uCreate Studio Service Overview – Support for Teaching

uCreate studio is the University of Edinburgh's community makerspace, offering access, training, and support in a wide range of new and transformative technologies. We've rejigged much of our service to a hybrid model: 3D printing will be available in a queue and collect format and a full catalogue of loan equipment will be available from term start. Alongside these services we're increasing support and provision in 2 key areas in support of Hybrid learning and teaching. More information on the makerspace and the services we offer is available on our website and please don't hesitate to get in touch if you have any questions, ideas or projects you would like to discuss.

3D Scanning

While both field trips and the use of physical teaching tools and artefacts are limited, uCreate Studio's 3D scanning services can help provide digital surrogates for traditionally physical activities and teaching models.

LIDAR scanning

LIDAR scanning allows for the digitisation of locations and buildings in full colour and 3 dimensions. The data sets produced can then be used for a wide range of applications: as a reference for the creation of measured drawings; as an annotated teaching tool for interactive viewing online or as a 3D environment to be explored in Virtual Reality in lieu of a more traditional field trip.
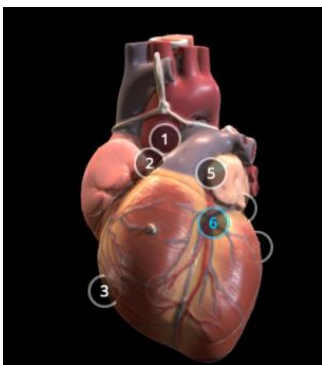
We're offering a bureau LIDAR scanning service for sites in Edinburgh intended for use in teaching next year. Please use the LIDAR scanning form to request a scan and one of our team will be in touch to discuss.

Object scanning

Room 1.12 in the Main Library has been repurposed as a socially distanced 3D scanning lab to support the digitisation of physical objects normally used for teaching.

Slots are available each week day for teaching staff to bring objects, artefacts and teaching models to be digitised in full colour 3D. Technicians will be on hand to provide socially distanced training and support to help you capture the data and to offer advice on different options for using it in your courses. To make use of this service, please fill out the booking form and one of our team will be in touch to confirm your session.

Technical support for interactive teaching models

One of the quickest ways to make use of 3D scans (or other 3D models) in teaching is to convert them into interactive, annotated 3D models that can be embedded in LEARN (see our website for an example anatomy teaching model created this way).

Makerspace staff are available throughout this year to handle the technical aspects of model creation. To make use of this service, please fill out the booking form and one of our team will be in touch to confirm your session.

Virtual Reality

Virtual Reality has come a long way over the past few years. With major improvements in both hardware and software. With the move to hybrid teaching and the increased difficulty in providing practical training and physical, in person teaching and learning caused by Covid-19. VR can provide opportunities to replicate traditionally practical or in-situ teaching in a safe, remotely accessible format.

University branded Smartphone VR headsets

Smartphone VR headsets are available from the makerspace for free. These headsets combine with a smartphone to allow access to 360, VR and immersive content. Headsets are intended for students to keep to allow courses to make use of VR content and 360 videos in hybrid teaching next year.

If you would like to use these in your teaching please use the headset request form to let us know how many you would like and we'll pass them on to you to distribute to your class.

Loan kits for high grade equipment

We've expanded our VR provision significantly this year. Teaching staff will be able to loan up to 26 Oculus Quest VR headsets and tracked controllers to distribute to student groups to make use of in teaching and added another 360 camera to our equipment stock for the quick (and easy) creation of 360 lectures, virtual field trips etc.

Our loan service will relaunch later this month but in the meantime if you have ideas you would like to discuss please get in touch and we can assist with advice and technical support.

Support in selecting and creating content

There are a wide range of VR applications available that can be of use in teaching including virtual lab toolsets for building practical skills; life size anatomy atlases; mechanical part inspection tools; and soft skills tools to support public speaking.

The makerspace team are on hand to provide advice and technical support when exploring VR software that may be of benefit to your course please get in touch and one of our team will follow up to outline the different tools that may be relevant to your needs.