1163-J5-1656	**Douglas B Meade*** (`meade@math.sc.edu`), Department of Mathematics, University of South Carolina, Columbia, SC 29205. *Some Thoughts About Series Solutions in the 21st Century.*

The classical series methods for ordinary differential equations have a beauty and appeal on their own, many modern classes do not have enough time to fully develop and apply these techniques.

In many practical settings it suffices to know the first few terms of the series expansion. We will explore different ways to obtain these approximate solutions, including Picard iterations and repeated differentiation.

A common theme of these methods is that they are iterative, and each step is easily implemented with symbolic computation tools. This makes these methods particularly well-suited to courses taught in an online or hybrid format. The examples discussed will include both theoretical and practical applications. (Received September 16, 2020)