## Sustainability in the Oxford Curriculum

Mapping opportunities to study environmental sustainability in undergraduate and postgraduate taught degrees across the University of Oxford

DRAFT FOR CONSULTATION

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# UNIVERSITY OF

### Credits

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### Introduction

Note: This document was approved by the Environmental Sustainability Subcommittee of the Planning and Resource Allocation Committee on 12 June 2024 and by Education Committee on 17 October 2024. During the 2024-2025 academic year, this report is being shared for consultation across the University of Oxford, with a final report and communications outputs identified below to be published and disseminated before the 2025-2026 academic year.

On 15 March 2021, Council approved the Environmental Sustainability Strategy for the University of Oxford<sup>1</sup>, setting the ambition for both net zero carbon emissions and biodiversity net gain by 2035. Curriculum was listed as one of the ten priority areas, with four commitments related to opportunities to study environmental sustainability (see Box 1).

#### Box 1

#### 7.2 Curriculum

Offer all students the opportunity to study environmental sustainability, either within or outside the examined curriculum.

Oxford provides an exciting, challenging learning environment, training future generations of researchers, innovators and leaders in sustainability.

We will give our students the opportunity to develop their knowledge, skills and understanding and become the sustainability leaders of the future. The University curriculum reflects its wide expertise in the fields of climate change, biodiversity and sustainability. Sustainability-related opportunities for internships and training courses are offered to students and student societies are pioneering extracurricular courses. These opportunities will be improved and extended to all students.

#### Commitments

7.2.1 Ensure courses with core and optional sustainability content are easily identifiable.

7.2.2 The Education Committee will encourage and monitor existing degree programmes' development of further environmental sustainability streams in the core curriculum.

7.2.3 Consider and support new courses related to interdisciplinary environmental and social sustainability questions.

<sup>&</sup>lt;sup>1</sup> <u>https://sustainability.admin.ox.ac.uk/files/environmentalsustainabilitystrategy.pdf</u>

7.2.4 Extend existing opportunities for extra-curricular study of environmental sustainability, internship programmes and short courses to all students.

This report is the first attempt to systematically measure the opportunities to study environmental sustainability in the examined curriculum at Oxford. As a curriculum mapping exercise, the report advances the first commitment under the curriculum priority – ensuring courses with core and optional sustainability content are easily identifiable – while serving as a baseline upon which progress on the second and third commitments can be tracked.

This work has been guided by the Curriculum Subgroup of the Environmental Sustainability Subcommittee<sup>2</sup>, which includes representatives from the four academic divisions, Department for Continuing Education, Centre for Teaching and Learning, and Oxford University Student Union. This project has also been undertaken with support from the Pro-Vice-Chancellor (Education), and in consultation with the academic leadership and staff focused on education policy in the four academic divisions.

The curriculum mapping project builds on initial work undertaken by Education Policy Support and the Oxford Networks for the Environment to compile courses related to environmental sustainability<sup>3</sup>. This report has been informed by related initiatives within the University, for example, the Saïd Business School's annual sustainability report<sup>4</sup> and the Planetary Health Report Card of the Oxford Medical School<sup>5</sup>, which was created by students based on an international framework, both of which assess sustainability in the curriculum. Insights from related projects at other higher education institutions have been drawn from the Responsible Futures programme of the charity SOS-UK<sup>6</sup>, which the University joined in partnership with the Oxford SU in 2023.

This report begins with details on the methodology, followed by University-wide and divisional results, and ending with a series of recommendations. The communications plan for this report includes the following components:

- Append to the annual ESSC update to Council.
- Create a two-page summary of findings to share the results more widely for internal and external audiences.

<sup>&</sup>lt;sup>2</sup> <u>https://governance.admin.ox.ac.uk/environmental-sustainability-subcommittee</u>

<sup>&</sup>lt;sup>3</sup> https://www.research.ox.ac.uk/area/trueplanet/one-education

<sup>&</sup>lt;sup>4</sup> <u>https://www.sbs.ox.ac.uk/about-us/school/sustainability</u>

<sup>&</sup>lt;sup>5</sup> https://phreportcard.org/wp-content/uploads/2024/04/Oxford\_University\_2024\_MED.pdf

<sup>&</sup>lt;sup>6</sup> https://www.responsiblefutures.org.uk/

- Update the curriculum webpages of the Environmental Sustainability website<sup>7</sup> to serve as an interactive version of this report, with data dashboards and case studies of both taught degrees and extracurricular opportunities written by students.
- Disseminate the report and supplementary materials through the four academic divisions and Conference of Colleges.

In the three years since the Environmental Sustainability Strategy was adopted, the importance of learning about environmental sustainability has only been reinforced by the worsening climate and nature crises, clearly articulated student concerns, and the strategic priorities of the University of Oxford. This report marks an important first step in achieving the curriculum commitments of Oxford's Environmental Sustainability Strategy. In addition to the findings and recommendations contained in this report, an essential outcome of this process has been the development of relationships with different stakeholders across the University. Building on these relationships, and aligning with strategic priorities related to the curriculum, Oxford University's sustainability education work will continue.

'Everyone should be learning about it, regardless of course. To tackle the climate and biodiversity crises everyone in every sector/industry needs to be on board.'

2<sup>nd</sup> year Geography undergraduate, Regent's Park College

<sup>&</sup>lt;sup>7</sup> <u>https://sustainability.admin.ox.ac.uk/curriculum</u>

### Methodology

The Curriculum Subgroup of the Environmental Sustainability Subcommittee has served as a forum to operationalise the curriculum priority of the Environmental Sustainability Strategy. An important first step involved developing a definitional framework for sustainability education in the unique context of Oxford University. This definitional framework was informed by the fields of environmental education and education for sustainable development, including guidance by UNESCO, QAA and AdvanceHE<sup>8</sup>. While many higher education institutions use the United Nations Sustainable Development Goals (SDGs) when mapping sustainability in the curriculum, the Curriculum Subgroup decided against this due to both critical observations and practical considerations of SDG-based approaches.

Figure 1 presents the curriculum priority annotated with key concepts, while Table 1 outlines the working definitional framework adopted by the Curriculum Subgroup. Rather than a single comprehensive definition, this definitional framework was intended to serve as a conversation starter with the different academic divisions and departments.

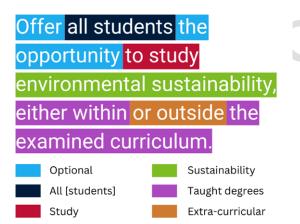


Figure 1: Annotated Curriculum Priority of the Environmental Sustainability Strategy

Table 1: Definitional Framework for Sustainability Education at Oxford University

Dimension	Components	Description
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<sup>8</sup> See QAA & Advance HE. (2021). Education for Sustainable Development: ESD Guidance 2021. QAA and Advance HE. <u>https://www.qaa.ac.uk/the-quality-code/education-for-sustainable-development</u> UNESCO. (2017). Education for sustainable development goals: Learning objectives. UNESCO. <u>https://unesdoc.unesco.org/ark:/48223/pf0000247444</u>

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a. Learning	i.	Cognitive	Learning about environmental sustainability involves
domains	ii.	Social-	more than increases in knowledge and
		emotional	understanding. The social-emotional domain
	iii.	Behavioural	captures both relationships between people and the
			living and non-living world, and issues such as
			climate anxiety. Education for sustainability also has
			a behavioural component in terms of supporting
			action to mitigate and adapt to climate change and
			protect biodiversity.
b. Learning	i.	Formal	As noted in the curriculum priority and
experiences	ii.	Informal	commitments, the opportunity to study
	iii.	Non-formal	environmental sustainability is offered by both the
			formal examined curriculum and informal extra-
			curricular activities. Non-formal learning can be
			understood as the hidden curriculum – the
			environmental performance of academic buildings,
			the sponsorship of career fairs, etc. – that may
			contradict messages in the formal curriculum.
c. Content areas	i.	Biodiversity	Environmental sustainability covers a wide range of
	ii.	Climate	topics. However, with respect to the two ambitious
			targets set out in the Environmental Sustainability
			Strategy (to achieve net zero carbon and to achieve
	S(		biodiversity net gain, both by 2035), sustainability
			education should prioritise skills and literacies
			related to biodiversity and climate.
d. Competencies	i.	Anticipatory	Much work in the fields of environmental,
		thinking	sustainability and climate education research and
	ii.	Critical thinking	practice has focused on the competencies learners
	iii.	Systems	should develop to support environmental
		thinking	sustainability. Of particular importance are the
			ability to engage with an uncertain future, think
			critically about the causes and proposed solutions to
			environmental problems, and understand both
			systems (environmental, social, economic, political)
			and systems change.

e. Principles	i. Local and global	The work of the curriculum priority in the
	engagement	Environmental Sustainability Strategy can't proceed
	ii. Equity and	in isolation and must be integrated with strategic
	justice	concerns about University's local and global
	iii. Pluriversal and	engagement, and important ongoing work on
	contested	decolonising the curriculum and supporting inclusive
		teaching. At the same time, academic freedom and
		the free exchange of ideas are at the heart of
		environmental sustainability, given the contested
		nature of these concepts.

The analysis in this report includes all undergraduate and postgraduate taught degrees, including award-bearing programmes offered by the Department for Continuing Education. As postgraduate research degrees contain limited and variable formal learning opportunities, they have not been included in this baseline report. This report also doesn't explore learning opportunities for University staff or the public offerings through Gardens, Libraries and Museums and the Department for Continuing Education, as they are beyond the scope of the curriculum priority. Data on courses and student numbers have been compiled from the Tableau Server managed by Student Data Management and Analysis<sup>9</sup>.

A core or optional component of a course – sometimes referred to a paper, module or option – with a particular focus on themes related to environmental sustainability was considered the threshold of an 'opportunity to study' sustainability. The purpose and core content of a course can be found on the websites administered by Undergraduate Admissions and Outreach<sup>10</sup> and Graduate Admissions and Recruitment<sup>11</sup>, as well as the course information sheets which are a component of the contract between the University and undergraduate<sup>12</sup> and postgraduate<sup>13</sup> students. After a preliminary review of both the admissions webpages and course information sheets, the course information sheets were chosen as the primary means of identifying course purpose and core content, especially as they are available online going back to the 2016-2017 academic year.

The optional content in a course can be found on departmental websites and in course handbooks. In both cases, this information is managed and shared very differently by each department.

<sup>&</sup>lt;sup>9</sup> <u>https://bits.uas.ox.ac.uk/</u>

<sup>&</sup>lt;sup>10</sup> https://www.ox.ac.uk/admissions/undergraduate/courses/course-listing

<sup>&</sup>lt;sup>11</sup> <u>https://www.ox.ac.uk/admissions/graduate/courses/courses-a-z-listing</u>

<sup>&</sup>lt;sup>12</sup> <u>https://www.ox.ac.uk/students/new/contract/undergraduate-course-information-sheets</u>

<sup>&</sup>lt;sup>13</sup> <u>https://www.ox.ac.uk/students/new/contract/graduate-course-information-sheets</u>

Handbooks are generally distributed as a downloadable PDF, but often these are only visible in a secure intranet or Canvas site. In some cases, handbooks are only provided as a series of webpages in Canvas. Lists of optional papers are sometimes provided as a separate document via email or online. A key limitation to this report is the difficulty gathering information about optional course content, and a substantial amount of student intern time went into systematically compiling course handbooks through desk research and divisional and departmental contacts.

As an initial step in the curriculum mapping, course information sheets and handbooks were searched using a series of keywords extracted from the Environmental Sustainability Strategy. These keywords were then examined in context to confirm their meaning (for example, all undergraduate course information sheets included the phrase 'current economic climate' which showed up in a search for 'climate'). The keywords drawn from the Environmental Sustainability Strategy include sustainability, sustainable, environment, climate, carbon, biodiversity, nature. While reviewing the information sheets, other keywords emerged including landscape, ecology, ecological, etc. Notes and links to evidence for each course were compiled in an Excel spreadsheet.

Using the course information sheets, handbooks and supplemental information as required, the lead author of this report categorised each course into one of the following:

- 1. course focus
- 2. core content
- 3. optional content
- 4. no content
- 5. anti-sustainability

The course focus category was used for courses with multiple core components and a clearly articulated course purpose related to environmental sustainability. The final category of anti-sustainability was not used, but has been retained to provoke the following question: is it possible that the learner outcomes from some courses are antithetical to environmental sustainability and will result in students entering careers and undertaking activities that hasten rather than reverse the climate and nature crises? The answer to this question is beyond the scope of this baseline review.

The preliminary categorisations were shared with divisional education policy staff to review and distribute among departmental contacts. This has played out slightly differently in each division, for example presenting the preliminary results to a meeting of the MPSL Education Committee to gather their feedback, versus having the education policy lead in SSD serve as an intermediary compiling feedback on the initial categorisations. The preliminary categorisations were also shared with the

Environmental Sustainability Subcommittee for review. Course categorisations were updated based on the feedback and evidence provided at this phase.

Over the course of the development of this report, information about extra-curricular activities related to environmental sustainability were also compiled, especially by the student interns assisting this project. Highlights of opportunities to study environmental sustainability outside of the examined curriculum are indicated below, and more detailed case studies of extra-curricular programmes are available on the Environmental Sustainability website.

To supplement the curriculum mapping, a survey of students was conducted in partnership with Oxford SU. 123 students completed the survey – 84% of which were undergraduates – with representation from 27 colleges and all four academic divisions. A summary of results of the survey is included in the following section, and quotes from students are interspersed in this report.

'Many students at Oxford are likely to go into jobs that have influence on future climate policy, so it is of paramount importance that they are aware of the solutions (reducing fossil fuel use and stopping global over-consumption).'

1<sup>st</sup> year Classics undergraduate, Wadham College

### Overall findings

Note: the highlighted numbers and figures below are provisional during the consultation process and will be confirmed before the final publication and dissemination.

### Curriculum mapping

Of the 3,512 undergraduate students that started at Oxford in 2023, 6% are enrolled in courses focused on environmental sustainability, 7% are in courses with core content related to environmental sustainability, and 54% are in courses where there are options related to environmental sustainability. See Table 2 for a breakdown of these categories by division.

Division	Course focus	Core content	Optional content	No content
Humanities	O	0 O	822	349
MPLS	<mark>106</mark>	<mark>75</mark>	525	<mark>309</mark>
MSD	<u>0</u>	<mark>150</mark>	0	<mark>137</mark>
SSD	<mark>96</mark>	23	<mark>559</mark>	O
Continuing Education	0		<mark>0</mark>	<mark>347</mark>
Total	<mark>202</mark>	262	<mark>1906</mark>	<mark>1142</mark>

Table 2: Undergraduate students (new starters in 2023) in courses categorised by environmentalsustainability content

Of the 4,530 students that started postgraduate taught degrees in 2023, 5% are enrolled in courses focused on environmental sustainability, 5% are in courses with core content related to environmental sustainability, and 28% are in courses with options related to environmental sustainability. The more specialised nature of postgraduate study, as well as the fact that many are one-year degrees, may explain the significantly lower figure for optional content for postgraduates compared to undergraduates. Table 3 breaks down this categorisation of postgraduate taught degrees by division.

Division	Course focus	Core content	Optional content	No content
Humanities	0	0	174	<mark>502</mark>
MPLS	31	<mark>12</mark>	<mark>0</mark>	<mark>460</mark>
MSD	0	0	<mark>68</mark>	<mark>339</mark>

SSD	<mark>162</mark>	<mark>210</mark>	<mark>948</mark>	<mark>1122</mark>
Continuing Education	<mark>49</mark>	0	<mark>76</mark>	<mark>377</mark>
Total	<mark>242</mark>	222	<mark>1266</mark>	<mark>2800</mark>

Table 3: Postgraduate students (new starters of taught degrees in 2023) in courses categorised by environmental sustainability content

It is worth noting that a much smaller number of students will choose the options related to environmental sustainability compared to the relatively large percentages that have these options. In some cases, a single optional paper is referenced across a number of degrees, resulting in hundreds of students being categorised as having this option, when in reality only a dozen students could choose the option in a given term.

See the section on findings by division below for more detailed information about the curriculum mapping in terms of departments and programmes. This data is also available as an interactive dashboard on the Environmental Sustainability webpages.

### Student survey

While the student survey shouldn't be considered a representative sample of the student population, it provided an opportunity for students to be involved in the curriculum mapping project and is a means of including student voice in this report. The respondents were largely supportive of environmental sustainability in the curriculum, although some of the open-ended responses included concerns about additions to the curriculum, both in terms of the appropriateness of sustainability to different academic disciplines, as well as the time pressures on students.

The students that completed the survey were overwhelmingly interested in opportunities to study environmental sustainability. 28% answered 'interested' and 45% 'very interested' in response to the question: How interested are you in learning more about environmental sustainability? 24% of respondents said that environmental sustainability wasn't currently included in their course, but they thought it should be (see Figure 2). 56% also indicated that it would be useful if optional modules were systematically signposted as having content related to environmental sustainability.

'The climate crisis is not just an environmental issue, but as also a race and class issue. All need to be tackled to achieve our goals. Furthermore, net zero or emission offsets shouldn't be the fight, the fight should be for complete zero.'

2<sup>nd</sup> year History DPhil, Harris Manchester College

When given the choice of different approaches to providing opportunities to study environmental sustainability, the options were ranked as:

- Building the material into course objectives
- Offering extra-curricular learning opportunities
- Creating dedicated modules that are optional
- Creating dedicated modules that are compulsory

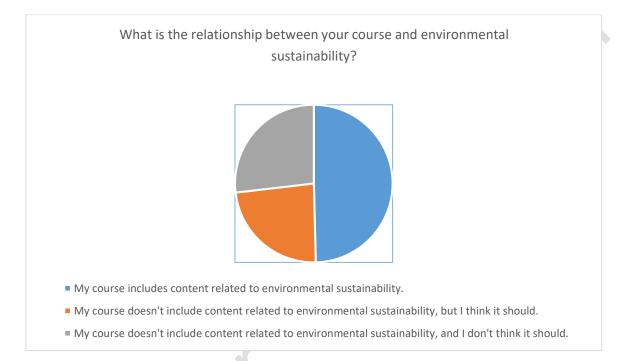


Figure 2. Student responses to the multiple-choice question: What is the relationship between your course and environmental sustainability?

### Extra-curricular opportunities

There are many opportunities to learn about environmental sustainability that are open to all students at the University of Oxford, for example lectures organised by the Oxford Networks for the Environment, academic departments and student societies. However, only a small number of extracurricular opportunities meet the same threshold of study as a core or optional module in a taught degree.

Having advocated for more climate in the curriculum, the Oxford Climate Society launched the student-run School for Climate Change<sup>14</sup> in 2017. Framed as a 'climate 101' for students interested in learning the basics of climate science and policy from Oxford academics, the School of Climate Change has grown and evolved over the past seven years. It now receives over 600 applications from

<sup>&</sup>lt;sup>14</sup> https://www.oxfordclimatesociety.com/the-oxford-school-of-climate-change.html

undergraduate and postgraduate students each term for the in-person lecture series, and thousands of people from around the world join the virtual offering that was initially developed during the Covid-19 pandemic.

The Environmental Change Institute in the School of Geography and the Environment has previously hosted a three-day Oxford Programme in Sustainability Leadership<sup>15</sup> during the last week of Easter vacation. In 2023, around 100 students – both undergraduates and postgraduates – joined lectures, panel discussions, workshops and group activities. One strength of the programme was the network of Oxford alumni in a range of sustainability careers that returned to the University to share their experiences with current students.

The Oxford SDG Impact Lab<sup>16</sup> is based in the Oxford Department of International Development and offers postgraduate students a 17-week training programme followed by a research placement with a non-academic partner. Organised around the United Nations Sustainable Development Goals, these fellowships provide interdisciplinary skills training and leadership development that are then applied to real-world sustainability challenges. In 2024, the SDG Impact Lab launched a series of new initiatives, including local climate policy labs for postgraduates and the Laidlaw Scholars programme for undergraduates.

The Vice-Chancellor's Colloquium<sup>17</sup> was announced in the 2023 Vice-Chancellor's Oration<sup>18</sup> and was designed and delivered by the Department for Continuing Education starting in 2024. 200 undergraduates – half from STEM subjects, half from humanities and social sciences – explored interdisciplinary perspectives on the causes, impacts and solutions to climate change through keynote lectures and college sessions facilitated by postgraduates. With a focus on developing interdisciplinary skills related to numeracy, critical thinking and communication, the programme ended with students working in small groups to propose local solutions to climate change.

<sup>&</sup>lt;sup>15</sup> <u>https://www.eci.ox.ac.uk/course/oxford-programme-sustainability-leadership</u>

<sup>&</sup>lt;sup>16</sup> https://www.sdglab.uk/

<sup>&</sup>lt;sup>17</sup> <u>https://ox.ac.uk/vc-colloquium</u>

<sup>&</sup>lt;sup>18</sup> https://www.ox.ac.uk/news/2023-10-03-vice-chancellors-oration-2023

### Findings by division

### Humanities Division

There were no courses in Humanities categorised as being focused on or having core content related to environmental sustainability. However, 70% of undergraduates and 26% of students pursuing postgraduate taught degrees are in courses that provide optional papers related to environmental sustainability (or recognise an option offered by another course or department in Humanities). This includes the majority of students studying Classics, English, History and Theology due to a small number of environmental humanities options that were identified. See Figure 3 for a breakdown by department.

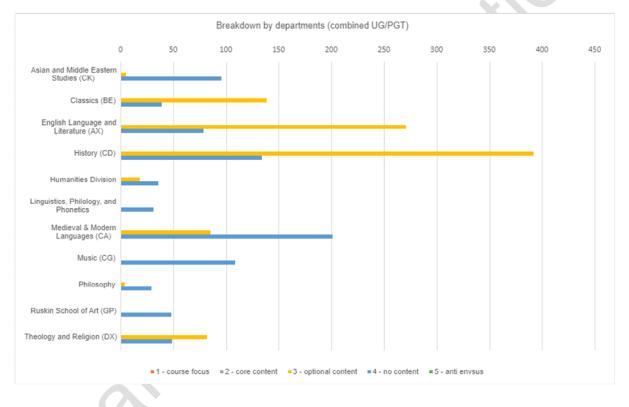


Figure 3. Opportunities to study environmental sustainability in the departments of the Humanities Division (student numbers, new starters 2023, combined undergraduate and postgraduate taught degrees)

The Humanities Division is home to a growing community of environmental humanities scholars, as reflected in Environmental Humanities Research Hub<sup>19</sup> and Climate Crisis Thinking in the Humanities and Social Sciences network<sup>20</sup> in The Oxford Research Centre in the Humanities (TORCH). The Division is currently planning for the introduction of a new postgraduate degree in Environmental

<sup>&</sup>lt;sup>19</sup> <u>https://torch.ox.ac.uk/environmental-humanities-research-hub</u>

<sup>&</sup>lt;sup>20</sup> https://torch.ox.ac.uk/climate-crisis-thinking-in-the-humanities-and-social-sciences

Humanities from 2026-27. It has also hosted informal learning opportunities related to sustainability, most notably the Everything is Connected season of the Cultural Programme<sup>21</sup>. Academics in the Faculty of History recently invited all members interested in environmental history to share information through a series of webpages<sup>22</sup>, which could serve as a model for other faculties.

### Mathematical, Physical and Life Sciences Division

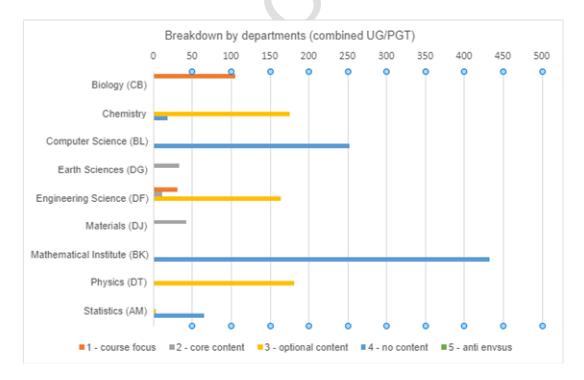
Courses focused on environmental sustainability (10% of undergraduate students and 8% of students in postgraduate taught degrees):

- MBiol Biology
- MSc Energy Systems

Courses with core content related to environmental sustainability (7% of undergraduates):

- BA Geology / MEarthSci Earth Sciences
- MEng Materials Science

An additional 52% of undergraduates are in courses with options related to environmental sustainability, including Chemistry, Engineering, Physics and Statistics. There were no options related to environmental sustainability identified for postgraduate taught degrees. See Figure 4 for a breakdown by MPSL department.



<sup>21</sup> https://oxfordculturalprogramme.org.uk/everything-is-connected/

<sup>&</sup>lt;sup>22</sup> https://www.history.ox.ac.uk/environmental-history

Figure 4. Opportunities to study environmental sustainability in the departments of the Mathematical, Physical and Life Sciences Division (student numbers, new starters 2023, combined undergraduate and postgraduate taught degrees)

The first sentence of the course information sheet for MBiol Biology makes clear that issues related environmental sustainability are the focus of the course (emphasis added): 'Biology is an exciting and rapidly developing subject area with great relevance to addressing global challenges from disease and poverty to *biodiversity loss and climate change*'<sup>23</sup>. While MEng Engineering Science includes an optional pathway related to environmental sustainability, and there are currently conversations in the department to increase this offering in response to requirements by professional accreditation institutions, the first sentence in the course information sheet frames the degree very differently (emphasis added): 'Engineering Science encompasses a vast range of subjects, from microelectronics to *offshore oil platforms*, and involves the application of creative reasoning, science, mathematics (and, of course, experience and common sense) to real problems'<sup>24</sup>.

#### Medical Sciences Division

There are no courses in MSD focused on environmental sustainability. There is one course with core content related to environmental sustainability which includes 52% of students per year (and an even larger percent of all current students when considering it is a six-year programme).

BA Medical Sciences

This categorisation of Medicine is primarily based on the assessment of medical students who completed the independent Planetary Health Report Card, which reported that a number of themes related to environmental sustainability are briefly covered in the core curriculum (see Box 2). Inside MSD, Dr SanYuMay Tun serves as the Lead for Education for Sustainable Healthcare (ESH) building on her work developing a curriculum for sustainable healthcare which was endorsed by the Medical Schools Council<sup>25</sup>. Dr Tun was also responsible for the University of Oxford joining the Planetary Health Alliance<sup>26</sup> in 2023.

Box 2

<sup>&</sup>lt;sup>23</sup> <u>https://www.ox.ac.uk/sites/files/oxford/field/field\_document/Biology%20CIS%202023.pdf</u> 24

https://www.ox.ac.uk/sites/files/oxford/field/field\_document/Engineering%20Science%20CIS%202023 \_0.pdf

<sup>&</sup>lt;sup>25</sup> https://www.medschools.ac.uk/media/2949/education-for-sustainable-healthcare\_a-curriculum-forthe-uk\_20220506.pdf

<sup>&</sup>lt;sup>26</sup> https://www.planetaryhealthalliance.org/

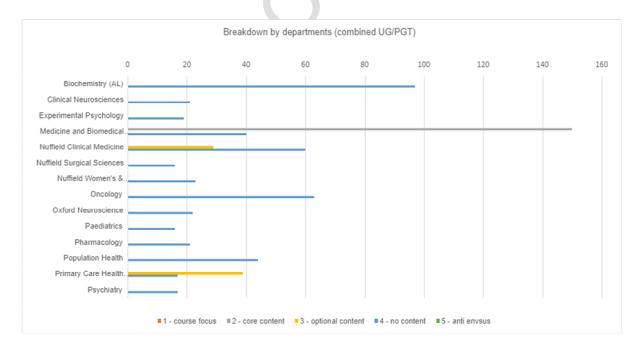
Planetary Health Report Card 2022-2023: Oxford University Medical School – Summary of Findings (Curriculum)<sup>27</sup>

#### Score: B

The curriculum score has continued to increase from last year, reflecting further integration of planetary health themes throughout the preclinical and clinical courses. Thanks to persistent effort from students and preclinical lecturers, the standard-entry medicine (SEM) score has been brought in line with the graduate-entry (GEM) score this year. We would like to particularly thank the ESH lead Dr SanYuMay Tun for her work in this area, with her new sessions on Planetary Health boosting this score area.

Recommendations: We recommend that the Primary Care department, which has inherited lots of the teaching time from the Public Health course in 5th year, ensures that ESH is well integrated to prevent a drop in score next year. The psychiatry course in 5th year should also work to address the mental health effects of climate change in their teaching.

Optional content related to environmental sustainability is available for 17% of students in postgraduate taught degrees in MSD through the MSc International Health & Tropical Medicine and MSc Global Healthcare Leadership. See Figure 5 for a breakdown by department.



<sup>&</sup>lt;sup>27</sup> <u>https://phreportcard.org/wp-content/uploads/2023/04/Oxford-University-Medical-School\_2023\_Med.pdf</u>

Figure 5. Opportunities to study environmental sustainability in the departments of the Medical Sciences Division (student numbers, new starters 2023, combined undergraduate and postgraduate taught degrees)

#### Social Sciences Division

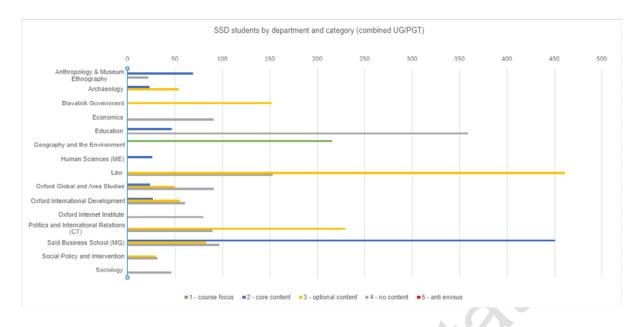
Courses focused on environmental sustainability (10% of undergraduate students and 6% of students in postgraduate taught degrees):

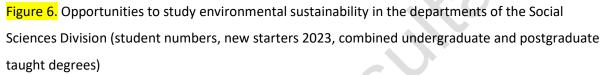
- BA Geography
- MPhil / MSc Biodiversity, Conservation and Management
- MPhil / MSc Environmental Change and Management
- MPhil / MSc Nature, Society and Environmental Governance
- MPhil / MSc Water Science, Policy and Management
- MSc Sustainability, Enterprise and the Environment

Courses with core content related to environmental sustainability (7% of undergraduates and 25% of students in postgraduate taught degrees):

- BA Archaeology and Anthropology
- BA Human Sciences
- Executive MBA
- MBA
- MPhil Development Studies
- MPhil / MSc Latin American Studies
- MPhil / MSc Medical Anthropology
- MPhil / MSc Social Anthropology
- MSc Cognitive Evolutionary Anthropology
- MSc Major Programme Management
- PGCE Biology
- PGCE Chemistry
- PGCE Geography
- PGCE Physics

All remaining undergraduate degrees and an additional 23% of students in postgraduate taught degrees have options related to environmental sustainability. See Figure 6 for a breakdown by department.





Given the relevance of environmental sustainability to a range of academic disciplines in social sciences, the opportunities and figures above are no surprise. As an example of the demand for these courses, the MSc Sustainability, Enterprise and the Environment offered by the Oxford Smith School in the School of Geography and the Environment has over 500 applicants for 25 places – an acceptance rate of less than 5% – making it one of the most competitive courses at Oxford in terms of admissions. Responding to interest from both prospective students and potential employers, the Saïd Business School has also worked to embed environmental sustainability into their educational programmes, as explained in their recent sustainability report.

'Our MBA programme exemplifies the systematic incorporation of sustainability across our teaching provision. 51% of our core teaching hours contain ESG-related content, resulting in a superb result in the Financial Times Global MBA rankings in 2023, where we placed 8th in the world for the provision of ESG-related [Environmental Social Governance] teaching hours. Furthermore, our MBA Core 1 integrated module (bringing together Technology and Operations Management, Organisational Behaviour and Accounting frameworks) addresses ESG issues in multiple ways. Last academic year, we examined students based on complex, sustainability-related cases (The Big Issue and UK Infrastructure Bank), with similar cases being set this year (Formula E and The Big Issue Invest).'

### Department for Continuing Education

Award-bearing courses focused on environmental sustainability (10% of students in postgraduate taught degrees):

- MSc Applied Landscape Archaeology
- MSc Sustainable Urban Development
- PGCert Ecological Survey Techniques
- PGDip International Wildlife Conservation Practice

Award-bearing courses with core content related to environmental sustainability (4% of undergraduates):

• UGCert Archaeology

An additional 15% of students in postgraduate taught degrees have options related to environmental sustainability through the MSt History of Design, MSt Literature and Arts, and MSt Practical Ethics.

The mission of Continuing Education includes the following reference to environmental sustainability, 'Staff and students will work together within and beyond Oxford to foster a vibrant learning community attentive to the importance of promoting sustainability and social justice'<sup>29</sup>. A highlight of the department's offerings is the MSc in Sustainable Urban Development (SUD), a two-year part-time programme for sustainability professionals. SUD brings together teaching staff with expertise in anthropology, architecture, economics, geography and planning, and a student cohort of working professionals from around the world. Continuing Education also offers The Vice-Chancellor's Colloquium to undergraduates as an extra-curricular opportunity.

<sup>&</sup>lt;sup>28</sup> <u>https://www.sbs.ox.ac.uk/sites/default/files/2024-03/sustainability-report-2022-23.pdf</u>

<sup>&</sup>lt;sup>29</sup> https://www.conted.ox.ac.uk/about/mission-vision-and-values

### Recommendations

Drawing on the findings above and the consultative process that led to this report, the Curriculum Subgroup of the Environmental Sustainability Subcommittee proposed the following two recommendations and related enabling actions subject to the availability of resources.

#### Recommendation 1: Support divisional ownership of environmental sustainability in the curriculum.

The definitional framework described in this report is the starting point for ongoing conversations with the academic divisions on disciplinary understandings of environmental sustainability, the appropriateness of environmental sustainability content for different courses, and the development of meaningful indicators of environmental sustainability in the curriculum. Following this report, each division and the Department for Continuing Education should convene a process to shape their own definitions and indicators for future curriculum mapping, as well as develop divisional plans of action related to advancing environmental sustainability in the curriculum.

Potential enabling actions to further advance environmental sustainability in the curriculum at the divisional level include:

1A) To ensure that courses with core and optional environmental sustainability content are easily identifiable to prospective students, divisions are encouraged to work with departments and undergraduate and graduate admissions teams to enhance web-based course information. Departments are encouraged to highlight core and optional environmental sustainability content in course handbooks using a similar system.

1B) Divisions are encouraged to update the process – and any templates, guidance documents or other systems – for developing new courses and approving substantial changes to existing courses to ask departments to provide information about any core and optional content that will be related to environmental sustainability. Course directors are in the best position to answer these questions, and framing environmental sustainability as important but not required would help mainstream sustainability in the curriculum.

1C) To ensure that the Environmental Sustainability Strategy is fully integrated into University operations, including the educational opportunities provided, divisions and departments are encouraged to update job descriptions to include a responsibility to support environmental sustainability as a strategic priority across education, research and operations.

Recommendation 2: Develop further extra-curricular learning opportunities, online resources and training related to environmental sustainability.

Learning opportunities outside the examined curriculum supplement undergraduate and postgraduate courses, while supporting student-driven learning. Innovative forms of self-directed, online learning – as described in the University's Digital Educational Strategy – have the potential to develop sustainability competencies for both students and staff. Resources and training opportunities should also be developed to improve the confidence of lecturers and tutors and quality of teaching and learning related to environmental sustainability, modelled on existing resources, training and support for inclusive teaching.

Potential enabling actions to further advance environmental sustainability through extra-curricular learning opportunities include:

2A) The pilot of The Vice-Chancellor's Colloquium in Hilary Term of 2024 confirmed that climate change was an effective theme for broadening the curriculum and developing interdisciplinary skills. The Department for Continuing Education is encouraged to formalise this extra-curricular offering into an ongoing programme, while also exploring opportunities to expand the reach of the Colloquium, for example through hybrid digital and in-person options. The Colloquium could also explore a range of themes related to environmental sustainability, using the United Nations Sustainable Development Goals and the 2030 Agenda for Sustainable Development to frame the experience.

2B) There are a number of extra-curricular learning opportunities related to climate change and sustainable development, however, there are no comparable extra-curricular opportunities to study biodiversity and nature. Oxford's Green Estate, including Wytham Woods and the Oxford Botanic Garden and Arboretum, provides an outdoor classroom for nature study and hands-on restoration activities. The Environmental Sustainability team is encouraged to convene relevant stakeholders to explore how existing activities (lectures, field trips, etc.) could be combined into a cohesive extra-curricular offering related to biodiversity and nature.

2C) With support from the Environmental Sustainability team, the divisions are encouraged to develop new cross-departmental collaborations to provide applied, project-based, interdisciplinary learning outside of the curriculum. This would enable the University to participate in international programmes and inter-university competitions like the World Solar Challenge and Solar Decathlon. Competitions within the University would also reward relevant student work, similar to the current Sustainability Photographer of the Year contest for students and staff, for example the creation of an annual Environmental Sustainability Essay Prize.

### Conclusion

Do all students at the University of Oxford have the opportunity to study environmental sustainability? Strictly speaking, the answer is yes. 13% of undergraduates are enrolled in courses where environmental sustainability is either the focus of the course or covered through core content. An additional 54% of undergraduates have options in their course to study environmental sustainability. For postgraduate taught degrees, 10% of students are in courses with core content or a focus on environmental sustainability and 28% are in courses with optional content. The remaining undergraduate and postgraduate students have the opportunity to study environmental sustainability outside their degree through a number of extra-curricular programmes.

However, when it comes to optional course content and extra-curricular opportunities, these numbers hide the fact that there are physical limits to how many students could actually take up these opportunities at any one time, as well as barriers due to established course pathways. 33% of undergraduates and 62% of postgraduates do not have access to any sustainability education through their courses, and the current capacity of the informal provision of educational opportunities could only reach a tiny fraction of them. For example, the capacity of The Vice-Chancellor's Colloquium was 200 undergraduates, the SDG Impact Lab programmes are limited to dozens of postgraduates, and an environmental humanities paper will only have space for to eight to twelve students. Ongoing work is required to better understand these limitations, as well as the motivations for students that do – and don't – participate in optional learning opportunities related to environmental sustainability.

The commitments of the curriculum priority of Oxford's Environmental Sustainability Strategy indicate what should happen next:

- Highlight the opportunities to study environmental sustainability.
- Increase the amount of core content related to environmental sustainability.
- Develop new interdisciplinary courses focused on environmental sustainability.
- Expand extra-curricular opportunities to study environmental sustainability.

The University of Oxford is well positioned to prepare graduates to tackle the challenges of climate change, biodiversity loss and sustainable development. By 2035 – when the University will have achieved net zero emissions and biodiversity net gain – the opportunities to study environmental sustainability should also have improved over the baseline captured in this report. Building on a history of quality teaching and learning, while responding to both student concerns and the evolving

demands of the workplace, Oxford can continue to innovate and expand its impact when it comes to sustainability education.



*Note: If you have any feedback on this report, please contact <u>william.finnegan@conted.ox.ac.uk</u>.*