

Candidate Information

Position: Lecturer (Education) in Physics
School/Department: School of Mathematics and Physics

Reference: 24/111848

Closing Date: Monday 13 May 2024

Salary: £41,331 - £57,141 per annum

Anticipated Interview Date: Monday 27 May 2024 **Duration:** Fixed term for 5 years

JOB PURPOSE:

To make a significant contribution to the delivery of the Physics Education in the School of Mathematics and Physics particularly in supporting international programmes with Northeastern University and NUIST. To support the development and delivery of an innovative teaching and learning strategy in the School, and contribute to the School's administration/outreach activity when required.

MAJOR DUTIES:

Teaching:

- 1. Deliver a range of teaching and assessment activities in Physics within an established programme including lectures, setting/marking coursework, practicals, and project work to undergraduates and postgraduates.
- 2. Select appropriate assessment instruments and criteria, assess the work and progress of students by reference to the criteria and provide constructive feedback to students.
- 3. Seek ways of improving performance by reflecting on teaching design and delivery and obtaining and analysing feedback.
- 4. Supervise practical work and advise students on techniques.
- 5. Supervise MSci projects.
- 6. Plan and develop independent teaching contributions and contribute to the design or revision of course units.

Scholarly Activity:

- 1. Engage in scholarly activity e.g. participating in conferences, applying for external funding, publishing in Physics research or education journals/books, participating in research and educational collaborations/networks.
- 2. Develop links with relevant professional bodies (e.g. HEA, IoP) to ensure that teaching reflects current best practice in Physics teaching.
- 3. Complete training courses relevant to the delivery of the Physics education.
- 4. Maintain and develop teaching and Physics teaching expertise.

Administration/Contribution to the Community:

- Contribute to the School's outreach strategy.
- 2. Provide pastoral care for students within own area to ensure, as far as practicable, that relevant issues are dealt with in a timely, sympathetic and effective manner.
- 3. Carry out designated routine School administrative duties, including, for example, committee work, course administration, etc.
- 4. Be responsible for the record–keeping associated with teaching and the preparation of teaching materials.

ESSENTIAL CRITERIA:

- 1. Hold a minimum of 2.1 honours degree or equivalent in Physics or closely related discipline.
- 2. Hold or are about to be awarded a PhD in Physics or closely related discipline.
- 3. Contribution to Physics (or related) scholarly projects as evidenced by publications, conference presentations etc.
- 4. Ability to supervise UG/PGT projects.
- 5. Demonstrable experience teaching Physics students in lectures, tutorials or laboratories, at UG or PGT levels. *NB (candidates must provide a summary table of their teaching experience including class size, class type, topic, year of programme / level (of UG or PGT), number of hours taught and summary student feedback scores if available).

- 6. Experience in marking coursework and/or examinations in Physics at University level.
- 7. Proven ability to work effectively, independently and as part of a team.
- 8. Proven ability to communicate complex concepts and information effectively to a student audience.
- 9. Commitment to contribute to the growth and wider culture of the School.

DESIRABLE CRITERIA:

- 1. PGCHET and/or membership of an appropriate professional and/or teaching body e.g. HEA, IoP, APSare.
- 2. Experience in development of new content for delivery to undergraduate and/or postgraduate Physics programmes.
- 3. Evidence of quality teaching at UG or PGT level (e.g. student evaluations, teaching awards).
- 4. Ability to devise, advise on and manage teaching programmes at both UG and PGT levels.
- 5. Commitment to the development of high quality teaching, learning, and assessment materials in the area of multimedia and computing.
- 6. Evidence of contribution to university level administration and outreach.
- 7. Demonstrable experience in providing pastoral care to students.