

MTH 310 MATHEMATICAL METHODS II (3 Units) (L30: P.O. T 15)

Sturm – Liouville problem. Orthogonal polynomials and functions. Fourier series and integrals. Partial differential equations: general and particular solutions. Linear equations with constant coefficients, first and second order equations, solutions of the heat, wave and Laplace equations by the method of separation of variables. Eigen function expansions. Methods of variation of parameters. Fourier transforms.