

From Art to Zoo Management: embedding sustainability in UK higher and further education

Education for sustainable development (ESD) is the process of equipping students with the knowledge and understanding, skills and attributes needed to work and live in a way that safeguards environmental, social and economic wellbeing, both in the present and for future generations

(Education for sustainable development: Guidance for UK higher education providers, HEA & QAA, June 2014)

About this guide

This guide has been developed by the Department for Sustainability at the NUS to showcase best practice in the incorporation of sustainability in UK further and higher education courses.

How it was created

This guide aims to showcase just some of the fantastic work going on across the sector. It is not a comprehensive report on sustainability in further and higher education, but rather a curated document, intended to inspire.

The guide was created according to the above definition of ESD from the Quality Assurance Agency for Higher Education (QAA) and the Higher Education Academy (HEA). For more information, please view the document [here](#).

Our work on ESD

NUS' Department for Sustainability works to embed sustainability into the curriculum, in part through running programmes with students' unions, universities and colleges across the UK. Some of the following case studies are accompanied by logos, indicating that the institution takes part in one of the following programmes.

Responsible Futures assists institutions in helping students to gain the skills and experiences they need to thrive as global citizens. It actively supports partnerships between students' unions and institutions through a structured framework of criteria to encourage action on embedding social responsibility and sustainability into formal and informal learning. Find out more at www.nus.org.uk/responsiblefutures.

Dissertations for Good is a website connecting students with organisations to complete research into sustainability together. It is helping students use their education as a force for social good. Find out more at www.nus.org.uk/dfg.

Join the conversation on social media using **#SustainabilityAtoZ**.

This resource would not have been possible without the contributions of all those included. **We extend our thanks to all those involved and hope that they are pleased with this final resource.**

**Kay Fretwell, student placement
Kim Croasdale, sustainability
project officer – curriculum &
healthcare**

#SustainabilityAtoZ

For more information please email sustainability@nus.org.uk or visit www.nus.org.uk/sustainability

Contents

The links in bold below mean that the case study describes that course. Those in italics link to a case study describing a similar, relevant course.

A

[Accountancy](#)
[Acting](#)
[Advertising](#)
[Aerospace engineering](#)
[Agricultural/Rural business management](#)
[Anatomy](#)
[Ancient history](#)
[Animal behavior and welfare](#)
[Animal management](#)
[Anthropology](#)
[Archaeology \(Geology\)](#)
[Archaeology \(World history\)](#)
[Architecture \(Art\)](#)
[Architecture \(Quantity surveying\)](#)
[Art and design](#)
[Artificial intelligence](#)

B

[Beauty therapy](#)
[Biochemistry](#)
[Biology](#)
[Brand management](#)
[Broadcast journalism](#)
[Business studies](#)
[Business \(tourism\)](#)

C

[Careers services](#)
[Chemical engineering](#)
[Chemistry](#)
[Childhood studies](#)
[Civil engineering \(Quantity surveying\)](#)
[Civil engineering \(Urban planning\)](#)
[Clubs and societies](#)
[Coastal zone management](#)
[Complementary therapies \(Hair and beauty\)](#)
[Complementary therapies \(Nursing and midwifery\)](#)
[Complementary therapies \(Occupational therapy\)](#)

C – cont.

[Communication](#)
[Community engagement](#)
[Computer science](#)
[Computer systems](#)
[Construction](#)
[Cosmetic science](#)
[Costume design](#)
[Counselling](#)
[Crafts](#)
[Creative writing](#)
[Criminal psychology](#)
[Criminology and justice](#)
[Cultural studies](#)

D

[Dance](#)
[Data science](#)
[Dental nursing](#)
[Dental surgery](#)
[Dental technology](#)
[Dentistry](#)
[Digital media production](#)
[Directing](#)
[Dissertations for Good](#)
[Drama](#)

E

[Earth sciences](#)
[Economics](#)
[Education \(Kinesiology – sport and exercise\)](#)
[Education \(Youth work\)](#)
[Electrical engineering](#)
[Electronic engineering](#)
[English language](#)
[Engineering \(Electronic engineering\)](#)
[Engineering \(Geology\)](#)
[Environmental science \(Chemistry\)](#)
[Environmental science \(Geology\)](#)
[Ethics](#)
[Equine management](#)
[Event management](#)

#SustainabilityAtoZ

For more information please email
sustainability@nus.org.uk or visit
www.nus.org.uk/sustainability

F

Fashion design

Festival management

Film studies/filmmaking

Finance

Fine art

Forensic science

Future-thinking

G

Geology

Geography (geology)

Geography (tourism)

GIS (Geographical information systems)

Graphic design (Art and design)

Graphic design (Visual communication)

H

Hair and beauty

Hairdressing

Health and social care (Nursing and midwifery)

Health and social care (Occupational therapy)

Health and social care (Youth work)

Healthcare management

Heritage studies

History

Hospitality

Human geography (International development)

Human geography (Urban planning)

Human resource management

I

Illustration

Inductions

Informal curriculum

International development

International politics

International relations

J

Justice and criminology

K

Kinesiology – sport and exercise

L

Land management

Languages (English)

Law

Leadership

Linguistics

M

Make-up

Management (Business)

Management (International development)

Marine science

Marketing

Materials science

Mathematics

Mechanical engineering

Media studies

Medicinal chemistry

Medicine

Mining

Modern history

Music

N

Nursing and midwifery

O

Occupational therapy

Oral health

Orthodontics

P

Paramedic science

Performance design

Performing arts

Pharmacology

Pharmacy

Philosophy

Photography

Physics

Physiology

Physiotherapy (Kinesiology – sport and exercise)

Physiotherapy (Nursing and midwifery)

Physiotherapy (Occupational therapy)

Psychology

Policing

Politics

PRME (Principles for Responsible Management Education)

Product design (Art and design)

Product design (Visual communication)

P – cont.

Project management

Public health

Q

Quantity surveying

R

Radio production

Religious studies

Responsible management

Responsible Futures

Robotics

S

Scriptwriting

Social care

Social policy (International development)

Social policy (Social science)

Social science/Social psychology

Social work (Social science)

Social work (Youth work)

Sociology (Justice and criminology)

Sociology (Social science)

Sociology (Youth work)

Spa management

Specialist teaching

Speech and language therapy

Sports coaching

Sport psychology

Statistics

T

Teaching (Kinesiology – sport and exercise)

Teaching (Performing arts)

TEFL – teaching English as a foreign language

Television production

TESOL – teaching English to speakers of other languages

Theatre studies

Theology

Translation

Transport and logistics

Travel and tourism

U

Urban design

Urban development

Urban regeneration

Urban planning

V

Visual communication

Volunteering

W

Wildlife conservation

World history

X

X-tra curricular activities

Y

Youth work

Z

Zoo management

Valeria Vargas, education for sustainable development co-ordinator at Manchester Metropolitan University (MMU), is responsible for supporting MMU’s commitment to embedding sustainability across the curriculum.

Department overview

Courses offered by the Manchester School of Art at MMU include Art and Design, Fashion, Photography and more. Sustainability is linked to these courses in some unique and interesting ways. One such example is the Living in Future Ecologies or ‘LiFE’ research group.

Through art and design practices, the group proposes challenging and innovative ideologies for sustainable living, social change and community mobilisation, by collaborating with other departments, businesses and organisations.

This year, Masters students from the School of Art pitched ideas to the LiFE research group and worked with researchers to develop and showcase their projects. They created a walk to exhibit these projects as part of the Manchester European City of Science 2016 celebrations. The walk took place in an area where a large building development is planned. You can view the project’s output publication at <http://www.cornerhousepublications.org/publications/fruitful-futures/>.

“One student looked at the resilience of Japanese knotweed, and created designs where it could be used as a material rather than destroyed. Another student aimed to raise awareness of poor development that does not consider local biodiversity or



communities... and created drawings of alternative, less invasive plans.”

Valeria Vargas

Recently, fashion design students collaborated with engineering students on a project to find creative solutions to local challenges - supporting local sheep farmers in adopting more sustainable wool processing methods.

“This project engages students from two faculties who do not often have the opportunity to interact. This allows students from both disciplines to explore questions and answers that they rarely face within their discipline in isolation – such as a greater appreciation of the wider issues facing textile producers and how this impacts on design decisions.”

Valeria Vargas

Links

- **Global Dimension in Engineering Education European Award (Fashion & Engineering): [the project and the awards](#)**
- **[Manchester School of Art, Manchester Metropolitan University](#)**
- **[LiFE Research Project](#)**
- **[Centre for Sustainable Practice in the Arts](#)**
- **[ArtsAdmin](#):** Enables artists to create work which is sustainable, collaborative and bold

Related subjects: Architecture, Crafts, Fashion design, Fine art, Graphic design, Illustration, Photography, Product design

Further information: <http://www.art.mmu.ac.uk/courses/>
Contact: artschool@mmu.ac.uk

Aldilla Dharmasasmita, academic associate at Nottingham Trent University's Green Academy and Nottingham Business School, feels that embedding sustainability into their courses helps students see the strong connection between concepts of sustainability and business practice.

Course overview

The Sustainability in Practice (SiP) Certificate at Nottingham Trent University (NTU) is an online module with an optional in-person Challenge Day. Available to all NTU students, it has been developed by Aldilla and the NTU Green Academy in collaboration with over 45 academics and other colleagues from across the institution. Nottingham Business School (NBS) made the decision to formalise the certificate by embedding it within a core Masters-level module and a core undergraduate module on Leadership and Employability.

Student Experience

The Leadership and Employability module also provides opportunities for final year students to undertake consultancy work with local organisations to reduce their greenhouse gas emissions, helping students draw links between business practices and environmental impacts.

"A number of students who initially had no interest in climate change or environmental management in business have progressed to furthering these topics, either through further studies or in their jobs."

Aldilla Dharmasasmita

Colleagues from NBS and other departments have published chapters in 'The Business Student's Guide to Sustainable Management' edited by Dr Petra Molthan-Hill, who leads the Green Academy. The book, endorsed by the Principles for Responsible Management Education (PRME) serves as a useful textbook for students and as a teaching resource for

colleagues teaching Business and related subjects. The initial response of many student readers was to question the relevance of sustainability to business. But Aldilla says that,

"Towards the end, most of them were able to see the strong connection between concepts of sustainability and business practice."

Additionally, colleagues from NBS and other schools can also access resources from an online Future Thinking Learning Room, developed by Lina Erlandsson and Jessica Willats of the Green Academy, in collaboration with colleagues across NTU. This is to support the embedding of sustainability into all courses with a special focus on the UN Sustainable Development goals.

Links

- [Sustainability in Practice Certificate](#)
- [PRME – Principles for Responsible management Education](#)

Related subjects: Future-thinking, Human resource management, Leadership, Management, PRME, Responsible management

Further information: <https://www4.ntu.ac.uk/nbs/>
Contact: GreenAcademy@ntu.ac.uk

Dr Katherine J. Haxton, senior lecturer in Chemistry at Keele University, feels incredibly lucky to work with a group of academics who are passionate and extremely knowledgeable about sustainability.

Course overview

Chemistry courses at Keele University include a compulsory module in the first year entitled 'Sustainable Chemistry'. The module is also offered as an elective for second year Environmental Science and Sustainability students and also forms part of a distance learning course at Nanjing Xiaozhuang University in China. The module looks at the numerous global challenges that chemistry has the potential to solve – including health, food and water, energy, plastics, gender equality, terrorism and security.

"We tackle topics such as gender equality indirectly, looking at medicines for emerging diseases... Ebola, Zika, malaria, and considering the headlines related to Zika (such as women being advised to avoid pregnancy) that place burden on women disproportionately. Students also look at how medicines are often tested disproportionately on white males leading to poor efficacy information for females."

Katherine Haxton

In the second year module 'Industrial Chemistry', students are encouraged to think about how industrial processes have been improved by environmental legislation, or how they could be improved in the future.

"In one particularly memorable session in 2015 we asked the students to prepare for class by picking a general election candidate or party, and to investigate their environmental policies. We used the class session to discuss these issues. Many

students used it as an excuse to try and dredge up the worst possible policies so it was a very lively session."

Katherine Haxton

Sustainability is also built into first and second year skills sessions, designed to develop skills such as group work, negotiation and presenting – for example, the '12 Principles of Green Chemistry' are used as a basis for group activities.

"Those teaching Chemistry get bogged down in the 12 Principles of Green Chemistry and, by incorporating those, tend to feel they have 'covered' sustainability. There is no reason why chemistry cannot be placed in a broader social, economic, political and environmental context... And there are many reasons why it should be, not least that it can engage and challenge students and staff. Suddenly it becomes the most obvious thing in the world to talk about global warming alongside infrared spectroscopy and gender equality alongside discussion of drug molecules."

Katherine Haxton

Links

- [Centre for Doctoral Training in Sustainable Chemistry, The University of Nottingham](#)
- [The Twelve Principles of Green Chemistry: What it is & why it matters](#)
- [SusChem](#)
- [OECD: Sustainable Chemistry Platform](#)

Related subjects: Biochemistry, Chemical engineering, Environmental science, Forensic science, Materials science, Medicinal chemistry, Pharmacology

Further information: <https://www.keele.ac.uk/chemistry/>
Contact: chemistry@keele.ac.uk

D - Dentistry

e-Den is the dentistry programme on the e-Learning for Healthcare online learning platform from Health Education England, which is free to access for UK dental students or NHS dental staff. It includes a range of sustainability content, developed by the Centre for Sustainable Healthcare.

Course overview

e-Learning for Healthcare is a national learning platform for healthcare students and professionals. Several of the online dentistry modules now contain sustainability content, including a dedicated session within the Management and Leadership module on 'Sustainable Dentistry and Measuring Carbon in Healthcare', which could supplement or be incorporated into a Dentistry degree course.



module, which now includes information on the impacts of nitrous oxide greenhouse gases.

Other modules refer to the environmental and health benefits of diet and smoking cessation, the Minamata Convention to eliminate mercury use, climate change adaptation, energy efficiency, greenspaces, and cycle provision in the context of management and leadership.

The Sustainable Dentistry session, developed in 2016 by two dentists working with the Centre for Sustainable Healthcare as KSS Dental Public Health Scholars in Sustainable Dentistry, introduces students to sustainability in healthcare and provides guidance on the practical application of sustainability principles in the dental setting.

Additional sustainability content has also been included in other modules and sessions, such as the 'Anxiety and Pain Control in Dentistry'

Links

- **[Sustainable Dentistry and Measuring Carbon in Healthcare \(session\)](#)**
- **[Centre for Sustainable Healthcare](#)**
- **[Eco Dentistry: The Future of Sustainable Care for Your Mouth](#)**

Related subjects: Dental nursing, Dental surgery, Dental technology, Healthcare management, Oral health, Orthodontics

Further information: <http://www.e-lfh.org.uk/home/>
Contact: support@e-lfh.org.uk

E – Electronic engineering

Dr David Chesmore, senior lecturer in the Department of Electronics at the University of York, specialises in environmental electronics and sustainable engineering. His areas of interest include environmental instrumentation, ecological and agricultural applications.

Course overview

BEng/MEng Electronic Engineering at the University of York has a strong sustainability focus thanks to David's passion for the subject. A recent compulsory module in the first year included a general introduction to climate change and business ethics, and covered the role of electronics in renewable energy (e.g. solar panels, wind turbines) and ways of sensing and measuring the environment (e.g. pollution levels).

“Remember, electronics are absolutely everywhere – the impact is huge! You have to consider the significance of landfill waste and the implications of the various chemicals and minerals used in electronics and batteries.”

Dr David Chesmore

In the third year, students must design a complete system in groups of 5 or 6 - for example, a functioning weather monitoring station. The module also covers electrical recycling, green manufacturing processes, how to design energy-saving systems for low power usage and sustainable mineral extraction. Gold extraction is a particularly important topic involving many social, political and environmental issues - including the use of cyanide in the extraction process, which can cause devastating water pollution.

Student experience

“We aim to be objective in addressing environmental problems such as climate change and renewable energy sources – simply giving students the facts and

letting them decide. That's why measuring and monitoring the environment is so important - to determine the facts.”

Dr David Chesmore

This year, students were required to write an essay about fracking. After researching the industry, sensing methods and related issues (e.g. seismic effects), they considered how negative impacts may be mitigated or avoided in the future. David mentioned that feedback from students on this assignment was overwhelmingly positive and there was some excellent research undertaken.

“Be multidisciplinary! – engineers must be good at switching disciplines in order to make more informed decisions – for example you could look at the chemistry of pollution.”

Dr David Chesmore

Students can also choose an optional module in the fourth year (if doing the MEng), covering water pollution monitoring and satellite remote sensing, and some students have even gone on to careers in water-related industries in other countries.

Links

- **[MSc Energy & sustainability with electrical power engineering, University of Southampton](#)**
- **[MSc Power engineering & sustainable energy, Swansea University](#)**
- **[Engineering for Sustainable Development: Guiding Principles, The Royal Academy of Engineering](#)**

Related subjects: Aerospace engineering, Artificial intelligence, Computer systems Engineering, Electrical engineering, Mechanical engineering, Robotics

Further information: https://www.york.ac.uk/electronics/undergraduate/courses/electronic_engineering/
Contact: elec-ug-admissions@york.ac.uk

MA Wildlife Filmmaking at Bristol's University of the West of England (UWE) has been co-designed by academics from the School of Film and Journalism at UWE, and producers and directors from the world-renowned BBC Natural History Unit.

Course overview

The MA Wildlife Filmmaking course at UWE helps students develop skills in researching, scriptwriting, directing, producing, and pitching and commissioning ideas. Facilities include a news studio, TV studio and post production areas. The course combines specialist, professional filmmaking experience with expedition-based or observational study of wildlife conservation.

Students use the power of film to inspire the public to learn about, experience and ultimately feel encouraged to protect the natural world. Students work with some of the UK's top wildlife and conservation organisations, such as the award-winning Wildscreen. During their final projects, students are matched with an industry mentor and the films are premiered to an audience of film and TV professionals.

"Past students have produced high-concept, awareness-raising films drawing inspiration from the migration of birds to the poaching of rhinos. Students often travel overseas to film, including Cuba, Sri Lanka, Israel, Brazil and Australia... whilst the UK continues to provide a great source of inspiration, from the Wildfowl and Wetlands Trust to the London Aquarium."

Source: Course webpage

Links

- **MA/PGDip/PGCert Wildlife Filmmaking UWE**
- **Wildscreen**: A charity that partners filmmakers with conservationists to create inspiring stories about the natural world
- **Films for Action**: A community-powered library of films and videos that encourage the creation of a more sustainable and democratic society
- **Greening Film**: Run by the British Film Institute (BFI), aims to help film industry professionals implement a sustainability strategy covering environment, ethics and economics
- **Greenshoot**: A social enterprise that offers hands-on environmental and sustainability accreditation and training for the creative industries



Related subjects: Broadcast journalism, Digital media production, Media studies, Radio production, Scriptwriting, Television production

Further information: <http://courses.uwe.ac.uk/D4P31/2016>
Contact: Peter Venn +44 (0)117 32 87642

G – Geology

BSc Geological Hazards at the University of Portsmouth is a unique course that combines applied geoscience with an in-depth study of geological hazards such as volcanoes, earthquakes and tsunamis. It is fully accredited by the Geological Society of London.



Course overview

Students on the BSc Geological Hazards at the University of Portsmouth come to understand the complex relationships between earth systems, human interaction with these systems, and the mechanisms, triggers and risks involved in geological hazards. Students are encouraged to evaluate and debate the legal, ethical, social and environmental issues surrounding hazard management, and consider the impact of geological investigation on the environment and local stakeholders.

“My course is informative and interesting, the staff are approachable and friendly, and the fieldtrips are especially great.”

Tim Over, BSc (Hons) Geological Hazards student

Students have gone on to sustainability-related careers in environmental organisations, international aid and coastal protection.

Links

- [BSc Geological Hazards, University of Portsmouth](#)
- [BSc Environmental Geology, Royal Holloway University of London](#)
- [BSc Environmental and Resource Geology, The University of Manchester](#)
- [Can sustainable development be achieved if geology is ignored?](#)
- [2017: Year of Risk, The Geological Society](#)

Related subjects: Archaeology, Earth sciences, Engineering, Environmental science, Geography, Marine science, Mining

Further information: <http://www.port.ac.uk/courses/geography-earth-and-environmental-sciences/bsc-hons-geological-hazards/>
Contact: science.admissions@port.ac.uk

H – Hair and beauty

Beverley Higham, lecturer and level 4 course manager in the Hair, Beauty and Holistic Therapy department at Wigan and Leigh College, is passionate about developing organic and sustainable beauty products and encouraging a generation of conscious consumers.



Sustainable beauty products

Beverley runs her own business creating natural, organic beauty products. Two years ago she brought some into college and the students were hooked! They decided to enter a competition – a sort of Green Dragon’s Den – to secure funding to use these products on their course. They won, and initial funds allowed for eight students to use them.

Soon, after pressure from the other students, the products were rolled out across the department. A sustainability snowball effect occurred. The college began thinking about washing machine usage, and in some cases replaced towels with thin sheets and fleecy blankets that don’t touch the client, so only need to be washed once a week. Some students even began turning vegan!

“You can move mountains and make magic – but you have to maintain that impact! You cannot stop. Many look at the short term costs and get put off, but you have to look at the long term costs to health and the environment.”

Beverley Higham

Beverley says the main problem in the industry is simply a lack of awareness of sustainability. Wigan and Leigh runs taster sessions with local schools to get students interested from a young age.

Student experience

New students are told Beverley’s story during inductions. Beverley is a firm believer that personal stories are the best way to engage students with sustainability. Students also learn about the environmental and health benefits of the organic products, and have a go at making their own.

“In this industry you have to care about your clients - everything that touches your skin can be absorbed. Breast Cancer UK suggest parabens can increase cancer risk – if you save just one woman from breast cancer then it has all been worth it!”

Beverley Higham

Level 4 students have access to the ‘Green Room’ – a private study lounge with recycled furniture and solar powered iPads - which provides incentive for students to continue their studies. This year, students went on a sustainable study trip to Provence, where they distilled their own oils and ate only organic produce – the students reported that it had a hugely beneficial impact on their mental and physical health.

As far as Beverley is aware, all past students who have opened their own spas have continued using natural products and promoting the ‘green theme’.

Links

- [Hairdressing at Wigan & Leigh College](#)
- [Potionshop](#)
- [Eco Hair and Beauty](#)
- [Can hair salons help save the environment? The Guardian](#)

Related subjects: Beauty therapy, Complementary therapies, Cosmetic science, Hairdressing, Make-up, Spa management

Further information: <https://www.wigan-leigh.ac.uk/area/0/Beauty+and+Holistic+Therapy>
Contact: applications@wigan-leigh.ac.uk

I – International development

The International Development MSc at the University of Bristol contains many modules that intrinsically link the topic to sustainability. It focuses on understanding and applying tools, techniques and abilities needed to manage development organisations.

Course overview

The University of Bristol's School of Sociology, Politics and International Studies (SPAIS) is an interdisciplinary research and teaching environment. Sociologists and political scientists investigate central theory, issues and cutting-edge empirical research. The teaching and research addresses some of today's most pertinent topics: questions of globalisation, risk and uncertainty; issues of security and resilience; of gender and social inequality; problems of migration, ethnicity and citizenship; and dilemmas of global development and sustainability.

"If we are not sustainable, we are not going to have a place to live."

Dr Gaston Fornes

Dr Gaston Fornes, senior teaching fellow, teaches on several courses provided by SPAIS: Small Business Development, International Development Organisations and Managing and Evaluating Development. A key aspect of the three modules is that students are asked to analyse and present solutions to real management issues throughout the semester. Graduates from the courses develop skills in team building, project and resource management, and effective communication and leadership – all of which are sought after by employers.

Sustainability is critical in both development and management studies. It doesn't always feature by name, but its principles are integral to the course through issues such as planning resource provision or leading multi-disciplinary teams.

These courses also incorporate ESD through the teaching methods. Every session contains a discussion on the issues assigned for the day and then a presentation and analysis of a case study. This structure allows the students to actively link concepts with practice themselves rather than learning by rote. All participants must also create a project and present on it in a context resembling a board meeting at an international organisation – true active learning!

These modules are an excellent example of taking a topic that is linked well to sustainability and using teaching styles and methods to complement the teaching.

"I found it truly engaging to be constantly impelled to think outside the box, to develop my own ideas and to think in a problem-solving way."

Student

Links

- [SPAIS](#)
- [Video on engaged learning](#)

Related subjects: Human geography, Management, Politics, Social policy

Further information: <http://www.bristol.ac.uk/media-library/sites/spais/documents/msc-unit-guides-ce/POLIM2036.pdf>
Contact: spais-admin@bristol.ac.uk

Dr Katja Hallenberg, senior lecturer in Criminal Psychology, Criminology and Policing at Canterbury Christ Church University helped to develop a new module entitled 'Criminology for a Just Society'.

Course overview

'Criminology for a Just Society' is an innovative module, which considers ways of addressing environmental, social, economic and cultural injustice through critical criminology. The content reflects a critical criminology approach, highlighting the crimes of the powerful, types of victimisation generally neglected within society, and the potential for grassroots change. The course includes aspects of formal teaching, volunteering and critical reflection.

Criminology integrates the theories, concepts and methods of other subjects, which means that an interdisciplinary approach – a key skill for sustainability - is already a core approach. This helps ensure students consider the bigger picture of the various dimensions of sustainability. The learning focusses on current ecological, cultural, socio-political and economic problems and ways of addressing them, in order to foster a broad and nuanced understanding of sustainability.

The module was developed closely with students, facilitating a collaborative and democratic learning environment, and promoting a sense of ownership and personal responsibility.

Student experience

By the end of the first module, the course leaders observed that the students held a holistic and multi-faceted understanding of sustainability, rather than the traditional environmentally-focussed approach they demonstrated at the beginning.

"I think the module's given me a lot of skills that I haven't got from other modules."

Student reflection

Experiential projects also provide key learning opportunities. Students arrange a placement with a broad remit and links to justice and sustainability. They write a reflective blog on their experience and a case study, critically evaluating the policies and practices of their chosen organisation. Applying the knowledge gained through their formal curriculum allows students to see sustainability in action.



Links

- **What is Green Criminology?**
- **Critical Criminology: An International Journal**
Centre for Crime and Justice Studies
- **Hallenberg, K.M. & Haddow, C.**
(forthcoming) 'Beyond Criminal Justice: Connecting Justice and Sustainability', *The Law Teacher*, Special Edition on Education for Sustainable Development

Related subjects: Criminal psychology, Law, Policing, Social care, Sociology

Further information: <http://www.canterbury.ac.uk/study-here/courses/undergraduate/applied-criminology-17-18.aspx>
Contact: admissions@canterbury.ac.uk

K – Kinesiology (sport & exercise science)

Rebecca Foster, course leader for Physical Education at the University of Worcester, has successfully integrated social sustainability into the formal curriculum through work placements and disability inclusion.

Course overview

The Institute of Sport and Exercise Science at the University of Worcester is home to the UK's first sports facility designed to be accessible to both wheelchair and able-bodied athletes alike - an official Paralympic training venue.

The department received sustainability funding to pay for two students to help out at Worcester Snoezelen sports club. The club offers multi-sensory and creative activities for people with disabilities or additional needs. The students are responsible for a small group, maintaining participant enjoyment and providing ideas for safe activities.

“Economic and environmental sustainability are far better defined and understood, so students are not always aware of the concept of social sustainability - and how health, wellbeing, volunteering and disability awareness relates to this - until opportunities such as these are presented to them”.

Rebecca Foster

The students themselves lecture their peers on the skills they develop through this opportunity, and the value of volunteering. This forms part of a module entitled 'Teaching Special Education Needs & Disability Physical Education in schools'.

The funding also paid for three students to become qualified British Sign Language (BSL) instructors and to run Sign Circle club which offers free taster sessions, as well three and five week courses in sports signs and general

sign language. Students also develop deaf sports clubs and school links. This all allows for people to become more confident in approaching and integrating with the deaf community, and makes sports and exercise more accessible.

Student experience

Student feedback shows that their learnings from the course directly relate to the education and sustainability priorities of employability, critical and creative thinking, participatory learning, partnership working and systemic thinking.

“Snoezelen has taught me about responsibility, adaptability and how enjoyable sport really can be for all.”

Student

The initiative has granted students relevant skills and experience, especially in raising deaf awareness and learning BSL. Showing how these relate to social sustainability is key to broadening students' horizons and their understanding of the concept.

Links

- **BASIS**
- **Institute of Sport and Exercise Science, University of Worcester**
- **Sustainability through sport, International Olympic Committee**
- **Sustainability in the sports sector, UCL Environment Institute**

Related subjects: Anatomy, Education, Physiotherapy, Physiology, Speech & language therapy, Specialist teaching, Sports coaching, Sport psychology

Further information: <http://www.worcester.ac.uk/discover/institute-of-sport-and-exercise-science.html>
Contact: r.foster@worc.ac.uk

L – Languages (English)

The University of Central Lancashire (UCLan) first ran 'Eco English' in 2014 - a collaboration between the SU's Green Ladder Project, funded by NUS' Students' Green Fund, and The Language Academy.

Course overview

International students from a range of countries including Brazil, China, Korea and Spain have taken part in UCLan's 'Eco English' – a one-week course that forms part of the annual English language summer school.

Students develop their language skills whilst

touring a local ethical business, taking part in an energy trail across campus, looking at air source heat pumps, solar panels and rain-water harvesting, and working in the campus' Secret Garden and a local nature reserve.

Melody Yuan, English instructor at Gengdan Institute near Beijing, China said:

"The students have enjoyed taking part in all of the eco activities. It's allowed them to learn new words that they have never come across before, and to make friends with students from other countries."

Jane Cleary, assistant director of studies of UCLan Language academy said:

"A real highlight for the teaching team was seeing the language go from the classroom out into the world to be used very naturally in a real-life context."



This model could be easily replicated within other language courses, providing opportunities

to practice

different words, volunteer and learn about other countries' responses to climate change and sustainability-related issues.

Links

- [English Language Summer School, UCLan](#)
- [Eco English course, North Devon School of English](#)
- [Education for Sustainable Development: Languages and Sustainability, LLAS Centre, University of Southampton](#)

Related subjects: Communication, Linguistics, TEFL, TESOL, Translation

Further information: http://www.uclan.ac.uk/courses/english_language_summer_school.php
Contact: languageacademy@uclan.ac.uk

The Mathematics Department at the University of Chester has incorporated several links to sustainability, thanks in part to the head of mathematics Dr Jason Roberts' research interests in mathematical ecology.

Course overview

In the Mathematics Department at the University of Chester, staff are encouraged to discuss the varied applications of mathematics with students, and to consider the potential for mathematics to solve real world problems.

“Different subjects will incorporate it [sustainability] at different levels and to differing amounts... I can't think of any subject that could not do something with it!”

Dr Jason Roberts

Many links are illustrated between finance and sustainability in particular - including sustainable economic models, stability and equilibrium points. Some students opt to carry out sustainability-focused projects as part of several applied mathematics modules, such as looking at climate change data and mathematical modelling of weather patterns, biodiversity and evolution.

“The research on Mathematical Ecology focuses on the analysis of mathematical models of population growth and mutualistic interactions (bees & flowers, ants & aphids etc.) We can use the models to examine how sensitive populations may be to changes in the environment.”

Dr Jason Roberts

Links

- **[Mathematics Department, University of Chester](#)**
- **[Mathematics for a Sustainable Society, University of Nottingham](#)**
- **[The mathematics of sustainability, Princeton University](#)**
- **[Mathematical and statistical challenges for sustainability, National Science Foundation](#)**
- **[NUS' Divest-Invest campaign](#)**

Related subjects: Accountancy, Computer science, Data science, Economics, Finance, GIS (Geographical information systems), Physics, Statistics

Further information: <http://www.chester.ac.uk/maths>
Contact: j.roberts@chester.ac.uk

The School of Nursing and Midwifery at Plymouth University aims to be a leader in embedding sustainability in the curriculum – focusing on health inequality, resource management and community engagement.



Course overview

All Nursing and Midwifery students at Plymouth University are introduced to sustainability in their first week, during course inductions. Sustainability is woven throughout core modules in all three years, with students exploring topics such as health inequalities in a changing climate, global public health issues, links between the environment and personal wellbeing, work-based learning in community engagement and supportive self-care skills, sustainability in the context of leadership and management, and sustainable use of resources (particularly looking at the vast quantities of cotton and plastics used in medical practice and how to reduce the impact of resource scarcity).

Collaboration is a key aspect of the course, and students work closely with the local community, healthcare organisations and other departments within the university:

“For example, we bring design students into clinical skills sessions to work with nursing and midwifery students to develop design solutions to the resources challenges faced in health care.”

Professor Janet Richardson, School of Nursing and Midwifery, University of Plymouth

Links

- [The School of Nursing and Midwifery, Plymouth University](#)
- [The Use of Evidence Based Sustainability Scenarios in the Nursing Curriculum, Janet Richardson, Plymouth University](#)
- [NurSus](#)
- [Healthcare without Harm](#)
- [NHS Sustainable Development Unit Resource Pack](#)

Related subjects: Complementary therapies, Health and social care, Medicine, Paramedic science, Pharmacy, Physiotherapy

Further information: <https://www.plymouth.ac.uk/schools/school-of-nursing-and-midwifery>
Contact: bridie.kent@plymouth.ac.uk

O – Occupational therapy

Tania Wiseman, course leader for MSc Occupational Therapy (pre-registration) at the University of Brighton, found her plans to embed vital sustainability content in the curriculum were supported by past and current students, colleagues and managers alike.

Course overview

Sustainability is a compulsory element within two modules in the final year of the MSc Occupational Therapy course at the University of Brighton. Students follow a problem-based curriculum, working in collaborative teams.

“As a course team our ambitions are to increase the sustainability of our students as lifelong learners, and ensure that we produce compassionate, resilient occupational therapists that practice what they preach.”

Tania Wiseman



During the course, students develop resource-conscious creative skills such as crafts or gardening, encouraging them to reflect on the environmental impact of their activities and their own personal wellbeing, as well as that of their patients. Students participate in international conferences and learning opportunities which deepen their understanding of global citizenship and social justice.

The ICT department has helped to develop resources that enhance compassion - for example, paper copies of doctors' notes have been replaced with videos of patients explaining

their situation, which elicits a more powerful and empathetic response from students.

“Formal revalidation of courses has so many drivers in health education, it can be hard to squeeze it all into one coherent course. I prioritised one learning outcome above all others, because I really believe that it is essential: to develop effective occupational therapy plans that are safe and sustainable (in that they meet the needs of the client without jeopardising the needs of future generations)... once inserted in the final two modules it trickled back into the rest of the course.”

Tania Wiseman

Links

- [MSc \(PGCert/PGDip\) Occupational Therapy \(pre-registration\), University of Brighton](#)
- [OT Susnet: A network for occupational therapy practitioners, students and educators interested in exploring sustainable practice](#)
- [Brighton's School of Health Sciences blog on sustainability in health](#)
- [Occupational Therapy MSc course information](#)

Related subjects: Complementary therapies, Health and social care, Physiotherapy, Public health

Further information: <https://www.brighton.ac.uk/about-us/contact-us/academic-departments/school-of-health-sciences.aspx>
Contact: sohpadmissions@brighton.ac.uk

P – Performing arts

FdA Contemporary Storytelling and Performance is an innovative new course taught by The Cornwall College Group in partnership with the Eden Project. It is a highly practical course that aims to develop performers who can help audiences reconnect with the natural world.

Course overview

FdA Contemporary Storytelling and Performance at Cornwall College gives students the opportunity to study approaches and techniques within storytelling, devising, performance, movement, voice and character development at the Eden Project – an educational charity and top visitor attraction. The natural landscapes, impressive biomes and environmental exhibitions all provide inspiration for students, promote audience engagement, and give the stories a real sense of place - creating a connection between people and planet.

“Stories are the vessels by which cultures communicate and transmit ideas with each other and future generations. Through storytelling we get to explore new ideas, imagine different worlds, and test moral choices. All of this is fundamental to the sustainability agenda as it gives us the cultural or human context, to help us understand the weight of scientific experiments, big data, and complicated ideas associated with sustainability. The beauty of this course is it gives students the skills to effectively communicate these big and complicated ideas.”

Gemma Hughes, Interpretation Team Coordinator,
Eden Project Ltd



The staff recognise that there are barriers to adapting existing courses, where the curriculum is often already full - but they feel it is helpful not to think of sustainability as a subject to be studied in isolation, but as a set of tools that help students understand complex issues and make better, informed decisions. These tools are 'ways of being and doing' that are applicable whether studying maths, science, history or performing arts.

Links

- [Eden Project degrees, Cornwall College](#)
- [Staging Sustainability: Making sense of Sustainability in HE Dance, Drama and Music, Paul Kleiman](#)
- [Julie's Bicycle](#)
- [Eco Drama](#)

Related subjects: Acting, Costume design, Creative writing, Dance, Directing, Drama, Music, Performance design, Teaching, Theatre studies

Further information: <https://www.cornwall.ac.uk/cornwallcollege/music-performing-arts/fda-contemporary-storytelling-performance>
Contact: enquiries@cornwall.ac.uk

Q – Quantity surveying

Dr Fiona Grant is the programme director of Commercial Management and Quantity Surveying at the School of Energy Geoscience Infrastructure and Society at Heriot-Watt University. Graduates of their Quantity Surveying BSc and MSc programmes are trained to incorporate sustainability into every decision they make.

Course overview

A quantity surveyor's role is to advise clients on the options available within a project, and their implications. This incorporates all aspects of the project including design, orientation, size, material selection and technology through to life cycle and whole life costing – even decommissioning at the end of a project's life. Properly informed graduates have the ability to make a positive impact on the future environment by taking sustainability into account within all of these decisions.

“One of our current research projects, ORIGIN, focuses on sustainable energy management by synchronising the demand for energy within a neighbourhood with the availability of locally generated renewables.”

Dr Fiona Grant



Since sustainability means so many different things to different academics, Fiona believes that it is key to link the topic throughout all modules, allowing tutors to relate it to all aspects of the programme. Their Centre of Excellence in Sustainable Building Design (only one of four such centres exist at UK universities) allows them to demonstrate and

exchange best practice in teaching and research for the sustainable built environment.

Student experience

Students report a greater understanding of sustainability in the built environment after they complete their studies. This includes the issues surrounding a growing global population, smart cities, and achieving sustainability with smarter usage of digital technology. This has led several graduates to roles incorporating sustainability, including one who now works with Historic Scotland to monitor and report of the organisation's carbon footprint on various projects including sustainable procurement and construction.

“Sustainability, in any definition, comes at a cost and all involved in a project need to be aware of the implications and options available, both from a sustainability and monetary capacity.”

Dr Fiona Grant

At the heart of Fiona's teaching is her belief that the environment belongs to us all, and that the Quantity Surveying profession is key to protecting it for future generations. Students on these courses learn that they can have a huge impact through their everyday working.

Links

- [**BSc Hons Quantity Surveying**](#)
- [**MSc Commercial Management and Quantity Surveying**](#)
- [**Heriot-Watt's Centre of Excellence in Sustainable Building Design**](#)
- [**Video on the ORIGIN project**](#)

Related subjects: Architecture, Civil engineering, Construction, Project management

Further information: <https://www.hw.ac.uk/schools/energy-geoscience-infrastructure-society/>
Contact: egis-enquiries@hw.ac.uk

R – Religious studies

Dr Brian Black, lecturer in Religious Studies at Lancaster University, teaches a second year module entitled 'Hinduism in the Modern World', which includes lectures, assignments and exam topics on Hinduism and the environment.

Course overview

Studying 'Hinduism in the Modern World', a module taught as part of BA(Hons) Religious Studies at Lancaster University, students examine attitudes towards politics and the environment from a religious perspective. They discuss some of the environmental and social issues facing India – particularly the impact of colonialism, gender inequality, the caste system, river pollution and deforestation. In each case, students consider how Hinduism has contributed to both the problems and the solutions – such as the Chipko movement (Ghandian-inspired activists, known as 'the original tree-huggers').

"To learn about different religions and philosophies challenges students to become more self-reflective and to become more responsible citizens in an increasingly multi-cultural world. Religious Studies consistently deals with diversity and difference; it is the field of study that is most likely to engage students with a variety of worldviews."

Dr Brian Black

Lectures on 'Hinduism and the Environment' prove very popular, and several students have chosen to focus on this topic for their third year dissertation, or subsequent PhD research.

"Pollution in the Ganges River is interesting because a lot of Hindus believe that the river is divinely pure... so religion has sometimes been an obstacle to cleaning it. However, there are also many Hindus motivated to clean it because of their deep appreciation for the river. If sustainability is to become a truly global movement, we need to find ways to communicate the objectives beyond the Western, post-enlightenment paradigm."

Dr Brian Black

Links

- **[BA\(Hons\) Religious Studies, Lancaster University](#)**
- **[MA Reconciliation and Peacebuilding, The University of Winchester:](#)
Combining religious studies, psychology and the arts, students critically assess practices which could turn violent conflict into positive, sustainable outcomes**
- **[Religion and Ecology:](#)
A huge collection of articles about world religions and their contributions to the environment**

Related subjects: Ethics, Philosophy, Theology

Further information: <http://www.lancaster.ac.uk/ppr/undergraduate/religious-studies/>

Contact: ppr@lancaster.ac.uk

S – Social science (Social psychology)

Dr Chris Jones, lecturer in Social and Environmental Psychology at the University of Sheffield, teaches students about the role psychology can and should play in understanding attitudes, habits and behaviour towards environmental sustainability.

Course overview

The integration of sustainability into psychology and social sciences at the University of Sheffield is unusual - especially for an undergraduate course. And it's becoming quite a draw for new students. Dr. Chris Jones teaches students about sustainability through numerous modules, many of which are not specific to environmental psychology.

"I think people are quite surprised by my lectures, as they don't tend to realise that psychologists get involved in the study of how people respond to new energy technologies and things – so it is a bit of an eye-opener."

Dr Chris Jones

Recently student essays have covered NIMBYism ('not in my back yard' – where people oppose new developments because they are close to them), attitudes to wind farms, shopping behavior and its social and economic implications on pay and working conditions in poor parts of the world, responses to energy security disruptions, meat consumption, and perceptions of nuclear power post-Fukushima. Sustainability crops up throughout the course, both in optional and mandatory modules, meaning it is viewed as a part of the overall course rather than a separate concept.

"There tends to be greater focus (and more interest) in your more 'obvious' psychologies: clinical, developmental, neuroscience...we have a focus on research-led teaching at Sheffield and so tuition on sustainability has naturally managed to 'piggy-back' on my being involved with the courses."

Dr Chris Jones

Chris recently co-designed a student task alongside Dr Kamal Birdi of the Management School and Joe Llanos, Green Impact coordinator. It encouraged students to use creative thinking techniques and build upon learnings from Chris' lectures to develop innovative solutions to problems being faced by the University. A panel chose the best idea and the students received a certificate at the annual Green Impact awards!

"Sustainability is of importance to us all – this is something that I try to convey to my students and colleagues. The problems we face in life are generally human-caused and need human solutions...you could do a lot worse than trying to understand what makes people tick – this is where psychology comes in!"

Dr Chris Jones

Links

- [Social, health and environmental psychology \(SHEP\) research group](#)

Related subjects: Counselling, Psychology, Social policy, Social work, Sociology

Further information: www.sheffield.ac.uk/prospectus/courseDetails.do?id=C8002017
Contact: I.fotherby@sheffield.ac.uk

nus
national union of students

T – Travel and tourism

The FdA Tourism Management at University Centre Weston has embedded sustainability in three compulsory modules by linking it to tourism impacts, visitor attractions, global challenges and management approaches to improve sustainability work.

Course overview

The FdA Tourism Management course at University Centre Weston brings the topic of sustainability alive by relating it to issues that are of primary importance to travel and tourism. The course is further enlivened by guest speakers and field trips. Key topics include: tourism impacts on social, economic and environmental sustainability, as well as the global challenges of sustainability and their impacts on tourism. Students also find out about sustainable businesses and organisations, gaining practical skills by learning about sustainability management and alternative forms of tourism (e.g. wildlife and responsible tourism).

Melissa O’Conner, higher education curriculum coordinator in business and tourism, uses her learnings from her MA looking at perceptions of sustainability within foundation degrees and higher education, to incorporate the issue into the courses she leads.

Student Experience

“The module combines both a theoretical and practice element as the students’ workplace experience informs a report evaluating environmental impacts and making recommendations for action.”

Melissa O’Conner

Upon starting the course, staff and students often have a preconception that sustainability is just about being ‘green’, looking only at the environment and recycling. After completing the course, students are more aware of the diversity of the topic and the social, cultural and economic aspects.

The work placement for sustainable tourism gives students the opportunity to investigate key sustainability issues within an organisation. As well as identifying how the organisation manages them through the use of sustainable principles and practice, they also research and make clear recommendations for improvement.

Eighty percent of students who have completed the FdA Tourism Management course have progressed to the Business Management with Sustainability Top-Up, to enhance their knowledge and skills further. Others have worked in places as diverse as the North Somerset Council, and a community in Nicaragua!

“They understand the balance needed to maintain sustainability and how this can be linked into tourism and business. They are aware of the long-term strategy, the viability and the importance of education and awareness.”

Melissa O’Conner

Further information

- www.facebook.com/ucw
- www.twitter.com/ucweston

Related subjects: Business, Coastal Zone Management, Event management, Festival management, Geography, Hospitality

Further information: www.ucw.ac.uk
Contact: melissa.oconnor@weston.ac.uk

U – Urban planning

MSc Urban Development Planning at the Bartlett Development Planning Unit, University College London (DPU, UCL) provides students with the tools to engage with urban development and planning challenges caused by economic, social and political change in the urban Global South.

Course overview

MSc Urban Development Planning at DPU, UCL explores urban development, globalisation and social justice in the context of major economic, social and environmental change. Optional modules include:

- 'Gender in Policy and Planning', which considers gender roles in the development of human settlements.
- 'Transport Equity and Urban Mobility', which looks at the relationship between social identity and transport planning, and how transport provision can create more socially just cities.

Students can also take other modules through DPU, including:

- 'Political Economy of Development', which exposes the links between agricultural policy, land allocation, food insecurity, conflict and famine.
- 'Adapting Cities to Climate Change in the Global South', which examines the ways in which climate change may affect urban areas.
- 'Social Diversity, Inequality and Poverty', which argues that social development should not be confined to the social sector, and that social equality should be at the centre of all urban development planning.

Links

- **[MSc Urban Development Planning, University College London](#)**
- **[MSc Global Urban Development and Planning, The University of Manchester](#)**
- **[SUSTAIN Learning Resources](#)**
- **[National Planning Policy Framework: Achieving sustainable development, Department for Communities & Local Government](#)**
- **[Sustainable urban planning articles, Inhabitat](#)**

Related subjects: Civil engineering, Human geography, Transport and logistics, Urban design, Urban development, Urban regeneration

Further information: <http://www.bartlett.ucl.ac.uk/bartlett/dpu/programmes>
Contact: c.levy@ucl.ac.uk; b.lipietz@ucl.ac.uk

V – Visual communication

John Hudson, senior lecturer in Advertising and Brand Management at Staffordshire University, teaches a variety of topics around sustainable visual communication, corporate social responsibility (CSR), and ethics in the context of advertising, branding and design.

Course overview

BA(Hons) Graphic Design and Illustration at Staffordshire University covers sustainability and ethics in the context of visual design. Students learn not only about sustainable production methods (giving consideration to the impact of different types of inks, paper or formatting, for example), but also develop an understanding of global environmental and social issues, and reflect on how CSR is shaping corporate design agendas.

“Graphics is not just about fancy packaging, flashy websites and selling stuff – it has the power to influence people, impact society and encourage positive change.”

John Hudson

John is passionate about sustainability and aims to inspire the designers of the future to act more responsibly. After all, it's not only big corporations that are in need of great communication - but charities, non-profits, and campaign groups, too. Students tend to arrive armed with a prior interest in sustainability, and the course develops knowledge and skills that help apply this to their future careers.

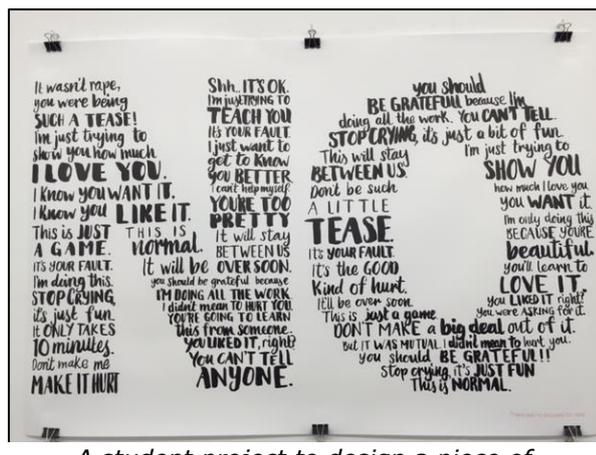
“Visual communication can be powerful, beautiful and engaging, and one person can make a difference!”

John Hudson

Student experience

Sustainability teaching runs through the entire degree course (starting with a 30 credit core module) and includes a collaboration with the Sociology department of workshops and day seminars on gender, equality and diversity. The course is designed to be interactive, challenging and to encourage problem-solving.

For the students' final project they must design a piece of advertising that addresses an ethical or societal issue. Past topics have included body dysmorphia, 'designer' dog breeding, and rape on campus (see photo below). Students were also approached by the local council to develop their child fostering campaign.



A student project to design a piece of advertising addressing rape on campus

Related subjects: Advertising, Brand management, Graphic design, Marketing, Product design

Further information: <http://www.staffs.ac.uk/course/SSTK-00726.isp>
Contact: <http://www.staffs.ac.uk/enquiries/>

W – World history

BASc History and Global Sustainable Development, designed by Cathia Jenainati at the University of Warwick, is the first course of its kind; it combines the study of world history with in-depth engagement with the 2015 United Nations Sustainable Development Goals.

Course overview

BASc History and Global Sustainable Development at the University of Warwick allows students to consider global problems related to the agenda of sustainable development, whilst developing expert knowledge in world history. Students gain an understanding of the background and motivation behind major economic, social and environmental interventions, considering the challenges of global governance, the consequences of industrialisation and the impact of imperialism.

Historians must be able to evaluate evidence, draw conclusions and make critical judgements. This course expands these principles - to include the ability to develop solutions. Global problems are considered from historical, modern and future perspectives – big questions such as:

- **Is social justice achievable?**
- **Will there be enough food to sustain humanity?**
- **What role can business leaders and economists play in ensuring a sustainable future?**
- **How can we build a framework for a sustainable future?**

Links

- **[BASc History and Global Sustainable Development, University of Warwick](#)**
- **[School for Cross-Faculty Studies, University of Warwick](#)**
- **[History and Global Sustainable Development](#)**
- **[GLOBUS student-led online magazine](#)**
- **[Environmental History Journal](#)**

Related subjects: Ancient history, Anthropology, Archaeology, Cultural studies, Heritage studies, History, International politics, International relations, Modern history

Further information: <http://www2.warwick.ac.uk/study/undergraduate/courses/v118/>

Contact: WarwickHistory@warwick.ac.uk

X – X-tra curricular activities

Gail Houghton, student engagement co-ordinator at Walsall College, recognises that extra-curricular activities can be an excellent way to engage both staff and students with sustainability issues and show the importance of volunteering and community links.

Example activities

At Walsall College, staff and students are encouraged to apply for various awards and funding which help to attract publicity, highlight best practice and offer a framework for improvement. The college was named 'Further Education Union of the Year' at the 2016 NUS Green Impact awards, and has also entered the Money for Life challenge and Pants to Poverty, for which where business students won a trip to India to investigate sustainable cotton farming.

Walsall College has an impressive Student Eats (NUS) garden where students grow fresh produce to sell at a low cost to other students and staff. The Students Union runs various sustainability-related campaigns, such as the Bra Bank – where students can recycle their old bras to help fund breast cancer research.

The college benefits from links to local businesses and charities, including local transport scheme BikeRight!, which visits the college each year to provide free bike checks and offer courses that promote sustainable commuting, and Greenfingers, who sell plants, containers and veg baskets on campus.

There are also regular volunteer fairs which provide an opportunity to engage with local community organisations such as The Conservation Volunteers, Walsall Hospital, Newlife Foundation for Disabled Children and Safe and Sound – dedicated to preventing bullying and keeping students safe.

Inductions are crucial in engaging new students. In the past, the college has revamped the student lounge with a 'Space to Grow' theme – including a raised garden bed and a chance for each new student to sow a seed.

Links

- [Walsall College Students' Union Green Gown Award Entry Companion](#)
- [NUS Student Eats](#)
- [BikeRight!](#)



Related subjects: Careers service, Clubs and societies, Community engagement, Inductions, Informal curriculum, Volunteering

Further information: <https://www.walsallcollege.ac.uk/student/category/fun-stuff>
Contact: info@walsallcollege.ac.uk

Y – Youth Work

The Youth Work Team at the University of South Wales (USW) recognises that youth work and sustainability are inextricably linked through topics such as social justice, community empowerment and safeguarding the future. Kelly McCarthy, lecturer in Youth and Community Work, told us how this is reflected in their courses.

Course overview

BA(Hons) Youth and Community Work (with optional youth justice pathway) and MA Working for Children and Young People courses at USW contain core modules which directly relate to sustainability – including 'Adolescence and Wellbeing', 'Global Youth Work and Community Development' and 'Ethics, Reflection and Safeguarding'.

"Students come to realise that sustainability is not just about one aspect of the world we live in (i.e. reducing waste), it is about all aspects... including global citizenship, social justice, ethics, and personal wellbeing."

Kelly McCarthy

The courses offer varied opportunities to study and work abroad, and to collaborate with organisations that work globally to tackle social injustice. Students recently worked on the Heritage Lottery funded Positive Identity Project by Urban Circle Productions, a 45-minute documentary about youth self-discovery and positive awareness, created by visiting historical locations in the local community. One student used her undergraduate dissertation project to inform the development of a current housing initiative specifically for young people experiencing housing issues.

"Sustainability is part of everything we should aim to do as educators. Look at the key points from The Wellbeing of Future Generations (Wales) Act 2015: work together better, involve people reflecting the diversity of our communities, look to the long term as well as focusing on now, take action to try and stop problems getting worse - or even stop them happening in the first place."

Kelly McCarthy

Links

- [BA\(Hons\) Youth and Community Work, University of South Wales](#)
- [MA Working for Children and Young People, University of South Wales](#)
- [Positive Identity Film – Behind the Scenes](#)
- [The Wellbeing of Future Generations \(Wales\) Act 2015](#)

Related subjects: Childhood studies, Education, Health and social care, Social work, Sociology

Further information: <http://courses.southwales.ac.uk/faculties/19-fbs>
Contact: <https://myusw.southwales.ac.uk/contact-us>

Z – Zoo management

Rana Parween is responsible for the module 'Applied Sustainable Practices', which forms part of the BSc(Hons) Animal Management top-up course at Askham Bryan College in York. The content of this module will likely soon be part of the BSc(Hons) Zoo Management top-up course.

Course overview

BSc(Hons) Zoo Management (top-up) at Askham Bryan College explores how animal species and habitats can be conserved, particularly the role of commercial collections, as well as the role of environmental education and positive environmental experiences for zoo visitors.

The state-of-the-art Animal Management, Wildlife and Conservation Centre at Askham Bryan College houses over 100 animal species across a range of habitats including aquatics, amphibians, reptiles and mammals. Students also have lectures at Flamingo Land Zoo.

Rana is a wildlife biologist who has always had an interest in preserving the natural world. Her 'Applied Sustainable Practices' module introduces students to the three realms of sustainability, which help them consider how much time, effort and money zoos should put into wildlife conservation and environmental education, and reflect on how that education may be best delivered.



Student experience

Students are taken on field trips to locations, such as Drax coal-fired power station, which is slowly changing to become one of the world's largest biomass facilities, and several zoos, to evaluate their sustainability agendas and study how sustainable practices are incorporated and managed. They also consider gender balance and quality of sustainability education within the companies. Students then work on a strategy to replicate best practice within their chosen animal industries.

"After completing the course, some students try changing things in their own businesses by incorporating solar panels, rain water harvesting, energy conservation, recycling and education amongst other methods of sustainable practice."

Rana Parween

Links

- **[Animal Management Department, Askham Bryan College](#)**
- **[BIAZA – British & Irish Association of Zoos and Aquaria](#)**

Related subjects: Agricultural/Rural business management, Animal behaviour and welfare, Animal management, Biology, Equine management, Land management, Wildlife conservation

Further information: <http://www.askham-bryan.ac.uk/the-college/departments/animal-management>
Contact: enquiries@askham-bryan.ac.uk

Index by institution

<p><u>Askham Bryan College</u></p> 	<p><u>Canterbury Christ Church University</u></p> 	<p><u>University of Brighton</u></p>  <p>University of Brighton</p>
<p><u>University of Bristol</u></p> 	<p><u>University of Central Lancashire</u></p> 	<p><u>University of Chester</u></p>  <p>University of Chester</p>
<p><u>University College London</u></p> 	<p><u>Cornwall College</u></p> 	<p><u>The Eden Project</u></p> <p>eden project</p>
<p><u>e-Learning for Healthcare</u></p> 	<p><u>Heriot-Watt University</u></p> 	<p><u>Keele University</u></p>  <p>Keele University</p>
<p><u>Lancaster University</u></p> 	<p><u>Manchester Metropolitan University</u></p> 	<p><u>Nottingham Trent University</u></p> 
<p><u>Plymouth University</u></p> 	<p><u>University of Portsmouth</u></p> 	<p><u>The University of Sheffield</u></p>  <p>The University of Sheffield.</p>
<p><u>University of South Wales</u></p> 	<p><u>Staffordshire University</u></p> 	<p><u>Walsall College</u></p> 
<p><u>The University of Warwick</u></p> 	<p><u>The University of the West of England</u></p> 	<p><u>University Centre Weston</u></p> 
<p><u>Wigan & Leigh College</u></p> 	<p><u>University of Worcester</u></p>  <p>University of Worcester</p>	<p><u>University of York</u></p>  <p>UNIVERSITY of York</p>