

Department of Civil Engineering
2011 Summer Semester
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Environmental Statistics

Outline #12 Time Series Analysis (27 June 2011)

1. Time Series Analysis

Moving average, Autocorrelation, Spectral analysis

2. General Principles of Experimental Design

- Potential sources of confusion and means for minimizing their effects
- Control
 - Mensurative / Manipulative
 - Negative control / Positive control
- Randomization
- Replication & Pseudoreplication
- Balancing and Blocking

3. Environmental Impact Assessment

- BACI design (before-after, control-impact)
- Types of Disturbances
- Statistics for impact assessments

4. Exercise (12-1, 12-2)
