

Abstract Submitted  
for the FWS14 Meeting of  
The American Physical Society

**Physics Instruction at the Davidson Academy of Nevada** BRETT  
GUISTI, Davidson Academy — There are three physics offerings at the Davidson  
Academy: 1) Physical Science - a middle school class which focuses on basic mechan-  
ics. 2) Physics - a high school class covering mechanics, waves, optics, thermody-  
namics, fluids, and special relativity. 3) Advanced Physics - a calculus-based course  
with a semester each of mechanics and electricity and magnetism. Basic concepts  
guiding all classes include conceptual understanding, computational practice, and  
comprehensive experiences. For the first time this year, the high school physics class  
is being taught using a “Flipped Classroom” approach where students watch videos  
of lectures at home and use class time to work on problem solving and labs. An  
emphasis on special relativity drawing heavily from the materials in Brian Greene’s  
online World Science U course will also be added to the physics curriculum this year.

Brett Guisti  
Davidson Academy

Date submitted: 08 Oct 2014

Electronic form version 1.4