

## PIU22032 — Epistemology and Philosophy of Science

| Module Information |                                             |
|--------------------|---------------------------------------------|
| Module Code        | PIU22032                                    |
| Module Title       | Epistemology and Philosophy of Science      |
| Department         | Philosophy                                  |
| Year Group         | Senior Freshman                             |
| Module Personnel   | Dr. Jamie B. Turner<br>Dr. Alison Fernandes |
| Academic Year      | 2026-27                                     |
| Credit Weighting   | 5 ECTS                                      |
| Semester           | 2                                           |
| Contact Hours      | 22 hours of lectures; 5 hours of tutorials  |

| Module Content     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|--------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Module Description | <p><b>Component 1 (Philosophy of Science):</b> Science looks to be our best hope of discovering the way the world is. We use it to predict climate change, map the human genome and identify the Higgs boson. Science seems to give us an objective view on the world. How does it manage to do this? Does it succeed in its aims? How can we tell? This course will examine the workings of science through four core topics: how we reason to science, how scientific theories explain, the role of values in science, and what scientific theories tell us about the world.</p> <p><b>Component 2 (Epistemology):</b> Topics will include a selection from the following: Kinds of knowledge, defining knowledge, foundationalism, coherentism and relativism.</p> |
| Learning Outcomes  | <p>On successful completion of this module students will be able to:</p> <ul style="list-style-type: none"> <li>• Explain major issues in philosophy of science concerning what science is, how it works, and why should we believe it.</li> <li>• Explain major issues in epistemology concerning what knowledge is, how justification works, and what provides reasons for belief.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                       |

## Module Content

|                                       |                                                                                                                                                                                                                                                   |
|---------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                       | <ul style="list-style-type: none"> <li>• Think critically about philosophical problems relating to scientific practice and knowledge.</li> <li>• Communicate their own ideas effectively to others, both in discussion and in writing.</li> </ul> |
| <b>Indicative Reading / Resources</b> | See Syllabus on Blackboard for Component 1 and Course Outline on Blackboard for Component 2.                                                                                                                                                      |

## Assessment

|                              |                                                                                               |
|------------------------------|-----------------------------------------------------------------------------------------------|
| <b>Assessment Components</b> | 1 Essay (60%).<br>1 Opinion Piece and annotated bibliography (40%).                           |
| <b>Assessment Details</b>    | Essay (1500 words).<br>Opinion Piece (1000 words).<br>Annotated bibliography (200–300 words). |

## Additional Information

|                      |       |
|----------------------|-------|
| <b>Prerequisites</b> | None. |
| <b>Co-requisites</b> | None. |