In order to take this course you ought to be acquainted with the following topics:

- Calculus of several variables;

- Vector analysis, especially *div*, *grad* and *curl*, including their use in curvilinear coordinate systems; Stokes's theorem and Gauss's theorem (*i.e.*, the divergence theorem);

- Elementary ordinary differential equations, at which you will get some practice for homework;

- Fourier series;

- Integral transforms (*e.g.*, Fourier, Laplace);

- Systems of simultaneous linear algebraic equations; properties of matrices and their determinants; and

- Elementary aspects of complex variables (although I shall try to limit our excursions off the real axis into the complex plane).

Do not panic if you consider your preparation to be inadequate! Give yourself a while to assess the situation, and come and see me if you are seriously concerned.