1046-Z1-1004 **Zengxiang Tong*** (`ztong@otterbein.edu`), Mathematical Sciences Department, Otterbein College, Westerville, OH 43081. *Extended Newton-Leibnitz Theorem.*

The Newton-Leibniz Theorem is called the Fundamental Theorem of Calculus and is contained in every calculus book. This paper proves a generalization of the Newton-Leibniz and suggests all authors and professors enclude this extended Newton-Leibniz Theorem in their calculus books and lectures. This paper will also present several interesting examples to show the need and power, mathematically and pedagogically, of this theorem. (Received September 13, 2008)