ABSTRACT

TITLE:	Confirming Exoplanets Using the Fort Lewis Observatory
AUTHOR(S):	Mullin, Elinor
PRESENTED AT:	2016 Undergraduate Research and Creative Activities Symposium, Fort Lewis College

ABSTRACT: The transit method was used to detect exoplanets at the Fort Lewis Observatory. Exoplanets are planets that orbit other stars. Using the telescope at the Fort Lewis College Observatory, eight transits were captured. The change in magnitude was determined for all eight transit stars and the transit duration was determined for six of the stars. The change in magnitude recorded by the Fort Lewis telescope was compared to the change in magnitude reported on the Exoplanet Transit Database (ETD). All eight transits had an average difference from the ETD of within 0.004 magnitude or 21%. Through this data analysis and comparison it was determined that the telescope at the Fort Lewis Observatory is capable of observing exoplanet transits having a change in magnitude of as small as 0.0087.