching and Learning:
Lectures:
Monday 9.00am  (Carslaw 452)
Wednesday 9.00am  (Carslaw 452)
Thursday 11.00am  (Carslaw 361)

Tutorial:  (One tutorial a week)
Wednesday 10.00am  (in Carslaw 453)

Practical:  (One practical a week)
Friday 11.00am  (Carslaw 705)

Assessments:
2 Assignments*  10%
Computer Work  5%
July Examination  35%

*Due dates: May 11 and June 6

6 Reference:
7 Course Outline and an Approximate Schedule:

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<tr>
<th>Topic</th>
<th>Reference in R2</th>
<th>Week</th>
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<tr>
<td>- Introduction to time series analysis.</td>
<td>Ch. 2</td>
<td>7</td>
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<tr>
<td>- Stationary time series, Autocorrelation function.</td>
<td>Ch. 2</td>
<td>7</td>
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<tr>
<td>- Probability models for stationary time series.</td>
<td>Ch. 3</td>
<td>7,8</td>
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<tr>
<td>- AR, MA, ARMA and ARIMA models.</td>
<td>Ch. 3</td>
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<td>- Time domain analysis.</td>
<td>Ch. 4</td>
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<td>- Forecasting using ARIMA models.</td>
<td>Ch. 5</td>
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<td>- Revision.</td>
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8 Consultation Time:

Monday 12.30 - 2.00 p.m. (Carslaw 819)

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

Course website:  http://rome.maths.usyd.edu.au/u/shelton/06TSA.html