
P11001: Balance Training Bike Pedal and Tilt Resistance

Part of the Assistive Devices Project Family.

Project Team

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Project Background

P11001 is a project is a continuation of Project P08001, originally begun winter quarter of 2007. It was revisited winter quarter of 2009 under project number P10001. The intention was to build a bike designed to help patients at the Nazareth College Physical Therapy Clinic be able to bridge the gap between stationary bike and an outdoor bike in a safe way. Prior iterations of this project have experienced several performance issues with regards to the pedals, tilt mechanism and display.

Problem Statement

The bicycle currently needs a better way of accomplishing the tilt resistance as the current method allows too much slack at the center position. Additionally, the pedaling resistance mechanisms need work to avoid jittery performance the user is currently experiencing. Lastly, the display mechanism needs to function correctly.