

# TECHNOLOGIES IN STEM EDUCATION

projects involving coding, ICT, big data, AI, VR, network security, etc.

PaedDr. Jarier Wannous PhD. | Súkromné gymnázium FUTURUM | Trenčín | Slovakia

## **Useful 3D Printed Tools for Teaching Physics**

3D printing is an extremely useful technology in science education. It can be used for teaching the basics of programming, art, creating models and **designing new tools for experiments**. This project shows a few examples of tools for physics experiment which were designed using 3D printing.

#### Archie:

Archie can be used for teaching the concept of density, Archimedes' principle and Archimedes' paradox.

#### **Balloon-powered cart:**

A balloon-powered frictionless cart can be used to

study uniform motion, motion with constant acceleration and collisions.



### **Hydrodynamics:**

Some tools can be used for studying hydrodynamics laws such as the continuity equation or Bernoulli's principle.



3D printing can be used for creating stands for different experiments, enabling accurate measurements. For example:

**Measuring permeability** can become much more accurate using 3D printed stands for coils.



Come and take a look at our stall for other examples of useful 3D printed tools

