1048-22-102   **Robert Milson*** (`rmilson@dal.ca`), DEPT. OF MATHEMATICS and STATISTICS, Dalhousie University, Halifax, NS B3L 4B6, Canada. *On projective equivalence of univariate polynomial subspaces.*

We pose and solve the equivalence problem for subspaces of P_n, the $n+1$ dimensional vector space of univariate polynomials of degree less than or equal to n. The group of interest is PSL_2 acting by projective transformations on the grassmannian variety $G_k P_n$ of k-dimensional subspaces. We establish the equivariance of the Wronski map and use this map to reduce the subspace equivalence problem to the equivalence problem for binary forms. (Received January 30, 2009)