Module Title: Restoration Ecology

Indicative Time Allowances (hours):

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<th>Lec</th>
<th>Tut</th>
<th>Sem</th>
<th>Prt</th>
<th>Wrk</th>
<th>Fld</th>
<th>Other</th>
<th>Deliv.</th>
<th>Exam</th>
<th>Private Study</th>
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<tr>
<td>13</td>
<td>0</td>
<td>6</td>
<td>11</td>
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<td>30</td>
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<td>120</td>
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Semester Delivery: (Select one only)

Semester 1 [ ] Semester 2 [x] Runs twice (S1 & S2) [ ]
Year Long [ ] Summer [ ] Other [ ]

Pre-requisites: None

Recommended Prior Study: None

Co-requisites: None

Barred Combinations: None

Aims:

a) Study the role of ecosystems in sustainability with a focus on their role in biogeochemical cycling, as a sink for carbon and for providing other ecosystem functions.
b) Investigate methods of restoration of habitats, including at landscape and global scales.

c) Appreciate methods of setting restoration goals and assessing the success of restoration projects.

d) Analyse the theoretical science and practical implications of species reintroductions, rewilding and invasive species control.

e) Examine the value of policy, community involvement and public support, health and wellbeing, in habitat restoration and management.

Learning Outcomes:

After completing the module the student should be able to:

1. Critically evaluate methods for restoring ecological functions and debate restoration goals at local, national and international scales and in natural, semi natural and peri-urban environments.

2. Undertake complex analyses of the theory, practical implications and complexities around restoring habitats with a focus on the effectiveness of rewilding projects, the reintroduction of species and removal of invasive species.

3. Evaluate real-world habitat and ecosystem scale restoration projects, taking into account conservation biology targets as well as social, political and economic implications to critically evaluate their success.

Learning Activities:

This module will comprise a series of lectures, supported by interactive seminars and in-depth analysis of real-life potential restoration projects. Lectures will draw on a wide variety of theoretical and applied topics with a wide use of case studies throughout. Practicals based in local habitats for onsite learners and similarly directed field or desk based investigations for distance-learners.

Outline Syllabus:

Ecosystem change over time and space, biodiversity and connectedness, stabilization wedges, land sparing v land sharing debate. The science behind rewilding, reintroduction and management of invasive species, phytoremediation and restoration of peri-urban spaces. The role of communities, impact of restoration on communities and economies, and the impact of national and international legislation.

Indicative References:


Assessment Details:

1. Coursework: 60% Coursework: Management report (1800 words)
2. Coursework: 40% Coursework: Essay (1200 words)

Weighting between E and CW: 0% 100%

Relationship between learning outcomes and assessment tasks:

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<th>Component 1</th>
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<tr>
<td>Component 2</td>
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Minimum Pass Mark (%): 50

Module Notes: