## UCD SUSTAINABILITY DN240 2022-23





University College Dublin Ireland's Global University

# WELCOME TO UCD AND TO OUR NEW DEGREE IN SUSTAINABILITY!

Sustainability is a way of thinking about the future, in which environmental, social and economic dimensions are intertwined in the pursuit of an improved quality of life. It involves the interdisciplinary integration of knowledge, insights, skills and practices from the natural and social sciences and the humanities for the contemporary and long-term protection of the Earth, its environment and its inhabitants. The concept of sustainability is enshrined in the UN Sustainable Development Goals (SDGs), which have been widely taken up as a road map for future development around the world.



The innovative new UCD BSc in Sustainability combines modules related to sustainability from all six UCD Colleges in the broad subject areas of (a) Environmental Sciences (b) Social Sciences, Policy and Law and (c) Business and Economics which correspond to the three pillars of sustainability: environment, society and economy. All students complete a common Stage 1 and then choose between three specialisations, leading to the following degrees:

- BSc Sustainability with Environmental Sciences
- BSc Sustainability with Social Sciences, Policy and Law
- BSc Sustainability with Business and Economics

The broad principle on which the structures have been designed is for students to develop a depth of knowledge and skills in one subject area while gaining



some understanding of each of the other two and the capacity to work as part of an interdisciplinary team.

The programme is designed to be:

- Interdisciplinary integrating science, agriculture, engineering, social sciences, humanities, policy, law, economics and business
- Flexible common Stage 1 and flexible choices in later Stages
- Applicable emphasis on application, innovation and career development
- Global national and international students, case studies and learning experiences

A detailed set of programme outcomes and graduate attributes is listed on the UCD website. DN240 BSc Sustainability (STS1) - Programme Details (ucd.ie)

#### Indicative topics in the three specialisations in the BSc Sustainability

Environmental Sciences Ecology and Conservation Environmental Chemistry Climate Science Earth Sciences Physical Geography Sustainable Agriculture Sustainable Energy Sustainable Manufacturing Transport Strategy Waste Management Mathematics and Statistics Social Sciences, Policy and Law Environmental Policy Environmental Law Sustainable Communities Social Justice Built Environment Landscape Architecture Equality and Diversity Human Geography Archaeology Sociology Business and Economics Environmental Economics Sustainable Business Practice Sustainable Supply Chains Bioeconomy Marketing Economics of Innovation Human Resources Green Finance Business and Social Enterprise Governance

#### Programme structure: stages and modules

The programme is diverse and flexible. In Stage 1 we establish a grounding in some key aspects of each of the disciplines and in the principles of sustainability (Figure 1). Stage 2 builds on that grounding and further develops the depth and breadth of your knowledge. At each of these Stages, you will have a complement of core (compulsory) modules and you will be able to choose options or elective modules in addition to these (refer to the box on this page for definitions of these terms). In Stage 1, you will choose only one elective in the Spring trimester. There is more choice and flexibility in Stages 3 and 4, a progressively greater emphasis on modules from your chosen specialisation and on research, project work, field trips and workplace experience (Figure 1). At each Stage, core modules include modules about sustainability itself and modules about science, social sciences, policy and law, business and economics. The sustainability cores are intended to build your understanding, skills and experience in sustainability and your capacity to work as part of an interdisciplinary team to address sustainability challenges:

#### Core modules in Sustainability for Stages 1 to 4

Stage 1	Introduction to Sustainability	
	Sustainability Challenges	
Stage 2	Stage 2 Sustainability: Research Tools	
	Careers and Innovation in Sustainability	
Stage 3/4	Internship in Sustainability	
	Sustainability Field Trip	
	Interdisciplinary collaboration to address sustainability challenges	

#### BSc Sustainability degree structure

#### Stages, credits and modules

- BSc Sustainability has four **Stages**.
- Each Stage corresponds to a year of study (though this can be flexible) and comprises 60 credits.
- Modules are self-contained units of learning on a particular topic.
- Most modules are 5 credits, so generally there are 12 modules per Stage.
- Core modules convey essential knowledge and skills and are required to complete each Stage. Conditional Core modules need only be taken by some students depending on certain conditions being met. Programme Core modules can be taken in one of a number of Stages. For example a Stage 2/3 Programme Core can be taken either in Stage 2 or Stage 3.
- **Option** modules can be chosen from a list set by your programme team.
- Five Elective modules can be chosen from all those offered by UCD (timetable and capacity permitting); one in Stage 1 and two in each of Stages 2 and 3.
- Structured Electives are sets of three or more elective modules on topics like social justice, global history, Italian, statistics and data analytics, innovation for change, GIS, etc.
- UCD Discovery modules can be taken as electives and give a broad perspective on topics of global significance such as war, childhood, etc.

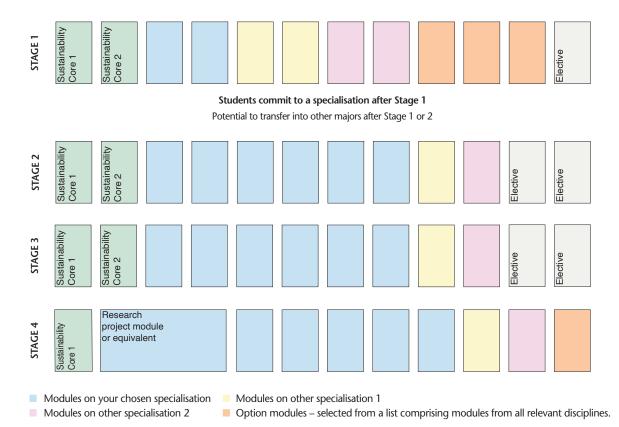


Figure 1. Outline of the Sustainability degree structure.

#### Stage 1

In Stage 1, eight core (compulsory) modules are specified for all students. GEOG10140 Mapping a Sustainable World is a Stage 1/Stage 2 Programme Core (PC) - all students must this module by the end of Stage 2. Environmental Sciences specialisation students must take CHEM00010 Introductory Chemistry (Conditional Core) in Stage 1 or 2 if they have not studied chemistry or if they have a Leaving Cert chemistry grade less than H5 or O1; they also must take CHEM10050 Basis of Organic and Biological Chemistry in Stage 1 or 2 (PC).

#### STAGE 1 Core (C), Conditional Core (CC) and Programme Core (PC) modules All Students must take eight of these modules in Stage 1

including either CHEM00010 or GEOG10140.

Sustainability	SUST10010 Introduction to Sustainability (C) SUST10020 Sustainability Challenges (C)		
Mathematics/Statistics	STAT10050 Practical Statistics (C)		
Environmental Sciences	SCI10010 Principles of Scientific Enquiry (C) GEOL10060 Introduction to Earth Sciences (C)		
Social Sciences, Policy and Law	ENVP10010 Environment Change & Policy (C)		
Business and Economics	ECON10040 Economics and Society (C) ACC10730 Business in Society (C)		

In addition, there is a selection of option modules from which you need to choose (Stage 1 Option modules box on this page lists a selection of these). The choice is really yours. You can opt for modules that give you more knowledge in an area you know you want to focus on, or try out modules in areas that you think may be interesting. You will also need to choose one Spring elective module from among all the modules offered by UCD. In Stages 2, 3 and 4, there will be scope for students who specialise in Environmental Sciences to develop a broad understanding across the range of environmental aspects of science or to focus primarily on modules on earth sciences, ecology/environmental biology or the environmental aspects of engineering (waste management, energy, transport solutions, etc.).

In Stages 2, 3 and 4 of the Social Sciences, Policy and Law specialisation, there is scope to stay broad across the social sciences including modules in geography, archaeology, sociology, environmental policy and law. Students who choose to specialise in Business and Economics will take modules that deal with environmental issues and development, such as FIN30220 Green Ventures, ECON30410 Development Economics and BMGT20050 Business Across Borders. Foundational principles of business and economics are covered in modules such as ECON10010 Principles of Microeconomics and MKT10720 Marketing: An Introduction in Stage 2. In Stages 3 and 4, there is great scope for students to choose modules in areas that interest them specifically in business, economics or both.

#### Stage 1 Option modules\*

ACM10090: Climate change: Causes and Consequences (O)
ARCH10150 Introduction to Anthropology (O)
ARCH10010 Exploring Archaeology (O)
BIOL00010 Fundamentals of Biology
BIOL10110 Cell Biology and Genetics (O)
BIOL10030 Cell and Plant Biology (O)
BIOL10140 Life on Earth (O)
CHEM10050 Basis of Organic and Biological Chemistry (O)
GEOG10100 People, Places, Regions (O)
LSOC10010 Making the Irish Landscape (O)
ECON10770 Introduction to Economics (O)
BMGT10140 Business Plan (O)
LAW10440 Law in Europe (O)
PHYC10200 Conceptual Physics (O)
MATH10290 Linear Algebra (O)
MATH10310 Calculus for Science (O)

\* Module list is not guaranteed and is subject to change each year.



#### Transfers

UCD has flexible policies enabling students to <u>transfer between degree</u> <u>programmes</u> if they wish to do so, if there is capacity and if they meet certain requirements. Students can apply to transfer from DN240 Sustainability into DN200 Science at the end of Stage 1 to access other majors such as Zoology, or Chemistry with Environmental and Sustainable Chemistry. It is also possible to transfer from DN240 directly into Environmental Biology or Geology at the end of Stage 2 if certain modules have been taken as Options or Electives during Stages 1 and 2:

- Students who wish to transfer into Geology at Stage 3, must take GEOL10060 Introduction to Earth Sciences plus any two from GEOL20120 Investigating Minerals, GEOL20190 Sedimentology and Palaeobiology, GEOL20200 Earth Structure and Geodata as Options or Electives in Stage 1 or Stage 2.
- Students who wish to transfer into Environmental Biology at Stage 3, must take BIOL10110 Cell Biology and Genetics, ENVB20050 Principles of Environmental Biology and Ecology, BIOL10140 Life on Earth and BMOL20060 Biomoecular Lab Skills 1 as Options or Electives in Stage 1 or Stage 2.

Further information about modules

Full details of the module requirements for Stage 1 and the modules themselves are available via the <u>Course Search</u>, accessible via the Current Students link on the UCD homepage. Module requirements can be found under <u>Undergraduate Programmes – Sustainability</u>. Module details can be accessed by clicking on the links on that page or via <u>Search all Modules</u>; just enter the module code or name in the Filter by Keyword box.

#### Contacts

Your main point of contact for general enquiries, registration or other queries is the BSc Sustainability Programme Manager, Kirsten Southard. Kirsten is located in the Science Office, Room 1.09, O'Brien Centre for Science, University College Dublin, Belfield, Dublin 4.

Email: sustainability@ucd.ie, tel: 01-716 2389.

Professor Tasman Crowe, Professor Jacky Croke and Associate Professor Maeve Houlihan are the Programme Co-Directors and are also available to answer your queries. However, your main contact for general queries should be Kirsten (<u>sustainability@ucd.ie</u>).

Your module coordinators and your tutor (assigned for SCI10010

Principles of Scientific Enquiry) can help you with more specific queries about module content, study skills, etc.

We appreciate that transitioning to life and learning at university can be challenging. If personal difficulties arise, please seek help, for example from a Student Adviser such as: Dani Findley (dani.findley) or Megan Kuster (megan.kuster@ucd.ie).

#### Other useful information

The information below will help you to understand some important principles and procedures for studying at UCD. As a Sustainability student, your modules will be delivered by staff from a wide range of UCD Colleges and Schools. In some cases, there may be variants on some of the procedures associated with particular Colleges or Schools. If necessary, seek clarification from your module coordinator or the relevant School Office.

#### **UCD Student Charter**

University College Dublin (UCD) is a community of students and staff where scholarship and personal development are fostered, leadership cultivated, innovation encouraged and social conscience developed. Our University provides a very broad and exciting range of opportunities for students from all backgrounds, and staff and students have a responsibility to engage, participate and respect the services and facilities provided. Central to the aims and values of our University is respect and fairness, and every member of our community is required to uphold these values in all dealings with each other.

The <u>UCD Student Charter</u> summarises our aspirations and expectations for all members of our University community. It sets out the roles and responsibilities of the various groups within our University and outlines what students can expect from their University and what the University can expect from its student members.

In order to build and maintain a positive and encouraging academic environment, UCD has regulations, codes and policies. Students and staff should be familiar with and abide by these regulations and procedures. In particular, students must be familiar with the UCD Student Code, which sets out the procedures for managing breaches of good behaviour.

The UCD Student Charter should be read in conjunction with these regulations, codes and policies. If you have any queries about the Charter please contact <u>studentcharter@ucd.ie</u>.





### Why not volunteer to help a community organisation or UCD Volunteers Overseas?

Volunteering provides an opportunity for you to contribute to your local or global community, to get some real-life experience and to develop and demonstrate your skills, knowledge and adaptability. It is a pathway to personal and professional development and employers often ask about volunteering at interview. Volunteering is also a great way to get to know more people from different backgrounds. Volunteering brings a valuable opportunity to experience something totally different and maybe even to learn something new about yourself. If you are interested, visit <u>UCD in the Community, Student Volunteer</u> or <u>UCD Volunteers Overseas</u> on the UCD website.

#### The UCD Advantage Award

The <u>UCD Advantage Award</u> is your chance to get recognition from UCD for skills, knowledge and experience that you have gained through participation in co-curricular activity, on and off campus. Whether you are part of a society or sports team, volunteer your time with a charity or have done a Summer internship, UCD wants to acknowledge your contribution and development. Participating in the Awards encourages you to expand the breadth of your co-curricular activity, to get involved in things that you may not have considered previously. This opens up a world of opportunity in terms of meeting new people, experiencing new situations and developing a whole host of new skills.

#### The UCD Student Guide

The <u>UCD Student Guide</u> provides information on University services and resources to help you get the most out of your university experience.

#### **Academic integrity**

Integrity is all about being honest and having good moral values. Academic integrity is simply integrity in an academic setting, i.e. in University. When you are a student in UCD, we encourage and expect that you will be honest and have high standards. This means avoiding behaviours that are considered dishonest. Most people know that it is dishonest to cheat in exams, and most people don't cheat; but there are other, much less obvious ways of being dishonest, and you may not even realise it. When you are writing your assignments, you will need to make sure that you avoid plagiarism.

#### What is plagiarism?

Plagiarism is a serious academic offence. While plagiarism may be easy to commit unintentionally, it is defined by the act not the intention. All students are responsible for being familiar with the University's <u>policy</u> <u>statement on plagiarism</u> and are encouraged, if in doubt, to seek guidance from an academic member of staff.

#### **Timetable information**

Personalised timetables based on individual students' module selection are available through the Student Web. In SIS you will be able to view your Autumn and Spring Trimester Timetables and your Examination Timetable (when published). To access SIS:-

- Click on UCD Connect on the top right hand side of the UCD homepage
- Scroll down and click on the SISWeb icon
- Enter your Student Number/Connect Username and Password
- Login

#### **UCD email accounts**

You should use your UCD email account when communicating with Lecturers and administrative staff. The Programme Manager will communicate with you by email through your UCD email address. All students have an obligation to regularly check their UCD email accounts and are bound by notices and information posted to these accounts.

**Email etiquette:** Email communications should follow the same standards expected in written business communications.

- Lecturers should be addressed appropriately.
- Student name, student number, stage, class and group must be provided.
- Students must ensure that their reply email address is functional.
- The tone of any communication must be respectful.

**Network usage:** You should adhere to the general guidelines on computer and email usage detailed in the "Acceptable Usage Policy for UCD Computer and Network Systems." This document can be viewed under the <u>Information Technology Acceptable Usage Policy</u>.

#### Printing, copying, scanning

Printing facilities for students are available in a number of buildings on campus. Please refer to the <u>UCD Library</u> website for further details.

#### Brightspace

The Brightspace Virtual Learning Environment (VLE) provides e-learning services to students and staff at UCD. Brightspace allows lecturers to share module materials, post announcements for students, and run quizzes and surveys. Brightspace also includes a Virtual Classroom facility, discussion forums and various other module tools. You'll find more information about Brightspace at <u>www.ucd.ie/futurevle</u> and remember to check out the "Discover IT @UCD" module designed to help you get started when you first login to Brightspace.

#### **Disability Support Services**

Students who require ongoing support and accommodation on the grounds of a verifiable disability are encouraged to register with <u>UCD</u> <u>Access and Lifelong Learning</u> at their earliest convenience. Temporary



Exam Support is arranged by UCD Access & Lifelong Learning for students sitting official end of trimester exams who require exam supports due to recent injury or illness. For example, a student who has broken their wrist may benefit from the use of a computer or other support to complete their exam.

#### **Extenuating circumstances**

Extenuating circumstances are serious, unforeseen circumstances beyond your control (ie. serious illness, family bereavement, etc.) which prevent you from meeting the requirements of your programme. If you are unable to complete assignments or attend required classes/exams due to unforeseen circumstances, you can apply for extenuating circumstances. If you are granted extenuating circumstances in a module, you will have the opportunity to retake this module in the following trimester for no additional cost and with no cap applied to your grade. To find more information about extenuating circumstances, there is a student guide available on the <u>Student Desk website</u>.

#### Foreseen absence from College

Circumstances that prevent a student from attending lectures, practicals, tutorials, in-trimester assessments or examination that are known in advance are **NOT** considered extenuating circumstances and students should ensure that arrangements have been put in place with module coordinators and/or Schools in advance of the absence. Retrospective claims for foreseen circumstances will not be accepted.

#### Policy on late submission of coursework

Each School has their own arrangements for late submission of coursework. If your assignment submission will be late, contact your Module Coordinator as soon as possible to let them know in order to make arrangements with them.

Late submission of coursework: There may be occasions where a student is late in submitting an assessment without extenuating circumstances or where an application for extenuating circumstances has not been successful. Such an assessment may be submitted up to 10 working days following the submission date and a grade penalty is applied, unless a student has sought an extension to the submission deadline without penalty and the module coordinator has approved

the application. In all other cases of late submission of coursework, the following penalties shall apply. Coursework submitted at any time up to and including 5 working days after the due date will have the grade awarded reduced by one grade point (for example, from B- to C+). Coursework submitted more than five working days but up to and including ten working days after the due date will have the grade reduced by two grade points (for example, from B- to C). Coursework received more than ten working days after the due date will not be accepted by the School. Please see the Late Submission of Coursework Policy for further details.

#### **Examination regulations**

Students should familiarise themselves with the **Examination Regulations**.

#### **Procedure if you are absent or late for an examination** If you are absent from an examination due to extenuating circumstances you should contact the Programme Manager (Kirsten Southard, <u>sustainability@ucd.ie</u>) as soon as possible for advice. If for some reason you find that you may be late for an examination, it is advised that you should still attend the Examination Centre, where it may be possible that arrangements can be put in place to facilitate you.

Students who are required to register and have not done so may be refused permission to sit an examination. Repeating students who are required to register for examinations and fail to do so may be refused permission to sit those examinations. Candidates are required to be in possession of their Student Card, which should be displayed on their desk.

#### Withdrawal

UCD recognises that for a variety of reasons a student may need to <u>withdraw from their programme</u> and the University and there may be fee implications. It further recognises that in some cases a student may, at a later date, apply for re-admission to the programme. Similar to students considering a Leave of Absence, you should make sure you get as much advice as possible before making this important decision. The Programme Manager, Programme Directors and your Student Advisers are here to help.

#### CONTACT

Your main point of contact for general enquiries, registration or other queries is:

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