

1163-M5-1684 **Larry G Blaine*** (lblaine@plymouth.edu), PO Box 605, Plymouth, NH 03264. *The Hexachord Theorem and Some of its Consequences.*

The Hexachord Theorem is perhaps the foremost example of a non-trivial mathematical result whose origins lie purely in the theory of musical composition. It says, roughly, that if the twelve notes of a "chromatic scale" (Think of any twelve consecutive notes on a piano keyboard) are partitioned into two sets of six notes each, the interval relations among the six notes are the same for both sets. In this talk, we will explore the history of the theorem, outline the methods of proof, discuss its relevance to music, and examine some generalizations. (Received September 16, 2020)