

1067-C5-1428 **Robert A Beezer*** (beezer@ups.edu), Department of Mathematics, #1043, University of Puget Sound, 1500 N. Warner, Tacoma, WA 98416-1043. *A first-year seminar in cryptology.*

“The Art and Science of Secret Writing” is a first-year seminar course in cryptology taught at the University of Puget Sound. Every first-year student is required to take a seminar course, which are offered in a wide variety of disciplines. These courses are not allowed to have significant prerequisites, so that they are each possible for any member of the entering class.

Still, much interesting cryptology can be developed with simple ideas like modular arithmetic and bit-wise operations. This presentation will explicitly describe approaches and materials that worked well, and those that did not, based on teaching the course three times, with substantial revisions for each new offering. The course has an historical component (e.g. classical ciphers), a modern component (e.g. DES, RSA) and a public policy component (e.g. Clipper chip, DMCA).

Even for an audience of students with minimal preparation in mathematics there are many fun and interesting activities that demonstrate the power of mathematics, its place in history, and the debates it continues to trigger today. (Received September 21, 2010)