Undergraduate Complex Variables, being a terminal, upper-level mathematics course, is a prime target for using non-traditional pedagogical techniques. One such technique is using an “inverted classroom” teaching style in which the “lecturing” is done at home in the form of reading assignments and/or watching video lectures. This frees class time up to focus on discussion, collaborative work, and engagement with the other activities that are traditionally done outside of class. I used an inverted classroom approach in my Fall 2012 Complex Variables course. I will discuss how I employed the style, the results from grade assessment and student feedback and share anecdotes. (Received September 07, 2012)