1106-41-56 **George Anastassiou*** (ganastss@memphis.edu), University of Memphis, Department of Mathematical Sciences, Memphis, TN 38152. *Complete Fractional Monotone Approximation.* Preliminary report.

Here is developed the theory of complete fractional simultaneous monotone uniform polynomial approximation with rates using mixed fractional linear differential operators. To achieve that, we establish first ordinary simultaneous polynomial approximation with respect to the highest order right and left fractional derivatives of the function under approximation using their moduli of continuity. Then we derive the complete right and left fractional simultaneous polynomial approximation with rates, as well we treat their affine combination. Based on the last and elegant analytical techniques, we derive preservation of monotonicity by mixed fractional linear differential operators. We study special cases. (Received June 04, 2014)