

1116-A1-281      **D A Dietz\*** ([dietz@american.edu](mailto:dietz@american.edu)). *Teaching Discrete Mathematics to novice programmers using python, unit tests, and precompiled code.*

In this talk, I discuss the programming component of a course I developed and used at the University of Pennsylvania to teach Discrete Mathematics to students who had no programming experience but were expected to be concurrently enrolled in an introductory programming course.

It is considered a best practice when programming to use unit testing, but beginners struggle to write the code itself, not to mention good unit tests. However, when the unit tests are provided for them, this flips around entirely, making it much easier for them to succeed in writing good code. I also gave the students "broken" starter functions and pre-compiled code as additional scaffolding so they could experiment with the working code prior to writing it.

I will briefly discuss some of the projects used as well as the benefits and drawbacks I felt this system brought to the overall experience of the students. (Received August 21, 2015)