Module Specification

Module Summary Information

<table>
<thead>
<tr>
<th></th>
<th>Module Title</th>
<th>Introduction to Gemmology and Jewellery Studies</th>
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<tbody>
<tr>
<td>2</td>
<td>Module Credits</td>
<td>60</td>
</tr>
<tr>
<td>3</td>
<td>Module Level</td>
<td>4</td>
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<tr>
<td>4</td>
<td>Module Code</td>
<td>GEM4008</td>
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Module Overview

This module is designed to introduce you to the theoretical study of gemstones and the techniques used for their identification which is key knowledge that is highly valued within the industry. The module starts with you studying the physical properties of natural and synthetic gemstones and gemstone simulants, to familiarise you with a representative suite of gem materials. You will study the science and theories that underpin our understanding and interpretation of the physical properties used within gem testing. In addition, the module introduces you to the most commercially important gemstone, diamond, as a distinct and separate specialism. You will also study basic concepts of geology and how these may apply to the formation of gemstones and gem deposits.

The aim of the module is to work in conjunction and in tandem with the gemmology and diamond practical module. This allows you to apply all the learning gained in this module into practical applications on the material studied.

During the module you will also be introduced to the concepts underpinning, the science, theory and applications of UV-Vis, NIR spectroscopy. You will also be introduced to key concepts of data analysis and the concepts of accuracy and precision within a scientific context. Through the use of both generic and task specific software packages you will develop your IT skills, and you will be also introduced to the principals and practice of academic research and writing, including Harvard referencing, that will be introduced and practiced throughout the entire degree.

Indicative Content

The fundamental skills you learn in this module will not only underpin your studies, but will also represent essential skills for your future employment. The module will be delivered to you through a combination of theory lectures, seminars, tutorials, group work and practical workshop demonstrations.
7 | Module Learning Outcomes
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On successful completion of the module, students will be able to:
1 | Use correct terminology to explain geological concepts.
2 | Describe the different physical and optical properties of a range of gemstones, and how these apply to gemstone testing and identification.
3 | Explain the principal causes of colour in diamond, and classify the different diamond types.

8 | Module Assessment
---|---|---|---
| Learning Outcome | Coursework | Exam | In-Person |
---|---|---|---|
1-2 | | x | |
3 | x | |

9 | Breakdown Learning and Teaching Activities
---|---|---|---|---|---|---|---|
| Learning Activities | Hours |
---|---|
Scheduled Learning (SL) includes lectures, practical classes and workshops, peer group learning, Graduate+, as specified in timetable | 155 |
Directed Learning (DL) includes placements, work-based learning, external visits, on-line activity, Graduate+, peer learning, as directed on VLE | 300 |
Private Study (PS) includes preparation for exams | 155 |
Total Study Hours: | 600 |