

1086-H1-1980 **Debra Hydorn*** (dhydorn@umw.edu), University of Mary Washington, 1301 College Avenue, Fredericksburg, VA 22401. *Exploratory Projects in an Introduction to Discrete Mathematics Course.*

As part of the University of Mary Washington Mathematics Department outcomes assessment program we have identified a series of student outcomes for our courses. These include correct use of mathematical notation, analyzing and constructing logical arguments and formulating conjectures from exploration and experimentation. Of these outcomes, our Introduction to Discrete Mathematics course did not include content or activities to promote exploration and experimentation. Because this course is a prerequisite to upper level courses in the major I have written a series of ten exploratory projects, some of which are extensions of topics covered in class while others cover new topics but require students to apply course topics in a new way. Some of these projects are adaptations of projects in the MAA publication "Resources for Teaching Discrete Mathematics: Classroom Projects, History Modules and Articles" while others came about from discussions with colleagues. Preliminary results indicate that a majority of students report improvement in our department outcomes upon completion of the course. (Received September 24, 2012)