1163-12-952 **Kristen L Hallas*** (kristen.hallas01@utrgv.edu), **Joan M Mattle** (jmattle@ithaca.edu), **Deanna C Perez** (dcp@csu.fullerton.edu) and **Aklilu Zeleke** (zeleke@msu.edu). *Recursive Polynomials.* Preliminary report.

In this talk we present some properties of Fibonacci-type recursive polynomials. After introducing the classical Fibonacci-like polynomials and the so-called Golden polynomials, we introduce recursive polynomial sequences defined by

$$G_{n+1}(x) = x^k G_n(x) + x^l G_{n-1}(x),\ k, l \text{ positive integers,}$$

with $G_0 = -1,\ G_1 = x - 1$

We discuss Binet forms, Pascal-like triangle representations and matrix representations for G_n, We derive interesting sequences and identities.

Lastly, we present analytic and numerical results on the nature of the real roots of G_n. Our work extends known results for Fibonacci-like polynomials. (Received September 14, 2020)