### Biology (BL) distance learning modules

#### BL1801 The Global Aquaculture Industry (by Distance Learning)

<table>
<thead>
<tr>
<th>SCOTCAT Credits:</th>
<th>10</th>
<th>SCQF Level</th>
<th>Semester</th>
<th>Both</th>
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<tbody>
<tr>
<td>Academic year:</td>
<td>2018/9</td>
<td></td>
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<tr>
<td>Availability restrictions:</td>
<td>Available only for students on the Undergraduate Certificate in Sustainable Aquaculture</td>
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<tr>
<td>Planned timetable:</td>
<td>To be arranged.</td>
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The module will introduce the concept and definition of aquaculture and describe the global industry in the main production regions. The module will also consider the concept of sustainability; outlining the major environmental, social and economic factors involved. Major species produced will be defined and grouped in terms of bony fishes (teleosts), shrimp, shellfish, algae and other species. The main issues and challenges relating to the development of sustainability in aquaculture will be introduced and discussed.

**Learning and teaching methods of delivery:**

Weekly contact: 2-hour on-line lectures and 2-hour interactive on-line learning each week over 12 weeks.

Scheduled learning: 60 hours  
Guided independent Study: 40 hours

**Assessment pattern:**

As defined by QAA:  
Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%

As used by St Andrews:  
2-hour Written Examination = 60%, Coursework = 40%

**Re-assessment pattern:**  
2-hour Written Examination = 100%

**Module coordinator:**  
Dr N Hazon

**Module teaching staff:**  
Dr J A David

#### BL2802 Fish and Invertebrate Biology (by Distance Learning)

<table>
<thead>
<tr>
<th>SCOTCAT Credits:</th>
<th>10</th>
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<tr>
<td>Planned timetable:</td>
<td>To be arranged.</td>
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</table>

This module will address the essential aspects of fish and invertebrate biology including anatomy, physiology and environmental requirements. Subjects studied will include anatomy and physiology of the circulatory, respiratory, nervous, digestive sensory endocrine reproductive systems and life cycle of invertebrate and vertebrate aquaculture species. These parameters will be examined in the context of biological requirements and sustainable aquaculture; production methods and technology, effect of water quality, disease, nutrition and environmental impact.

**Learning and teaching methods of delivery:**

Weekly contact: 2-hour on-line lectures and 2 hour interactive on-line learning each week over 12 weeks.

Scheduled learning: 60 hours  
Guided independent Study: 40 hours

**Assessment pattern:**

As defined by QAA:  
Written Examinations = 60%, Practical Examinations = 0%, Coursework = 40%

As used by St Andrews:  
2-hour Written Examination = 60%, Coursework = 40%

**Re-assessment pattern:**  
2-hour Written Examination = 100%

**Module coordinator:**  
Dr N Hazon

**Module teaching staff:**  
Dr J A David
BL2803 Aquaculture - Products and Markets (by Distance Learning)

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<tr>
<th>SCOTCAT Credits:</th>
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<td>Planned timetable:</td>
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This module provides an understanding of the diversity of species, value of markets and global trade of aquaculture products. The module will review the range of products for finfish and invertebrates. In particular the importance of value added and niche products will be examined in a variety of aquaculture products. The module will examine critically the different markets for aquaculture products; for example a comparison of subsistence farming in Malawi for local consumption with production of high value marine species for export in Brazil. For major aquaculture species such as salmon and shrimp the effects of the main market pressures on sustainable production such as use of medicines, food safety, quality and traceability will be discussed.

<table>
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<tr>
<th>Learning and teaching methods of delivery:</th>
<th>Weekly contact:</th>
<th>2-hour on-line lectures and 2-hour interactive on-line learning each week over 10 weeks.</th>
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<tr>
<td></td>
<td>Scheduled learning:</td>
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<td>Guided independent Study:</td>
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<table>
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<tr>
<th>Assessment pattern:</th>
<th>As defined by QAA:</th>
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<tbody>
<tr>
<td></td>
<td>Written Examinations = 0%, Practical Examinations = 0%, Coursework = 0%</td>
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<table>
<thead>
<tr>
<th>Re-assessment pattern:</th>
<th>2-hour Written Examination = 100%</th>
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## Philosophy (PY) distance learning modules

### PY1801 Ethical Issues (by Distance Learning)

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<td>Planned timetable:</td>
<td>No traditional classes: e-learning module.</td>
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'Ethical Issues' provides an accessible and comprehensive introduction to the philosophical significance of the most pressing moral problems of today, e.g. euthanasia, world poverty, and the moral status of animals and the environment; as well as a guide to the rival theoretical approaches used to reflect upon these issues: consequentialism, Kantian ethics, virtue theories, and moral skepticism. The module will also address meta-ethical questions concerning the metaphysical and epistemological status of moral claims and judgements (are there moral facts? Is ethical knowledge obtainable?)

**Anti-requisite(s)**

You cannot take this module if you take PY1901 or take PY1101 or take PY1103 or take PY1105 or take PY1011

**Learning and teaching methods of delivery:**

- **Weekly contact:** Via Moodle - weekly 1-hour scheduled live tutorial chat.
- **Scheduled learning:** 15 hours
- **Guided independent Study:** 185 hours

**Assessment pattern:**

- **As defined by QAA:**
  - Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%
- **As used by St Andrews:**
  - Coursework = 100%

**Re-assessment pattern:**

1 or more essays totalizing no more than 4,500 words

**Module coordinator:**

Dr L A Jones

### PY1802 Reasoning and Knowledge (by Distance Learning)

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<td>2018/9</td>
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<td>Availability restrictions:</td>
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<td>Planned timetable:</td>
<td>No traditional classes: e-learning module.</td>
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</table>

What should we believe? How should we think? This module provides an introduction to informal modes of reasoning and to philosophical ideas about the differences between good and bad arguments. We will discuss induction and deduction, justification and knowledge, and will study elementary features of logic. The module is an essential foundation for further study in philosophy, and teaches critical and analytic skills central to many other disciplines.

**Anti-requisite(s)**

You cannot take this module if you take PY1006 or take PY1012 or take PY2902

**Learning and teaching methods of delivery:**

- **Weekly contact:** Via Moodle - weekly 1-hour scheduled live tutorial chat.
- **Scheduled learning:** 15 hours
- **Guided independent Study:** 185 hours

**Assessment pattern:**

- **As defined by QAA:**
  - Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%
- **As used by St Andrews:**
  - Coursework = 100%

**Re-assessment pattern:**

1 or more essays/critical evaluation totalizing no more than 4,500 words

**Module coordinator:**

Dr L A Jones
## PY2801 Mind and Reality (by Distance Learning)

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<th>SCOTCAT Credits:</th>
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<th>SCQF Level: 8</th>
<th>Semester: 1</th>
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**Academic year:** 2018/9  
**Availability restrictions:** (subject to sufficient student demand) Non-graduating distance-learning students only.  
**Planned timetable:** No traditional classes: e-learning module.

What am I, and what is reality? Am I part of the scientific, law-governed material world? If so, can I really act freely? How could a material thing be conscious? Am I the same person I was ten years ago? What, fundamentally, are material things and their properties? Can we understand the nature of space and time? Is the human mind capable of proving that God exists? This module will enable students to understand and begin to answer such fundamental metaphysical questions, and to gain valuable skills in reasoning and abstract thought.

**Anti-requisite(s):** You cannot take this module if you take PY1005 or take PY1010 or take PY2902

**Learning and teaching methods of delivery:**  
**Weekly contact:** Via Moodle - weekly 1-hour scheduled live tutorial chat.  
**Scheduled learning:** 15 hours  
**Guided independent Study:** 185 hours

**Assessment pattern:**  
As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%  
As used by St Andrews: Coursework = 100%

**Re-assessment pattern:** 1 or more essays totaling no more than 6,000 words

**Module coordinator:** Dr L A Jones

**Module teaching staff:** TBC

## PY2802 Modern Philosophy: from Descartes to Kant (by Distance Learning)

<table>
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<th>SCOTCAT Credits:</th>
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**Academic year:** 2018/9  
**Availability restrictions:** (subject to sufficient student demand) Non-graduating distance-learning students only.  
**Planned timetable:** No traditional classes: e-learning module

For the purposes of this module, 'modern philosophy' means philosophy written in Europe from Descartes in the mid-seventeenth century to Kant at the end of the 18th century. This was an extraordinary period in the history of western thought, when a variety of brilliant thinkers devoted themselves to working out the philosophical implications of the 'new science'. This generated questions about the extent of human knowledge, about what can be known with certainty, about perception, and about how we acquire knowledge through the senses. There was also renewed interest in morality, its foundation, and its relation to human nature. This module will critically examine the arguments of major philosophers of the modern period, including Descartes, Locke, Berkeley, Hume and Kant.

**Anti-requisite(s):** You cannot take this module if you take PY2004 or take PY2901 or take PY1013

**Learning and teaching methods of delivery:**  
**Weekly contact:** Via Moodle - weekly 1-hour scheduled live tutorial chat.  
**Scheduled learning:** 15 hours  
**Guided independent Study:** 185 hours

**Assessment pattern:**  
As defined by QAA: Written Examinations = 0%, Practical Examinations = 0%, Coursework = 100%  
As used by St Andrews: Coursework = 100%

**Re-assessment pattern:** 1 or more essays totaling no more than 6,000 words

**Module coordinator:** Dr L A Jones

**Module teaching staff:** TBC