

Introduction to 3D scanning with SOL PRO 3D scanner LESSON PLAN



OBJECTIVE

Students will be able to successfully scan an object using the SOL PRO 3D scanner, and export their scan for printing or online sharing.

OVERVIEW

Additive manufacturing is expanding at a rapid pace in multiple industries. Just as computer know-how was added to classrooms over the past decades, 3D knowledge is beginning to become a foundational capability for many professions.



This course plan will help students overcome some of the mental blocks and cognitive hurdles that may slow them from exploring 3D technologies.

FIND RELATED LINKS



https://scandimension.com/pages/ science-research-with-sol-pro-3d-scanner

OUTLINE

10 minutes - Introduction and discussion

Discuss where 3D technology is being used in the world today. Ideas from the students can be from engineering, the arts, architecture, virtual reality, games, to food and much more.

15 minutes - Hardware set-up

Find images of a SOL PRO 3D scanner hardware assembly on our start page: scandimension.com/pages/start

10 minutes - SOL PRO software installation

Download SOL PRO software and launch it. The software checks that the scanner is connected and that the computer meets the requirements. Follow the on-screen directions to begin scanning.



10 minutes - Video learning

Watch these videos with basic knowledge and information about the SOL PRO 3D scanner:

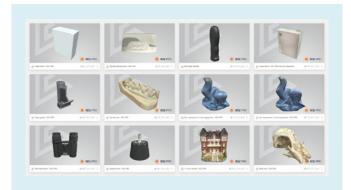
- · A SOL PRO 3D scanning from start to finish
- · How to improve 3D scanning speed

10 minutes - Assignment and instructions Assignment:

- Group students (pairs, or small groups)
- Have each group identify an object to scan (pay attention to the limits for size and surface material when scanning with SOL PRO)
- Outside of class/lesson have each group perform a single scanning pass of the object (approximately 20 minutes will be required – each additional scanning pass will add time, so multiple scanners/computers are needed or time allocated for each group to complete a scan)
- Set a due date for when the scan must be completed

10 minutes - Knowledge Base introduction

Cover resources students may find useful in completing their first scan. Note that scanning shiny, dark/black and/or translucent objects may require some preparation.



3D SCANNED EXAMPLES

Visit our collection on Sketchfab and inspect these 3D models scanned with SOL PRO 3D scanner. Log in and download for your own use.







