962-26-627   **George A. Anastassiou*** (`ganastss@memphis.edu`) and **Jerome A. Goldstein**, Department of Mathematical Sciences, University of Memphis, Memphis, TN 38152. *Fractional Opial type inequalities and fractional differential equations.*

A set of very general Opial type inequalities is established involving fractional derivatives of different orders. These are based on Taylor's formula for fractional derivatives. These results are applied in proving uniqueness to the solutions of very general fractional initial value problems of ordinary fractional differential equations. (Received September 18, 2000)