Job Description – Lecturer in Astrobiology Education

1 FTE
3 year fixed-term
AC3
Walton Hall, Milton Keynes-based with some travel

The Role

The role of this lectureship is to deliver on the educational objectives of the OU Astrobiology Research Group as defined by within the research project to which this post is aligned. The post-holder will be welcomed into an interdisciplinary research group investigating the feasibility of life beyond the Earth, and the associated social, legal and economic implications. In their role they will develop, implement and critically evaluate a programme of teaching and training for academics, teachers and other stakeholders, that complements and incorporates the activities of the Astrobiology Research Group. This is a core element of the Group’s strategic expansion and builds on institutional expertise in the scholarship of teaching and learning to diverse audiences. This lectureship will focus entirely on the educational and scholarship elements of the Astrobiology Group’s activities and, as such, will not incur study leave.

Key responsibilities

- To be an active member of the OU Astrobiology Research Group, attending regular research group and other meetings.
- To integrate the activities of the OU Astrobiology Research Group into educational materials for a range of learners as specified by the project brief.
- To collaborate with the Business Development Manager to establish and develop educational links with industry.
- To work with industry to design, produce, deliver and evaluate a blended (online and face-to-face) programme of continuing professional development for key stakeholders in the space sector.
- To work with teachers to design, produce, deliver and evaluate blended teaching resources for Key Stage 3-5 students, and accompanying teacher continuing professional development.
- To work with educators in Official Development Assistance (ODA) countries to design, produce, deliver and evaluate educational materials for learners in these countries.
- To seek external funding in support of teaching, training, knowledge exchange, and/or research, in support of the educational objectives of the Astrobiology Research Group.
- To undertake activities in the scholarship of teaching and learning, where relevant, including formative and summative evaluations, to ensure educational materials are pedagogically sound, appropriate, usable and accessible.
- To produce high-quality scholarly outputs based on the activities, and that learning from the development and delivery of the educational materials is effectively shared.
• To ensure that educational materials comply with quality standards and regulations, where appropriate.
• To deliver regular reports to the Executive Committee.
• To participate in, and develop, networks within and outside the university relating to education, learning and teaching.
• To carry out administrative tasks associated with this work, such as risk assessments and applications for ethical clearance.
• To have a strong commitment to the principles and practice of equality and diversity, ensuring that educational materials are tailored to the needs of diverse learners and inclusivity is built into their design.
• To undertake other duties in support of the Astrobiology Research Group, as directed by the line manager.

Person Specification

Skills and experience

**Essential:**

- A PhD in a relevant subject with a strong demonstrable track record in educational research.
- Evidence of high-quality scholarship and scholarly outputs in teaching and learning.
- Professional recognition as HEA fellow or a teaching qualification recognized by HESA, or preparedness to work towards such a qualification.
- Demonstrable evidence of developing, delivering and assessing teaching or training in either a face-to-face or online/distance learning context.
- Demonstrable evidence of commitment to their own continuing professional development.
- Evidence of being ICT proficient, including in the use of digital devices and services.
- Experience of analysing problems and working creatively to develop innovative and workable solutions.
- Excellent oral and written communication skills in a variety of contexts, including the ability to offer and receive constructive criticism.
- Ability to plan and prioritise workload and work to agreed deadlines.
- Demonstrable evidence of taking responsibility and accountability for tasks while making effective use of available resources, information and feedback to improve efficiency, productivity and overall performance.
- Demonstration of a personal commitment to developing interpersonal skills, with an understanding of impact on individuals, respecting and valuing diversity.

**Desirable:**

- Experience of working across discipline boundaries or in multidisciplinary teams.
- Experience of working in a research environment.
About the Astrobiology Research Group

Research England has recently awarded the Open University Astrobiology Research Group an Expanding Excellence in England grant worth £6.7 million. This will allow the Group to expand to bring together expertise in technology, international development and governance to address the scientific and governance challenges associated with the advancement of astrobiology and related space exploration missions. This will result in a multi-disciplinary research environment with members spanning three Faculties: The Faculty of Science, Technology, Engineering and Mathematics, the Faculty of Business and Law, and the Faculty of Arts and Social Sciences.

The primary aims of this multi-disciplinary group will be as follows:
1) furthering the understanding of the limits of life and potentially habitable environments in the Solar System;
2) identifying chemical and geochemical signatures that could be used as evidence of life;
3) investigating the survivability of microorganisms and their biosignatures;
4) educating and engage with the space sector, policymakers and the public in the UK and ODA countries;
5) examining critically the governance and ethical implications of astrobiology-related space missions to develop and enhance governance frameworks.

The OU Astrobiology Research Group is committed to building an inclusive research environment. The Group supports flexible working arrangements, within the limits of the post, and particularly welcomes applications from groups traditionally under-represented in STEM.
About the Unit

Faculty of Science, Technology, Engineering & Mathematics
The Faculty of Science, Technology, Engineering and Mathematics (STEM) is comprised:

- School of Computing & Communications
- School of Environment, Earth & Ecosystem Sciences
- School of Engineering & Innovation
- School of Life, Health & Chemical Sciences
- School of Mathematics & Statistics
- School of Physical Sciences
- Knowledge Media Institute
- Deanery including teams supporting Curriculum, Research and Enterprise, Laboratory Infrastructure and Faculty Administration

“We aspire to be world leaders in inclusive, innovative and high impact STEM teaching and research, equipping learners, employers and society with the capabilities to meet tomorrow’s challenges”

The Faculty of STEM consists of 700 staff and 1,800 Associate Lecturers. The Faculty delivers over 185 modules across undergraduate and postgraduate curriculum, supporting nearly 19,000 students (full time equivalents) which is 29% of the OU total.

The Faculty generates more research income (circa £17M) than any other Faculty in the University, supported by a comprehensive laboratory infrastructure.

We are proud of our distinctive values and capabilities underpinning our aspiration:

We are inclusive:
- We transform people’s lives, ensuring STEM education is openly accessible to many thousands of students from diverse backgrounds – our students express high satisfaction with their study experience.
- We engage the public in exciting citizen science and engineering, including through free open educational resources, multi-platform broadcasting, outreach to inspire the next generation and with programmes to encourage more women into STEM.

We are highly innovative:
- We are at the forefront of innovative developments in teaching practical science and engineering at a distance, through simulated and remote access laboratories and practical experimentation.
- Our high quality teaching and curriculum are informed by world-leading research, strong links with professional bodies and communities of practitioners, as well as by scholarship focused on continuously improving our STEM pedagogy.

We deliver significant social and economic impact:
- We provide STEM higher education at a scale and reach unsurpassed in the UK, with a sizeable international reach and further growth potential.
- We inject transferable STEM skills and knowledge direct into the workplace for immediate employee and employer benefit, as students combine study while working.
• The employability value of our courses is underpinned by accreditation from leading STEM Professional Bodies and Learned Societies, as well as partnerships and sponsorship with leading employers.
• Our high quality, applied and academically relevant teaching and research addresses real-world issues, delivering impact for industry and society, including addressing pressing STEM skill-shortages across the UK.