1145-05-2411 **Berit Nilsen Givens*** (bngivens@cpp.edu). *A sequence of integrals of Fibonacci polynomials.* Preliminary report.

The Fibonacci polynomials, by analogy with Fibonacci numbers, are defined recursively: $F_1(x) = 1, F_2(x) = x$, and $F_n(x) = xF_{n-1}(x) + F_{n-2}(x)$. Unsurprisingly, the Fibonacci polynomials $F_n(x)$ have many interesting properties. Here we consider the sequence of numbers $e(n) = \int_0^\infty F_n(x)e^{-x}\,dx$, whose first few terms are $1, 1, 3, 8, 31, 147$. We give an overview of some basic facts about the sequence $e(n)$, including both recursive and nonrecursive formulas. Finally, we investigate the sequences obtained by considering $e(n)$ modulo a prime p and compute the p-adic valuation of $e(n)$ for a few example values of p. (Received September 25, 2018)