

Abstract. In this talk, by using the notion of l_p -modulus of variation of a function ($p \geq 1$), we introduce a Banach space of functions of generalized bounded variation, denoted $V_p[\nu]$, and consider several problems pertinent to the theory of Fourier series in this space. In particular, we first state a Helly-type result and an embedding theorem for $V_p[\nu]$. Next, under some restrictions on p and ν , we give a characterization of the uniform convergence of Fourier series in $H^\omega \cap V_p[\nu]$, where H^ω is the class of all functions whose moduli of continuity (in the classical sense) are dominated by ω . In conclusion, an estimate on the magnitude of the Fourier coefficients in $V_p[\nu]$ is obtained.