

moons trailer



NARRATOR: This course introduces and celebrates the amazing diversity of moons in our solar system, drawing on the unique teaching and research expertise of the Open University.

PROFESSOR JOHN ZARNECKI: Every time I see Titan, I find it incredible to think that something we designed and built is sitting there on the surface. It's there now. It'll always be there.

NARRATOR: With specially filmed contributions from moon experts from around the world.

EXPERT 1: When you get to the gas giants, the large bloated planets that go around our sun, they have immense amounts of gravity, and their wide orbits have enabled them to pick up many moons. Some of them probably formed in orbit around the planets. Others are captured asteroids and comets.

EXPERT 2: This is the image that we took when we went really close to Enceladus, and you can clearly see this large plume of water vapour coming off from the south pole. There are ice crystals, and there are organic compounds-- the basic building blocks of life.

NARRATOR: Having examined a variety of very different moons, their origin, and their past and present activity, the course goes on to investigate the different ways that scientists study moons, from highly sophisticated technology used on space probes to the incredible Apollo missions that sent 12 human beings to explore our own moon.

EXPERT 3: I always remember coming home one night. I had been working late in the lab dealing with lunar samples. I looked down and saw that my hands were sparkling in the moonlight, and I realised it was moon dust on my hands. And I looked up and I thought, this dirt came from there.

NARRATOR: Accessible even if you're new to the subject, the course includes special interactive elements, allowing you to study moon rocks using a virtual microscope and even to challenge the computer to a game of moon trumps. Towards the end of the eight weeks, the course asks some of the big questions about the likelihood of any moons hosting habitable environments, as well as exploring the remarkable discovery of water on our own moon.

EXPERT 4: Finding water not only enables human life to have a foothold in space. It also permits you to create a space transportation system that's reusable and extensible.

NARRATOR: Finishing the course will leave you with insight into the often dramatic processes that shape the moons of our solar system and the ingenious ways that scientists can study them.

[MUSIC PLAYING]