

SIO 221A: Time Series Analysis

Instructor: Mike Buckingham

(mbuckingham@ucsd.edu; x 47977)

1. Introduction to time series
2. Generalized functions (delta function)
3. Fourier transform theory
4. Power spectrum
5. Sampling & Nyquist's theorem
6. Cross-spectral analysis
7. Cross-correlation function
8. Coherence function
9. Multi-dimensional spectral analysis
10. Introduction to statistical processes
10. Linear systems
11. Green's function
12. Waveguides
13. Introduction to array theory