Introduction to Research Methods

Module description
This module aims to help students understand and develop their skills in the research process. Students will be introduced to the techniques and methods used through various stages of research and will have the opportunity to carry out data collection with a group of their peers. Students will be supported to carry out the appropriate design, data collection and analysis.

This module aims to:
- Develop students’:
  - knowledge of the fundamentals of the research process, including ethics
  - understanding of the interdependence between each stage of the research process
  - capacity to formulate and test research questions and hypotheses
  - experience of both qualitative and quantitative research skills
  - hands-on experience with data collection and management

Learning outcomes
On completion of this module, students will be able to:
- critically assess scientific methods
- select appropriate analytical techniques
- carry out qualitative analysis
- plan, design, conduct, analyse and report a piece of scientific research
- conduct a literature review

Syllabus
- What is research
- Approaches: qualitative and quantitative
- Interpretative phenomenological analysis
- Ethics in research
- Methods, variables, research questions and hypotheses testing
- Data, sampling and power
- Ways of interpreting
- Parametric and non-parametric
- Basic statistical analysis, e.g. t-tests

Learning and teaching methods
The pedagogical approach for this module is informed through the principles of collaborative enquiry, constructionism and scientific apprenticeship.

Collaborative enquiry is supported through our internet-mediated learning platform that aims to develop a learning community and support dialogue and collaboration between students. This is encouraged through online peer discussion and debate to construct a unique learning experience that enhances students’ subject understanding through social interactions and empowers them to explain their understandings, and receive feedback from tutors and peers.

Learning through scientific apprenticeship will take place through the integration of scientific knowledge, principles and experience into the practical application of both the qualitative case study approach and the scientific report.

Teaching will be delivered through the provision of specified reading materials that will be provided on the University of Essex Online Learning Platform, and will be supported by specified discussion forums, pre-recorded lecturecasts and biweekly online question and answer sessions (using synchronous communication software and application sharing facility).

Students will be provided with indicative guidance on, and encouraged to look at relevant websites which are appropriate to the learning outcomes, and to identify and share appropriate web-based resources (as learning support references) with their fellow students.

The pre-recorded lecturecasts and the online question and answer sessions will include referenced use of selected case studies which will be drawn from the reading materials and the practice-based and professional/educational contexts and experience of the Tutors.

Self-managed learning will supplement lectures and students will be given direction on required and indicative reading.

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<tr>
<th>Description of unit of assessment</th>
<th>Length/Duration</th>
<th>Submission date</th>
<th>Weighting</th>
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<tbody>
<tr>
<td>Qualitative report</td>
<td>3,000 words</td>
<td>Mid module</td>
<td>50%</td>
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<tr>
<td>Quantitative report</td>
<td>3,000 words</td>
<td>End of module</td>
<td>50%</td>
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Complete the online application form and an Admissions Adviser will be in touch to assist you in the enrolment process.