

# EX-RayCalc Teaching Materials

EX-RayCalc Teaching Materials are for use with the EX-RayCalc software simulation tool designed to support the teaching of X-ray imaging.

These teaching materials are for use with EX-RayCalc. EX-RayCalc simulates primary X-ray photon transport through a simplified imaging model relevant to medical X-ray imaging. The software allows the user to interactively explore the effect of changing the beam geometry, radiographic factors and spectral filtration on the output spectra, dosimetry, and photon statistics. The software can be used to support a wide range of teaching on the physics of X-ray imaging, from X-ray production to the operation and design of a fluoroscopic automatic dose control system, and is applicable to courses such as medical physics, radiography, radiology and medicine.

## Authors

Dr Andrew Davies

Dr Laura Treadgold

Dr Stephen Kengyelics

<https://licensing.leeds.ac.uk/product/ex-raycalc-teaching-materials>