

Abstract Submitted  
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**Improving Skills in Computer Methods: An Introductory Toolkit to Python for Undergraduate Physics Majors**<sup>1</sup> ERIN O'DONNELL, Utah State Univ — To account for the ever-evolving nature of computer science, I proposed a change to Utah State University's PHYS 2500: Computer Method for Physicists. Instead of coding with MathCad, the goal was to get students proficient enough in Python to begin research at a sophomore level. To accomplish this, a toolkit was created using Notebooks Azure; a free cloud-based program by Microsoft that runs Jupyter Notebooks. The objective of the Toolkit was to create a Python workbook students can reference as well as be able to accomplish at their own pace. The final project condensed a semester's worth of introductory python into a toolkit able to be finished in 20-30 hours depending on skill. Overall satisfaction of the course improved as well as grades.

<sup>1</sup>Howard L. Blood Scholarship

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