# College Policies and Procedures

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Welcome to the College

Congratulations on joining Imperial College London, the only university in the UK to focus exclusively on science, medicine, engineering and business.

From Fleming’s discovery of Penicillin to Gabor’s invention of holography, Imperial has been changing the world for well over 100 years. You’re now part of this prestigious community of discovery and we hope you will take this opportunity to make your own unique contribution.

We’re committed to providing you with the very best academic resources to enrich your experience. We also provide a dedicated support network and a range of specialist support services to make sure you have access to the appropriate help, whether that’s further training in an academic skill like note taking or simply having someone to talk to.

You’ll have access to an innovative range of professional development courses within our Graduate School throughout your time here, as well as opportunities to meet students from across the College at academic and social events – see page 6 for more information.

We actively encourage you to seek out help when you need it and try to maintain a healthy work-life balance. Our choice of over 380 clubs, societies and projects is one of the largest of any UK university, making it easy to do something different with your downtime. You also have access to gym and swimming facilities (following an annual fee of £30 in 2018-19) across our campuses.

As one of the best universities in the world, we are committed to inspiring the next generation of scientists, engineers, clinicians and business leaders by continuing to share the wonder of what we do through public engagement events. Postgraduate students, alongside our academics and undergraduate students, make a significant contribution to events such as our annual Imperial Festival and our term-time Imperial Fringe events – if you’re interested in getting involved then there will be opportunities for you to do so.
**Our Principles**

In 2012 the College and Imperial College Union agreed ‘Our Principles’ a series of commitments made between students and the College. The Principles are reviewed annually by the Quality Assurance and Enhancement Committee and changes recommended for Senate approval.

**Imperial will provide through its staff:**
- A world class education embedded in a research environment
- Advice, guidance and support
- The opportunity for students to contribute to the evaluation and development of programmes and services

**Imperial will provide students with:**
- Clear programme information and assessment criteria
- Clear and fair academic regulations, policies and procedures
- Details of full programme costs and financial support
- An appropriate and inclusive framework for study, learning and research

**Imperial students should:**
- Take responsibility for managing their own learning
- Engage with the College to review and enhance provision
- Respect, and contribute to, the Imperial community

**The Imperial College Students’ Union will:**
- Support all students through the provision of independent academic and welfare assistance
- Encourage student participation in all aspects of the College
- Provide a range of clubs, societies, student-led projects and social activities throughout the year
- Represent the interests of students at local, national and international level

[www.imperial.ac.uk/students/our-principles](http://www.imperial.ac.uk/students/our-principles)
Welcome from the Graduate School

Professor Sue Gibson, 
Director of the Graduate School

The Graduate School has several roles but our main functions are to provide a broad, effective and innovative range of professional development workshops and to facilitate interdisciplinary interactions by providing opportunity for students to meet at academic and social events. Whether you wish to pursue a career in academia, industry or something else, professional skills development training will improve your personal impact and will help you to become a productive and successful researcher.

Professional development courses for Master’s students are called “Masterclasses” and they cover a range of themes, for example, presentation skills, academic writing and leadership skills (http://www.imperial.ac.uk/study/pg/graduate-school/professional-skills/masters/). All Masterclasses are free of charge to Imperial Master’s students and I would encourage you to take as many as you can to supplement your academic training. The Graduate School works closely with the Graduate Students’ Union (GSU) and is keen to respond to student needs so if there is an area of development training, or an activity that you would like us to offer, but which is not currently provided, please do get in touch (graduate.school@imperial.ac.uk).

The Graduate School also runs a number of exciting social events throughout the year which are an opportunity to broaden your knowledge as well as to meet other students and have fun. You should regularly check the Graduate School’s website and e-Newsletters to keep up to date with all the events and development opportunities available to you.

Finally, I hope that you enjoy your studies here at Imperial, and I wish you well.

Sue Gibson

The Graduate School

Dr Janet De Wilde, 
Head of Postgraduate Professional Development

I would like to welcome you to the Graduate School programme for postgraduate professional development. Our team of tutors come from a wide variety of experiences and we understand just how important it is to develop professional skills whilst undertaking postgraduate studies and research. Not only will this development improve success during your time at Imperial College, but it will also prepare you for your future careers. We are continually working to develop the courses we offer and over this year you will see a range of new courses including face-to-face workshops, interactive webinars and online self-paced courses. I encourage you to explore and engage with the diverse range of opportunities on offer from graduate school and I wish you well in your studies.

Janet De Wilde
You automatically become a member of the Graduate School when you register as a postgraduate student at Imperial.

The Graduate School has been set up to support all postgraduate students at the College through:

- Training and development courses
- Networking activities, social and academic events to encourage cross-disciplinary interactions
- Forums to represent the views of postgraduate students throughout the College

‘Masterclass’ professional skills courses

You can see the full range of free professional skills courses for postgraduate students on the Graduate School website:

- [www.imperial.ac.uk/study/pg/graduate-school/professional-skills/masters](http://www.imperial.ac.uk/study/pg/graduate-school/professional-skills/masters)

All courses can be booked online.

Contact us

- Level 3, Sherfield Building, South Kensington Campus
- 020 7594 1383
- graduate.school@imperial.ac.uk
- [www.imperial.ac.uk/graduate-school](http://www.imperial.ac.uk/graduate-school)
Welcome from the Graduate Students’ Union (GSU)

I am delighted to welcome you to Imperial College! Let me introduce you to the Graduate Students’ Union (GSU). We are the representative body defending your interests as a postgraduate student in major decisions taken by the College. Beyond that, we work towards building a thriving postgraduate community that spans faculties and where students effectively communicate in an interdisciplinary way. Our committee is comprised of motivated postgraduate students like yourself, who have been appointed in university-wide elections and volunteer to make your experience at Imperial as fulfilling and enjoyable as possible.

So, what are we up to for this coming year 2018/19? We are going to focus on three major areas of action:

- Continue improving post-graduate well-being by increasing the quality of supervision and by creating strategies to tackle common mental health challenges in higher education.
- Develop the GSU to become central to the postgraduate community by improving the two-way flow of information, between the GSU and you.
- Organise exciting events around the topics of well-being, interdisciplinary research, and entrepreneurship.

As the GSU president, I would like to emphasise that Imperial College London is relying on its postgraduate students to maintain its position as a front-runner in world-class research and teaching. For us, the GSU, to be successful we need to receive as much of your input as possible. We want to work with you, for you!

Finally, I hope that you have a fantastic time here at Imperial and take advantage of the richness of opportunities that awaits you. If ever you have questions or ideas to share with us, please do not hesitate to get in touch with us and we are looking forward to seeing you at our events!

Ute Thiermann, GSU President 2018/19

gsu.president@imperial.ac.uk
Welcome from the Programme Director

Welcome to the Centre for Environmental Policy

Dr Mike Tennant
Course Director, MSc Environmental Technology

Today we have over 150 people joining us from 31 countries and a wide range of backgrounds - it's my great pleasure to welcome you all to the CEP and the MSc in Environmental Technology.

You're joining a large and diverse family of sustainability professionals. We're incredibly proud of the 5000+ alumni who have graduated from this course since it started in 1977 and very much hope that you'll follow in their footsteps, acting to lead the ever-growing number of people and organizations that are having a positive effect on the environmental and society.

Each of you will have different motivations and aspirations and we want you to work together, contributing and taking advantage of the diversity of disciplinary and cultural experience that you all bring, to develop your understanding of contemporary sustainability problems so that you can harness your passions and work towards achieving your goals.

You'll find that there’s a lot to learn and if you commit yourself to the course and enjoy your learning you'll flourish. The Core Course will provide you with a broad and fundamental set of disciplinary tools that enable you to work in an interdisciplinary manner, essential to tackle any of the issues of unsustainability that we see around us today. In the second term you'll be applying that knowledge to a specific area and starting on the journey to become an expert in your chosen field. The summer term gives you the opportunity to engage in a detailed research project with a member of staff and to pave the way to your new career in sustainability.

The MSc isn't only about work though - it’s also about creating strong and lasting friendships and professional relationships. We encourage you to see your year here as an opportunity to make friends, and this means that you should spend as much time working and socialising with others as you do with your work. Our Thursday evening seminars & mixers are a great way to start this journey off. The International Food Night and Christmas cèilidh are always a highlight of the year, and the various Option social events shouldn’t be missed.

The MSc in Environmental Technology is a journey that will point you in the direction of a career that makes a difference in the world. I, and all of my colleagues in the CEP, hope that you enjoy this journey and make the most of your time with us
The Centre for Environmental Policy

The Centre for Environmental Policy, which is the Department that hosts the MSc in Environmental Technology, was created on 1 August 2005 out of the former Department of Environmental Science and Technology (DEST) and the Department of Agricultural Sciences (DAS), both formerly in the T.H. Huxley School of Environment, Earth Sciences and Engineering. Prior to that DEST’s predecessor was Imperial College Centre for Environmental Technology (ICCET), established in 1977. It remains a highly interdisciplinary organisation, though some of the natural science staff are now based in other divisions but contribute heavily to teaching and collaborative research. The Centre provides the focus for College research and teaching in the field of environmental policy.

The Centre is a unique interface between science and technology, and economics and policy. Scientists, economists and social and policy experts work towards gathering the scientific evidence necessary to develop or implement new environmental policies, or, alternatively, support policies already in place.

While part of the Faculty of Natural Sciences the Centre is also seen as a College-wide interdisciplinary centre with a specific remit to interact with other departments and faculties throughout the College. The MSc Environmental Technology continues to be its core teaching product (and by October 2015 produced over 3,500 graduates since 1977).

The Centre’s MSc activities are based primarily in the Weeks Building 16-18 Prince’s Gardens on the South Kensington Campus and in Sherfield Building Level 1 where five of our Option rooms are located.

The MSc course is under the overall direction of Dr Mike Tennant, who is based on the First floor of Weeks Building.
## Academic and Administrative Staff

### Course Director
- **Dr. Mike Tennant**
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  - Tel: 47759
  - Email: M.Tennant@imperial.ac.uk

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### Course Tutors
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### Core Course
- **Environmental Pollution and Control**
  - Dr. Nick Vuckovic
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- **Environmental Law**
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- **Environmental Policy and Management**
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### Option and Convenors
- **Water Management**
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- **Environmental Economics and Policy**
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- **Environmental Resource Management**
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- **Business and the Environment**
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### Energy Policy
- **Global Environmental Change and Policy**
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English language requirement
If you are not a native English speaker you must meet the College’s English language requirements.

See the Admissions website for details:

www.imperial.ac.uk/study/pg/apply/requirements/english

For information on English language support available while you’re here, see

Attendance and absence
You must inform your Senior Postgraduate Tutor if you are absent from the College for more than three days during term. If the absence is due to illness you must produce a medical certificate after seven days. If you miss an examination through illness you must contact your Senior Postgraduate Tutor on the day and provide a medical certificate within five working days. If illness has impacted on your ability to take assessment, you should seek advice and support about making a claim for mitigating circumstances. Please note that there is a deadline of 5 working days from the date the assessment is due (hand-in date or examination date for example) to make a claim.

The Registry will be informed of all student non-attendances as the College is obliged to report the non-attendance of students on Tier 4 visas to the Home Office.

Attendance at the expected contacts set out below will be monitored. Where contacts take the form of course work, submissions must be made within 3 working days of the deadline, allowing for any authorised extensions. Where absences have been agreed in advance, or where they are due to certificated illness they will not count as a missed contact.

Information on attendance will be kept confidential to key MSc staff members, and not further distributed except as set out below.

Action on consecutive missed contacts

- If 3 consecutive expected contacts have been missed, the Senior Tutor will contact the student's personal tutor, and write informally to the student.
- Where 5 consecutive expected contacts have been missed the Senior Tutor will write formally to the student explaining that continuing absences will be reported to Registry.
- When 10 consecutive expected contacts have been missed, Registry will be notified immediately, and the student informed. Where visa conditions have been breached, this information must by law be passed to the UK Borders Agency. There can be no discretion in this matter.

Schedule of expected contacts

Core Course
- Registration
• First access of blackboard system
• Attendance at all small group seminar sessions
• Seminar essay submission
• Statistics test submission
• Law test Attendance
• Core course first and second exam attendance.

**Option Term**

• 8 contacts over the course of the option. Please ask your convenor for details, as they vary by option
• Exam attendance

**Thesis Term**

• Attendance at project review
• Submission of thesis proposal
• Scheduled meetings with supervisors
• Attendance at project viva
• Thesis submission
• Executive summary submission
Key dates 2018-19

Term dates
Autumn term: 29 September - 14 December 2018
Spring term: 5 January - 22 March 2019
Summer term: 27 April - 28 June 2019

Closure dates
Christmas/New year: 24 December 2018 – 1 January 2019
(College reopens on 2 January 2019)
Easter holiday: 18 April - 23 April 2019
(College reopens on 24 April 2019)
Early May Bank Holiday: 6 May 2019
Spring bank holiday: 27 May 2019
Summer bank holiday: 26 August 2019

Key events
Postgraduate Awards Ceremonies: May 2019
Imperial Festival and Alumni Festival: May 2019

Illness, Emergencies and Absence

Please notify the CEP Teaching Office if you are unable to attend classes as a result of illness or other severe emergency. This is a College requirement if you are away for over three days. If your absence is due to illness and lasts for more than six days, a medical certificate must be brought to the Postgraduate Office.

In the event of suspected swine flu or any similar highly contagious disease DO NOT come to College, but notify the Teaching Office. All lecture and supporting material is made available on Blackboard so you can easily catch up lectures that may have been missed. See the College Alerts website at http://www3.imperial.ac.uk/alerts for more guidance.

Examinations should not be missed unless you are genuinely too ill to come into College or have a severe, unexpected personal emergency (such as the death of a close family member) on or immediately prior to the day of the exam. In these circumstances please notify both the Teaching Office and your personal tutor by telephone and email before the start of the examination.

In all cases evidence supporting your absence from an examination must be provided without delay. If you are unable to provide supporting evidence you will receive a zero mark, and may not be granted an opportunity to re-take the examination.
If you are too ill to take an examination, you must obtain a medical certificate supporting your case and dated on the day of the examination. The Imperial College Health Centre can provide a suitable certificate. Call (020 7584 6301 or 020 7594 9375/6) as soon as they open (usually 0800) on the day of examination and explain your situation. A similar certificate from your General Practitioner will do equally well.

If a prolonged illness or personal emergency prevents you from meeting course work submission deadline, it is possible to apply for an extension as follows:

- **Core Course**: Apply to the person setting the assignment, with a copy to the Teaching Office and the Director of the Core Course (Dr Bill Sheate) using the Mitigating Circumstances form available on Blackboard.
- **Option Term**: Apply to your option convenor, with a copy to the teaching office, again using the Extenuating Circumstances form available on Blackboard.
- **Thesis Term**: Apply to Dr Rob Gross (Project Term Director) via your supervisor. Use the Extenuating Circumstances form available on Blackboard.

More details on these and other regulations can be found in the Freshers’ Handbook.
The MSc in Environmental Technology

The MSc in Environmental Technology has an outstanding international reputation. It has for many years set market and educational standards in taught postgraduate environmental provision and is the envy of many institutions. Compared to many taught masters courses, this MSc is unusual if not unique: it has an extremely large annual cohort and a fairly rigid course structure, which aims however to facilitate the course’s mission and objectives and maximise the delivery of its learning outcomes. The learning methods used for such delivery have been designed on this structure, and although sometimes not obvious to realize during the process, they are really appreciated after graduation with the application of knowledge and understanding, application of critical power, skills and other attributes acquired as learning outcomes.

While the course forms the centrepiece of departmental activity, the department also has a distinctive research profile. With no undergraduate provision, the linkage between MSc teaching and research is thus very important to the department, and the ways in which research informs teaching is evident and manifest in departmental educational objectives.

The MSc programme shares the following important features:

- most tuition has an holistic, multidisciplinary and interdisciplinary approach;
- the integration of fieldwork, experimental and theoretical investigations underpins much of the learning experience even in some of the more policy based options;
- quantitative and qualitative approaches to acquiring and interpreting data;
- examination of the exploration for, and exploitation of, physical and biological resources and social and economic barriers and opportunities
- examination of the implications of sustainability and sustainable development.

The Natural Sciences Options (Pollution, Water, EAA and Health and the Global Environment) and Environmental Resource Management, to some extent broadly concerned with environmental sciences, typically involve in their programme:

- a systems approach to understanding the present and past interactions between the processes and the perturbations of these systems by human influences
- the scientific study of physical, chemical, biological and anthropogenic processes that affect environmental quality
- modelling environmental processes and systems
- problem-solving related to environmental phenomena
- the monitoring and management of natural and human-induced environmental changes
- scientific examination of the implications of sustainability and sustainable development.

The more policy related Options: Business & Environment, Energy Policy, Environmental Economics & Policy and Global Environmental Change & Policy are similarly to some extent broadly concerned with environmental studies though also interact with government and business. These focus more on the sociological, political, environmental and economic implications of human interactions with the environment, the relationship between the environment, human health, human culture
and attitudes and a foundation of scientific understanding of natural and human-induced environmental processes appropriate to the programme’s aims.

Teaching methods aim to help students to use scientific information to inform decision-making processes and environmental management, in addition to examination of the concepts and applications of sustainability and sustainable development. Applications include: environmental decision making; environmental auditing; environmental impact assessment and planning; legislative aspects of environmental protection and environmental education.

Teaching methods aim to help students to use scientific information to inform decision-making processes and environmental management, in addition to examination of the concepts and applications of sustainability and sustainable development. Applications include: environmental decision making; environmental auditing; environmental impact assessment and planning; legislative aspects of environmental protection and environmental education.

Don’t forget to download the free Imperial Mobile app for access to College information and services, including your programme timetable, College emails and a library catalogue search tool.

[Link](www.imperial.ac.uk/imperialmobile)

Imperial Success Guide
The Imperial Success Guide is an online resource with advice and tips on the transition to Master’s level study. More than just a study guide, it is packed with advice created especially for Imperial Master’s students, including information on support, health and well-being ideas to help you make the most of London.

[Link](www.imperial.ac.uk/success-guide)
Educational aims/objectives of the programme

The programme aims to:
• Provide the highest standard of training for environmental scientists and managers, who will become leaders in their fields, whether in academia, consultancy, research, government bodies, non-governmental organisations or industry and commerce, both nationally and internationally
• Attract highly motivated students, both from within the UK and from overseas
• Develop new areas of teaching in response to the advance of scholarship and the needs of vocational training

The programme objectives are:
• A command of the range of subjects necessary to understand and resolve environmental problems and the ability to apply the knowledge to practical issues
• Specialisation on certain areas in greater depth
• Understanding of the fundamental mechanisms operating in the environment and the principles underlying the tools for sustainable environmental management
• Development of interpersonal and transferable skills
Quantitative and qualitative skills
• Development of the ability to conduct independent rigorous research into environmental problems with confidence

Programme Learning Outcomes
The Imperial Graduate Attributes are a set of core competencies which we expect students to achieve through completion of any Imperial College degree programme. The Graduate Attributes are available at: www.imperial.ac.uk/students/academic-support/graduate-attributes

Programme Outcomes
At the end of the MSc you will:
• Be skilled in interdisciplinary thinking and working
• Be a skilled problem solver for sustainability
• Be able to communicate and collaborate with specialist experts across the range of disciplines relevant to the environment: from science to economics, from law to engineering, from risk to policy.
• Be highly employable in your chosen environmental field

The programme overall provides opportunities for postgraduate students to develop and demonstrate knowledge and understanding, qualities, skills and other attributes in becoming professionals in this field

Knowledge and Understanding of:
A1. The current status and essential breadth of understanding of environmental science, technology, and policy, the issues, and their interdisciplinary nature
A2. The underlying scientific principles for computational analysis and evaluation of statistical data
A3. The understanding and use of natural and social science research methodologies including quantitative and qualitative data analysis, sampling, experimental design, questionnaire design, interviews, including evaluation of their applicability, limitations and advantages
A4. The wide range and interdisciplinary nature of subjects for the understanding and resolution of environmental issues
A5. The fundamental mechanisms operating in the environment and the principles underlying the tools for sustainable environmental management
A6. Practical knowledge of research techniques
A7. Management and communication skills, including problem definition, project design, decision processes, teamwork, negotiation, written and oral reports, and scientific publications.

Teaching/learning methods and strategies
• Acquisition of A1 to A5 is through a combination of lectures, seminars, computer-based work and coursework, both in the core course and specialist option modules (October to March).
• Acquisition of A6 is through a combination of lectures, fieldwork, and laboratory-based computer research through the Core Course, Option Course and utilised through a full-time, individual, supervised research project (April to September).
• Acquisition of A7 is through a combination of lectures, laboratory and fieldwork exercises, coursework, projects and the full-time research project. Throughout the students are encouraged to undertake independent reading both to supplement and consolidate what is being taught/learnt and to broaden their individual knowledge and understanding of the subject.
• Assessment of the knowledge base is through a combination of unseen written examinations (A1-7), assessed coursework (A1-7), group presentations (A1-7) and the individual research project report and interim viva (A1-7).

Intellectual (thinking) skills - able to:
B1. Analyse and solve environmentally based problems using an integrated multidisciplinary approach, applying professional judgements to balance costs, accuracy, reliability, and both realistic practical and strategic options
B2. Integrate and evaluate information
B3. Formulate and test hypotheses using appropriate methodological/experimental design and collection and correct techniques for the analysis of appropriate quantitative/qualitative data
B4. Plan, conduct and write-up a programme of original research.

Teaching/learning methods and strategies
• Intellectual skills for B1 are developed through the teaching and learning methods outlined in section 1 and through real case studies mainly as part of coursework/group-work.
• Through information filtering and processing, and data source validation required for problem solving coursework B2 skills are developed.
• Similarly, through data analysis, the use of computer-based exercises and small group seminars embedded in different parts of the programme B3 skills are also developed.
• All these contribute to the development of student’s ability to plan, conduct and write-up a programme of original research (B4), with experimental design and statistical skills developed in lectures, computer-based practical work, fieldwork, and team projects in the Core Course, Option Course and subsequently in the individual research project.
• Individual, formative and summative feedback is given to students on all work produced including oral presentations. The Core Course Exams, held in December, and the Option
Course Exam, held in March, provide important summative feedback on student progress.

**Practical skills** – able to:
C1. Analyse and evaluate the critical aspects of an environmental problem
C2. Have a theoretical awareness to be able to select and/or practically utilise a wide range of research methodologies and analytical techniques
C3. Analyse statistical results and determine their strength and validity
C4. Prepare technical reports
C5. Give technical presentations
C6. Use the natural/social scientific literature effectively
C7. Use computational tools and packages.

**Teaching/learning methods and strategies**
- Practical skills are developed through the teaching and learning programme outlined above (and in section 11).
- Practical experimental skills (C1 to C3) are developed through laboratory, computer-based exercises, field work and project work.
- Skills C4 and C5 are taught and developed through feedback on reports written and presentations made as part of coursework assignments.
- Skill C6 is developed through lectures, coursework reports and essays, group project exercises and the individual supervised research project.
- Skill C7 is taught and developed through coursework exercises and project work.
- Practical skills are assessed through laboratory experiment write-ups, field work and coursework reports and the research project dissertation.

**Transferable skills** – able to:
D1. Communicate effectively through oral presentations, computer processing and presentations, written reports and natural/social scientific publications
D2. Apply statistical and modelling skills
D3. Management skills: decision-making processes, objective criteria, problem definition, project design and evaluation, risk management, teamwork and coordination, and management of negotiations
D4. Integrate and evaluate information from a variety of sources
D5. Transfer techniques and solutions from one discipline to another
D6. Use Information and Communications Technology
D7. Manage resources, time and personal well-being
D8. Learn independently with open-mindedness and critical enquiry
D9. Learn from the shared experiences of others
D10. Learn effectively for the purpose of continuing professional development.

**Teaching/learning methods and strategies**
- Transferable skills are developed through the teaching and learning programme outlined above and in section 17.
- Skill D1 is taught through coursework and developed through feedback on reports and oral presentations.
• Skill D2 is taught through lectures and practical work and developed, as appropriate, during the individual research project.
• Skills D3 to D5 are developed through project work and lecture/workshop based exercises.
• Skill D6 is developed through computer-based exercises, projects, fieldwork and other coursework activities and individual learning.
• Skill D7 is developed throughout the course within a framework of skill lectures/ workshops, staged coursework deadlines and the split examination system.
• Although not explicitly taught, skills D8 to D10 are encouraged and developed throughout the course, which is structured and delivered in such a way as to promote this.
• Skill D1 is assessed through coursework, written examinations.
• Skill D2 is assessed through coursework, written examinations and project work.
• Skills D3 to D5 are assessed in field and team exercises.

The other skills are not assessed formally.

The programme’s competency standards document can be found at: https://www.imperial.ac.uk/environmental-policy/msc/msc-environmental-technology/course-description/learningapproach/
Blackboard

Blackboard is the Virtual Learning Environment used by the MSc and is where you will find all timetable information, lecture materials (slides, handouts etc), discussion groups, sign-up sheets for seminars and practicals, assessment submission etc. You will be enrolled into Blackboard as soon as possible after you have formally registered, so it is imperative that you register as quickly as possible so you have access to Blackboard (normally it will happen within 24 hours of you registering).

You need your normal College login details and you should login to Blackboard at [http://bb.imperial.ac.uk](http://bb.imperial.ac.uk)

Blackboard is a fully featured application, which is designed to be used on a desktop or laptop computer. It can be accessed via a mobile app, but this does not provide full functionality, including full navigational access, so access via a computer (PC or Mac) is recommended.

*Your first task having logged in to Blackboard should be to complete the Personal Record form in the Student Forms folder (see Course Content > General Information > Student forms, and below).*

*You should do this by the end of the FIRST WEEK of the Autumn term*, as sign-up to small group seminars and library sessions can only be done via Blackboard.
You will be given further guidance on Blackboard in the Core Course introductory session on Tuesday 3rd October.

The Core Course

The Core Course is arranged on a modular basis to present a progressively more complex and in-depth understanding of the natural and human environment and their interaction. The Core Course is highly interdisciplinary, providing an essential breadth of understanding across environmental technology and policy issues, as well as a precursor to the specialist options in the second term. The course comprises six core modules (each of c.20 hours), plus a core transferable skills module, all running in parallel:

- Ecology in Context
- Environmental Pollution and Control
- Environmental Policy and Management
- Environmental Law
- Environmental Economics
- Quantitative Skills and Uncertainty

The core Transferable Skills module covers a wide range of personal and practical management skills and analytical skills. All of these modules are compulsory.

In addition there are small-group seminars, and weekly environmental policy seminars

The Core Course emphasises contemporary policy debates through a number of cross-cutting themes: climate change and energy, international development, sustainability and health, and biodiversity.

The Director of the Core Course is Dr Bill Sheate who is also Deputy Director of the MSc course overall and Director of Careers/Departmental Careers Advisor.

Core Course Learning Outcomes:

- Be able to appreciate the interdisciplinary nature of sustainability
- Be able to examine critically the breadth of subjects covered
- Be able to integrate and apply knowledge across disciplines with confidence
- Be able to understand the fundamental principles of ecology, environmental law, environmental economics, environmental policy and management, environmental pollution and control, and quantitative/qualitative research skills and uncertainty
- Be confident to engage in group learning and communication
- Be a skilled and confident problem solver, independently and as part of a team, able to project manage and make a contribution
- Be confident and efficient in acquiring and applying new skills and knowledge
MSc Environmental Technology Core Course Structure

Autumn Term

Week 1

- Environmental Policy and Management
- Environmental Economics
- Ecology in Context
- Environmental Pollution and Control
- Quantitative Skills and Statistics
- Environmental Law
- Small Group Seminars
- Policy Seminars

Cross-cutting themes

- Climate change & energy
- International development
- Sustainability & health
- Biodiversity

Transferable Skills
Core Course Timetable

The following pages detail the times and locations of the Core Course lectures. Most will take place in the following places:

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<th>Royal School of Mines</th>
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<td>RSM 1.31</td>
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<td>RSM G20</td>
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<tr>
<th>Sherfield Building SHER</th>
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<tr>
<td>SHER 571 Read</td>
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<td>SHER 569 Pippard</td>
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<tr>
<th>Sherfield Suite 164, 165, 169A, 169B &amp; 170</th>
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<tr>
<td>Option/meeting rooms. Located on mezzanine floor of the Sherfield building (level 1)</td>
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<th>Ace Extension on Walkway AceX</th>
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<td>AceX LT1 (250)</td>
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<th>Other Buildings</th>
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# Module timetable - Environmental Technology Msc (Wk 1, wk starting 01/10/2018)

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<thead>
<tr>
<th>Time</th>
<th>Monday</th>
<th>Tuesday</th>
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<tbody>
<tr>
<td>09:00AM</td>
<td>Introduction to MSc Environmental Technology Induction</td>
<td>Introduction to Specialist Options - CEP rooms</td>
<td>EC2: Human Demography Lecture</td>
<td>T54 Critical Thinking Lecture</td>
<td>T54 Introduction to Health &amp; Safety Lecture</td>
</tr>
<tr>
<td>10:00AM</td>
<td>Module: Environmental Technology Msc Group: LF Env Tech Core Course (MSc) Staff: Rost, Bill, Mike Room: ACEX 295 - Lecture Theatre</td>
<td>TS1: Introduction to the Core Course, Blackboard and Careers Lecture</td>
<td>T55 Critical Thinking and Alumni Lecture</td>
<td>TS5 part one Student</td>
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<tr>
<td>11:00AM</td>
<td>MSc Welcome Lunch in Sherfield Room 109a &amp; b Social Event, 11:30AM-11:30PM</td>
<td>Q5: Why do we need quantitative methods? Lecture</td>
<td>T55 part one Student</td>
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<tr>
<td>12:00PM</td>
<td>Module: Environmental Technology Msc Group: LF Env Tech Core Course (MSc) Staff: Rost, Bill, Mike Room: SHER 571 - Read Lecture Theatre</td>
<td>T56: Introduction to ICT, 10:30am Graduates School Welcome Lecture</td>
<td>Policy Seminar Series Lecture</td>
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<tr>
<td>01:00PM</td>
<td>First meeting with Personal Tutor - CEP rooms</td>
<td>TS3: Introduction to ICT, 10:30am Graduates School Welcome Lecture</td>
<td>T55 part one Student</td>
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<tr>
<td>02:00PM</td>
<td>Module: Environmental Technology Msc Group: LF Env Tech Core Course (MSc) Staff: Rost, Bill, Mike Room: SHER 571 - Read Lecture Theatre</td>
<td>Optional Sports Activities</td>
<td>T55 part one Student</td>
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<tr>
<td>03:00PM</td>
<td>Personal Tutor meetings - - CEP rooms Induction</td>
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<td>T55 part one Student</td>
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<td>04:00PM</td>
<td>Module: Environmental Technology Msc Group: LF Env Tech Core Course (MSc) Staff: Rost, Bill, Mike Room: SHER 571 - Read Lecture Theatre</td>
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<td>T55 part one Student</td>
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<td>05:00PM</td>
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<td>T55 part one Student</td>
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# Module timetable - Environmental Technology Msc (Wk 2, wk starting 08/10/2018)

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<tr>
<td>09:00AM</td>
<td>EPAM1: Governing Sustainability Lecture</td>
<td>CS POP P (OSPO): Practical Foundation</td>
<td>EPAM2: Environmental Policy &amp; Management: Environmental Governance in Practice</td>
<td>Library Workshop: Getting to the Good Stuff - Group 1 Induction</td>
<td>EL1: Introduction to Environmental Law - Structure, Sources and Instruments</td>
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<td>10:00AM</td>
<td>T07: Using Library Resources for Research</td>
<td>T04: Relaxation and Resilience (RA1)</td>
<td>T05: Student Reporting - Group 1</td>
<td>T05 part 2: Student</td>
<td>T05: Introduction</td>
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<td>11:00AM</td>
<td>EC1: Ecological Theory – Individuals and Population</td>
<td>EC4: Ecological theory – what is a community and how might we measure /</td>
<td>T01: Lecture</td>
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<td>09:00 AM</td>
<td>Small Group Seminars (CEP Rooms)</td>
<td>Library Workshop: All About Referencing - Group 1</td>
<td>Small Group Seminars (CEP Rooms)</td>
<td>Small Group Seminars (CEP Rooms)</td>
<td>Small Group Seminars (CEP Rooms)</td>
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<tr>
<td></td>
<td>Seminar: 09:00AM-10:30AM</td>
<td>Lecture: Induction, 10:00AM-11:30AM</td>
<td>Seminar: 09:00AM-10:30AM</td>
<td>Seminar: 09:00AM-10:30AM</td>
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<tr>
<td>10:00 AM</td>
<td>EP&amp;M3: The Science-Policy Interface (A)</td>
<td>EP&amp;M4: The Science-Policy Interface (B)</td>
<td>EL4: Remedies Part II - Enforcement of Environmental Law in the UK and EU</td>
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<td>Lecture: Module: Environmental Technology MSc</td>
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<td>Staff: Malik, Zin A</td>
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<td>Room: RSM8-320</td>
<td>Room: CAOB 500</td>
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<td>11:00 AM</td>
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<td>Small Group Seminars (CEP Rooms)</td>
<td>Library Workshop: All About Referencing - Group 2</td>
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<td>Seminar: 09:00AM-10:30AM</td>
<td>Lecture: Induction, 10:00AM-11:30AM</td>
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<td>Staff: Suri, Natasha, Thompson, Katherine E</td>
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<td>02:00 PM</td>
<td>EP&amp;M3: The Science-Policy Interface (A)</td>
<td>EP&amp;M4: The Science-Policy Interface (B)</td>
<td>EL4: Remedies Part II - Enforcement of Environmental Law in the UK and EU</td>
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Module timetable - Environmental Technology MSc (Wk 4, wk starting 22/10/2018)

Policy Seminar Series
Seminar
Module: Environmental Technology MSc
Group: LF Env Tech Core Course (MSc)
Staff: Murph, Shane
Room: RSM8-320
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<td>09:00AM</td>
<td>Small Group Seminars (CEP Rooms) Seminar</td>
<td>EPAMS: Tools for spatial planning and sustainability</td>
<td>ELS: International Law and the Environment Lecture</td>
<td>Environmental Technology MSc Group LF Env Tech Core Course (MSc) Lecture</td>
<td>Small Group Seminars (CEP Rooms) Seminar</td>
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<td>10:00AM</td>
<td>Small Group Seminars (CEP Rooms) Lecture</td>
<td>Small Group Seminars (CEP Rooms) Lecture</td>
<td>OSP T Tests and Mann-Whitney Practical Group 2 Computer Session</td>
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<td>Small Group Seminars (CEP Rooms) Lecture</td>
<td>Small Group Seminars (CEP Rooms) Lecture</td>
<td>OSS: Policy Instruments Lecture</td>
<td>Environmental Technology MSc Group LF Env Tech Core Course (MSc) Lecture</td>
<td>Library Workshop: All About Referencing - Group 4</td>
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<td>12:00PM</td>
<td>Small Group Seminars (CEP Rooms) Lecture</td>
<td>Small Group Seminars (CEP Rooms) Lecture</td>
<td>EGS: Risk 2 - Management Decisions Lecture</td>
<td>Environmental Technology MSc Group LF Env Tech Core Course (MSc) Lecture</td>
<td>Library Workshop: All About Referencing - Group 4</td>
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<td>01:00PM</td>
<td>Small Group Seminars (CEP Rooms) Lecture</td>
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<td>EGS: Risk 1 - Uncertainty in Problem Bohinj</td>
<td>Environmental Technology MSc Group LF Env Tech Core Course (MSc) Lecture</td>
<td>Library Workshop: All About Referencing - Group 4</td>
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<td>Q30 Chi Squared tests and count data Lecture</td>
<td>EPAMU: Policy Case Study – Energy Policy Lecture</td>
<td>Q3SP Chi Squared tests and count data Practical Group 1 Computer Session: 09:15AM-10:15AM</td>
<td>Option Module Discussions Lecture</td>
<td>EES: Cost-benefit analysis Lecture</td>
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<td>TDI5: Resilience and Resilience (R&amp;R3) Lecture</td>
<td>Module: Environmental Technology MSc Group: LF Env Tech Core Course (MSC)</td>
<td>Q3SP Chi Squared tests and count data Practical Group 2 Computer Session: 10:30AM-12:30PM</td>
<td>Optional Sports Activities</td>
<td>Module: Environmental Technology MSc Group: LF Env Tech Core Course (MSC)</td>
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<td>09:00</td>
<td>Q57: Regression and correlation - simplifying your model Lecture</td>
<td>Q57 Regression and Correlation Practical Session Group 1</td>
<td>EEM: Macroeconomics Lecture</td>
<td>EP5609: Waste and Resources Management Lecture</td>
<td>EP5610: Air Pollution and Control Lecture</td>
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<td>09:00AM</td>
<td>Low Exam - the Quakers Tower Room (QTR) Presentation</td>
<td>G28: ANOVA and Kruskall-Wallis Lecture</td>
<td>G28 ANOVA and Kruskall-Wallis Practical Session Group 1 Computer Session, 10:00AM-11:30AM</td>
<td>EP5:013: Pollution and Human Health Lecture</td>
<td>EE1 Lecture</td>
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**Module timetable - Environmental Technology Msc (Wk 10, wk starting 03/12/2018)**

**Tuesday**
- BRAG 17: Conclusion - The Way Forward
- Lecture
- Module: Environmental Technology Msc
- Group: LF Em Tech Core Course (MSc)
- Staff: Yassenou, MSc
- Room: SAFB 016 - Lecture Theatre - Level 1

**Optional Sports Activities**
For information only
- Module: Environmental Technology Msc
- Group: LF Em Tech Core Course (MSc)

**Thursday**
- Policy Seminar Series
- Seminar
- Module: Environmental Technology Msc
- Group: (R)
- Staff: Murphy, Shane
- Room: IMS 020

**Note:** Hours marked in green indicate lectures, hours marked in pink indicate seminars, and hours marked in yellow indicate optional sports activities.
## Module timetable - Environmental Technology Msc (Wk 11, wk starting 10/12/2018)

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**Optional Sports Activities**
For information only.
Module: Environmental Technology Msc
Group: LF Env Tech Core Course (MSc)
Staff -
Module Summaries

Transferable Skills (TS)
Coordinator: Dr Bill Sheate

Aim
This module draws together a range of key transferable skills to support your learning during the Core Course and the MSc as a whole, and that will be of lasting value into your future careers, including: learning styles; bibliographic searching; time management; team working; critical thinking and analysis; relaxation and resilience, and even electoral methodologies.

(TS1) Introduction to the Core Course, Blackboard and Careers
Dr Bill Sheate

(TS2) Introduction to Careers and Alumni
Dr Bill Sheate (Core Course Director and Director of Careers)
Jason Yarrow (Careers Service)

(TS3) Introduction to ICT
ICT

(TS4) Introduction to Health & Safety
Stefan Hoyle

(TS5) Student Hustings and Elections
Dr Bill Sheate

(TS6) Critical Thinking
Dr Mike Tennant

(TS7) Using Library resources for your research
Katharine Thompson, Chemistry and Environment Librarian

(TS8) Team working/Working in groups
Dr Mike Tennant/Dr Bill Sheate

(TS9) Time management
Self-directed/Blackboard resources (not timetabled)

(TS10) What’s it all about?
Dr Bill Sheate

(TS11) How to Approach Exams
Dr Bill Sheate

(TS12) Required Reading
Self-directed (not timetabled)

(TS13-15) Relaxation and Resilience (R&R) Programme (Part 1)
Dr Bill Sheate

(TS1) Introduction to the Core Course
Dr Bill Sheate (Core Course Director and Director of Careers)
Philosophy and approach to teaching and learning at Masters level – how to get the most out of the Core Course (including the social aspects of the Policy Seminars); the aims and objectives of the Core Course. Structure and purpose of the Core Course modules: Ecology in Context, Environmental Pollution and Control, Environmental Policy and Management, Environmental Law, Environmental Economics, Quantitative Skills and Uncertainty (aka QS Module), Transferable Skills, Policy Seminars, Small Group Seminars, Tutorials, Assessment and Examinations. The session also includes an Introduction to Blackboard (Virtual Learning Environment), where all electronic teaching materials, e.g. PowerPoint slides, written lecture material, can be found and assignments submitted.

See https://bb.imperial.ac.uk/ (for Blackboard) and https://workspace.imperial.ac.uk/college/public/pdfs/ISGMasters.pdf for Imperial College Study Guide for Master’s Students.

(TS2) Introduction to Careers and Alumni

Dr Bill Sheate (Core Course Director and Director of Careers)
Jason Yarrow (Careers Service)

This session introduces the support available through the Careers Service and the department in relation to Careers, including one to one clinic sessions on CVs and internships, individual careers advice, careers seminars and events. It also includes an introduction to probably the greatest resources of the MSc, its past students – the alumni, including a regular email list server of jobs and opportunities, as well as an Alumni mentoring scheme where current students can be matched to alumni.

(TS3) Introduction to ICT

ICT staff

All you need to know about access computing and online resources inside and outside College.

(TS4) Introduction to Health & Safety

(Stephan Hoyle and others)

It is compulsory for all students to attend this session – a register of attendance will be taken.

(TS5) Student Hustings and Elections

Dr Bill Sheate

Student representatives for the year will be elected through a system of proportional representation (single transferable vote system). The first session provides an
opportunity for anyone wishing to stand for election to speak to the other students and ‘sell’ themselves (‘hustings’)! Just to say why you would like to be a student rep and why others should vote for you. The second session will be the election proper conducted according to the single transferable vote (STV) system. This provides education and entertainment in equal measure as candidates are elected and/or knocked out of the voting rounds until the required number of representatives is elected (normally three). Volunteers are also sought to act as ICT/computing representatives to liaise with ICT services in College.

(TS6) Critical Thinking

Dr Mike Tennant

What is critical thinking?

When we are faced with claims about particular things, for example the use of nuclear energy, genetically-modified crops or the causes of poverty, it is important to scrutinise those claims and decide upon their validity rather than take them at face value and potentially make a mistake in basing future thoughts and actions on what could be erroneous knowledge. At its most basic level critical thinking requires that we question every stage of a knowledge claim, including the formulation of the question (“am I asking the right questions?”), the methods and evidence used (“is this a good way to investigate the question?”) and the conclusions that are developed (“do these conclusions reflect the evidence truthfully?”). Critical thinking not only concerns evidence, but also challenges bias and ideology, for example the contemporary move to commodify nature can be seen to benefit those with financial power rather than nature itself; our own particular upbringing can lead us to think in particular ways about things. We can ask questions that try to tease these biases out: who does this position benefit? if I were to believe what others believe, would I see things in a different way?

Finally, critical thinking involves evaluation of alternatives and the development of a course of action. While this may be straightforward if there is an over-whelming weight of evidence in favour of a particular thing; it may not to be when political or ethical questions are considered. Creativity, imagination and inclusive decision-making are important tools that need to be employed at this stage.
(TS7) Using Library resources for your research

Katharine Thompson, Chemistry and Environment Librarian

You will be given specific CEP training sessions and introduced to our specialist staff; Katharine Thompson (Environment Librarian) and Natasha Suri (Senior Library Assistant). Please ask them for advice when looking for information. Contact details for library staff can be found at http://www.imperial.ac.uk/admin-services/library/subject-support/environment/

The training sessions will include:

• recommended resources
• search tips and tricks
• better reading and note taking
• tools to save you time
• how to reference using Harvard
• avoiding the plagiarism trap!
• referencing made easy with RefWorks

(TS8) Team working / working in groups

Dr Mike Tennant / Dr Bill Sheate

Working in a team doesn't come naturally to everybody - some people are introverted or lack confidence and prefer to work alone, some people can be over-confident and bossy, and some people don't pull their weight, making team work less enjoyable for everybody. This session is a fun way to help you understand your own strengths and weaknesses for team working and how to deal with those of others.

(TS9) Time management

Self-directed/Blackboard resources (not timetabled)

Managing your time at university is a very important skill and one that many students struggle with. As a university student, lots of your learning will be through independent studying and this will require you to manage your own study time effectively. A set of resources are provided online (on Blackboard) to help you in organising and managing your time, including practical techniques to help you practise better time management and make the most of timetabled and non-timetabled activity.
(TS10) What's it all about?

*Dr Bill Sheate*

An interactive discussion session to set the Core Course in context. Where has the Core Course got to so far? Identifying links and synergies across the modules, integrating disciplines and subjects. What do we mean by interdisciplinarity? Generic issues to do with the Core Course, its structure and delivery. Developing your own approach to learning. Prioritising and allocating your time effectively.

(TS11) How to Approach Exams

*Dr Bill Sheate*

The Core Course is intensive and challenging because of the nature and breadth of the topics covered, but it should, *above all else*, be an enjoyable learning experience for you. Developing your own techniques and approaches to studying and learning, and appreciating the value of integrating material in the core course across the modules, is essential to get the most out of the course and to make dealing with the exams much more straightforward. While the modules are presented as distinct it will soon become apparent that there are many linkages across the modules, and the more connections you make yourself the better: you will discover interdisciplinarity through the Core Course.

Exams and assessments are used at Masters' level to help make learning possible through problem solving and making you think, rather than simply as a test of how much you know – they can even be fun! You therefore need to approach such assessments differently and, particularly in exams, focus on applying your knowledge and understanding to the question posed, sometimes in novel situations you will not previously have considered. If you enjoy your learning (the process) the outcomes (exam results) will look after themselves. Contrary to what you may imagine, actual exam results and MSc final grades are *far less* important to employers than the fact that you have done the MSc Environmental Technology alongside all the other personal attributes you are likely to bring.

This session is particularly to assist those who have not taken exams in the UK before, or those returning to study after a period of time, although all will benefit from it. The aims are to provide practical advice on how to approach the exams and enjoy the process; to familiarise students with the style of answer expected for essay questions; and to provide guidance on how to read and interpret questions and instructions and understand the boundaries contained within typical exam questions. This will be facilitated through the analysis and discussion of past Core Course examination papers. Feedback will also be provided on the Mock exam question(s) for those who choose to do one.
References:


Learning, assessment and exams – a mindful approach
http://www.imaginationtherapy.co.uk/blog/2016/10/25/learning-assessment-and-exams-a-mindful-approach

Imperial College Master’s Study Guide:
https://workspace.imperial.ac.uk/college/public/pdfs/ISGMasters.pdf

(TS12) Required Reading (not timetabled)

Classic core texts

Three key books that were critical agenda setters of their day set out the historical context to the environmental and sustainability challenges we are faced with now. The Core Course will enable you to update and critique these seminal works to provide you with a thorough understanding of the causes of environmental problems and the scope for potential solutions. You are expected to have read these three classic texts (copies in the library or available online or to purchase) by the end of the Core Course because they will provide you with a solid foundation of understanding of the key issues (they are also potentially examinable as part of the integrating questions in the Core Course exams):

1. Rachel Carson (1962), *‘Silent Spring’*, Houghton, Mifflin, USA


Please note that, other than the three ‘required’ classic texts above, there are NO ‘must have’ books for the Core Course, since so much depends on an individual student’s background. Decisions on which books, if any, to purchase are best left until you have had a chance to look at them. Recommended reference texts (provided in the modules below) will be available in the library and/or as e-books or online.
TS 13-15 Relaxation and Resilience Programme (Part 1)

*Bill Sheate*

CEP, uniquely at Imperial College, provides as an integral part of the MSc course this innovative programme of mindfulness, relaxation, stress management and resilience skills training which runs throughout the academic year. It has been running now for several years and is very popular with the students (see feedback comments below).

**Part 1** consists of the first three sessions delivered during the Core Course (TS13-15/R&R1-3) – see figure below; these are seen as core skills training for all students. Sessions in the Option and Summer terms (Parts 2 and 3: R&R4-6), are highly recommended, providing a progression of personal and social skills to include assertiveness and problem solving, helpful especially when working in option groups and in career planning.

Feedback from students:

".....the R&R sessions were an incredible addition to the course."

"Relaxation and Resilience sessions [were] particularly helpful....."

"Super cool idea to do this and the students as a whole really enjoyed it!"

"R+R really helpful, not just for this term but for life!"

"I love the emphasis on mental health and management of stress. Thank you so much for including this in the MSc. I think it is a really enlightened approach."
Learning outcomes:

At the end of the programme students will be able to:

- Use and apply key relaxation and mindfulness skills and so be more resilient to potentially stressful events, situations
- Be more aware of their own thoughts, feelings and behaviours, and able to be a detached observer of them when necessary
- Be more confident in themselves and assertive when they need to be
- Be better able to problem solve when faced with personal and professional situations they haven’t previously faced

This is a programme of sessions designed to introduce some simple self-help relaxation and stress management techniques and develop skills that you can benefit from directly in the session and then take away and repeat and tailor to your own needs in your own time (via audio recordings that will be provided via Blackboard). The programme is run by Bill Sheate who has many years’ experience helping students suffering from stress and anxiety, and is delivered for CEP in his capacity as a qualified, registered cognitive behavioural hypnotherapist working in private practice (part-time)\(^1\), specialising in stress and anxiety in higher education. These sessions draw on mindfulness and relaxation practices, and core aspects of cognitive behavioural therapy. In addition, an optional half-day Self-Hypnosis Workshop is available for those who wish to explore this further (offered in the Spring Term). The three main sessions in the Core Course run in Week 2, Week 4, and Week 7.

Many of us from time to time will feel anxious and worry about all sorts of things – personal matters, exams, finances, coping with work, did I make the right decision doing the MSc? We also experience stress exerted by work, by ourselves (in terms of our own expectations and the goals we set ourselves) or by the expectations (real or perceived) of others. We may feel we can’t cope with things as well as we expect ourselves to be able to. Maybe we strive for perfection even though we know it isn’t really achievable. Consequently we often have lots of ‘self-talk’ – negative pop-up thoughts and stories we tell ourselves; worries that become self-reinforcing. Sometimes it can help to take time out and create a bit of space to do some focused relaxation or mindfulness (being in the present moment, accepting thoughts and feelings). By running these sessions as part of transferable skills, they are provided for everyone; they are seen as an important part of the MSc course as a whole because everyone can benefit from them.

You don’t need paper or laptops, tablets or phones – nothing but yourselves and a readiness to close your eyes and open your imagination. And the more you practice the better you will get at relaxing when you want to – it can work really well when commuting on trains/tube!

**Note: The sessions will begin promptly at 5 minutes past the scheduled time – if you are late you may NOT be admitted as this will disrupt the purpose of the sessions!**

The programme consists of 10 hours in total, spread over the three terms:

\(^1\) Dip CBH, GQHP, GHR Reg, CNHC Reg, Dip SMRB – [www.imaginationtherapy.co.uk](http://www.imaginationtherapy.co.uk) for more information.
1. Introduction to Mindfulness and Relaxation (2 hrs)

2. Mindfulness – cognitive awareness, defusion and distancing (1.5 hrs)

3. Applied Relaxation and confidence building (1.5 hrs)

4. Assertiveness skills training (1.5 hrs)

5. Problem solving skills training (1.5 hrs)

6. Acceptance and Commitment (personal values and life-long resilience) (2 hrs)

Part 1 – Core Course (Autumn Term)

R&R 1 (TS13): Introduction to Relaxation and Resilience (2 hours) (as this is skills training it is very much about building long-term resilience, i.e. more than just managing stress). Includes: a very brief introduction to the simple cognitive model (Ellis, 1967 ABC model) – the basis of cognitive behavioural therapy, and for understanding the relationship between thoughts, feelings and behaviour. This provides the basis for understanding how mindfulness and relaxation can be used to change the way we respond to events and stressors. It includes a simple mindfulness exercise, an exercise in imagination, and an exercise in relaxation.

R&R 2 (TS14): Mindfulness – cognitive awareness, acceptance, defusion and distancing (1.5 hours). A series of simple mindfulness-based exercises, followed by a longer mindfulness exercise.

R&R 3 (TS15): Relaxation and confidence building (1.5 hours). Applied relaxation (belly breathing, tension releases breathing), understanding stress, and a relaxation and confidence building exercise, with a focus on exams/assessments.

Part 2: Option term (early evening, tbc)

R&R 4: Assertiveness skills training (1.5 hours). A mindfulness exercise to start. Individual assertiveness rights; assessing individual assertiveness and work on assertiveness skills.

R&R 5: Problem solving skills training (1.5 hours). A short mindfulness exercise to start. Assessing individual problem solving skills (questionnaire); developing core problem solving skills for personal and professional circumstances.

Note: An optional half-day Self-Hypnosis Workshop (run by Bill Sheate) will be offered by the Department in the Spring Term for those MSc students interested in exploring relaxation and confidence building approaches further.
Part 3: Summer term (during project research methods fortnight)

R&R 6: Acceptance and Commitment - personal values and life-long resilience (2 ours). Bringing together a number of the skills developed through a series of mindfulness/relaxation exercises with a focus on building confidence and skills for the future (including careers etc). This session draws on Acceptance and Commitment Therapy (ACT) in providing a broader framework within which to set the mindfulness and relaxation skills already developed. Personal values and perspectives.
Ecology in context (EC Module)
Coordinators: Prof Mark Burgman & Dr Tilly Collins

Aims:

Natural Systems are key providers, supporters and regulators of the human population and the planet as a whole. Ecology, the study of interactions between components and with their environments, provides a theoretical and mechanistic framework for understanding the temporal and spatial dynamics of species. Working with and managing both natural and semi-natural environments requires a solid understanding of these, their interacting components.

This module aims to provide grounding in the key vocabulary and concepts of biodiversity and ecological theory. It will refer to the dynamics of ecosystems at several interacting scales, and to some of the applications of ecology in several different scientific disciplines and draw upon case studies and illustrate situations where ecological theory has been applied successfully.

Learning outcomes:

- To familiarise with an accurate ecological vocabulary
- To deliver an understanding of key theory, application and complexity of outcome across a range of scenarios.
- To deliver an understanding of the range of applications and importance of ecological understanding.
- To provide the underpinning material that relates populations and communities to environmental outcomes and future scenarios

Lecture outlines:

n.b. the order of lectures can vary.

**Underpinning Ecology**

**EC1: Ecosystems and an outline of Climate change**

The definitions of ecosystems. An outline of productivity and biomass relationships with consideration to which factors may limit productivity. A brief introduction to climate change and uncertainty.

**EC2: Human Demography**

An introduction to the historical rise in world population and projections for the future. What are the problems associated with changing population size and age structure within Europe and across the developing world. The implications of planned and unplanned changes are examined in some detail

**EC3: Ecological theory – Individuals and populations**

An introduction to the principal ecological interactions that govern the dispersion and numbers of individuals within populations with links to
the mathematical models that have helped us to understand their importance and mode of action.

**EC4: Ecological theory – what is a community and how might we measure / assess it?**
How do we define ecological communities and how might we compare their attributes and functions? What are the useful descriptors and how do we resist becoming WIWACs?

**EC5: Fisheries – a model ecological system**
A more detailed look at use of ecological models in fisheries systems and a consideration of the condition of world fisheries, both capture and captive with a look at the contrasting ecological challenges that these present.

**EC6: Management of Fisheries**
Given our understanding of ecology and the level of information available to us, what are the management methods that might enable the transformation to a sustainable industry?

**EC7: Ecosystem Services and The MEA**
This session introduces the concept of ecosystem services and their framing within the Millennium Ecosystem Assessment. It explores how the framing of the relationship between nature and people has evolved over the last twenty years culminating with the Intergovernmental Panel on Biodiversity and Ecosystem Services, and looking forward to the Convention on Biological Diversity 2050 Vision for Biodiversity. It explores the contribution that these global frameworks/programmes have had on both biodiversity and human wellbeing.

**EC8: Agriculture – The production of food and fibre**
The challenges of producing the right food in the right place at the right time. How do the farming systems compare in their ecology and in their efficiency. What are soil characteristics and how do we manage soil quality. Can we meet the need for water and manage water quality. What is integrated pest management and how does this sit with technological improvements and impacts on natural systems.

**EC9: Urbanisation and Ecology**
The world’s urban population is increasing. Over 50% of the global population live in urban areas; in developed countries like the UK this is over 80%. Green spaces and access to natural areas are important in cities both for humans and other species. This lecture outlines their benefits and management challenges.
Suggested reading

*Ecology: From Individuals to Ecosystems*, 4th Edition
Michael Begon (University of Liverpool), Colin R. Townsend (University of Otago), John L. Harper (University of Exeter)

This is a good introductory text that covers much core ecology and will provide a sound basis to work from. The library has many copies and you don’t need to read it all but dipping into each chapter will give a good indication of the scope of the subject.

Other Publications
The following provide an up to date assessment of the state of the environment and cover a multitude of subjects. Within each of them there is material relevant to ecology either relating to the impacts of climate change on ecosystems or the impacts of man’s endeavours to produce food and timber on the land and seas.

The full *Millennium Ecosystem Assessment* along with several synthesis reports which may be more digestable are available from: [http://www.unep.org/maweb/en/index.aspx](http://www.unep.org/maweb/en/index.aspx)


Publications from *Food and Agriculture Organisation* of the United Nations
*The State of Food and Agriculture*
*The State of the World’s Forests*
*The State of World Fisheries and Agriculture*

Demography

Also the following websites:
[http://www.who.int/choice/demography/](http://www.who.int/choice/demography/) UN World Health Organisation
[http://www.census.gov/](http://www.census.gov/) see international section of US Census Bureau website

Teaching staff
A variety of different lecturers contribute to this module

**Mark A. Burgman**
Current Director of the CEP and Editor-in-Chief of the journal Conservation Biology, Mark works on expert judgement, ecological modelling, conservation biology and risk assessment. He has written models for biosecurity, medicine regulation, marine fisheries, forestry, irrigation, electrical power utilities, mining, and national park planning. He worked as a consultant ecologist and research scientist in Australia, the United States and Switzerland during the 1980’s before joining the University of Melbourne in 1990. He joined CEP in February, 2017.
Alexandra Collins
Alex is a Lecturer in the CEP and a Policy Fellow at the UK Department for Environment, Food and Rural Affairs (Defra), she is developing evidence review methodologies and guidance for Defra and its associate agencies. She also works with Defra’s Joint Water Evidence Group to assist with the completion of reviews of evidence inform policy and practice decision making in the areas of water and land management. Her responsibilities also include the promotion of knowledge exchange between scientific researchers and policy makers. In addition to her work as a Policy Fellow, Alex co-convenes the ERM option and undertakes research within the Environmental Quality Research Group at the CEP. Her research is focused on the integrated management of water resources, the identification and management of multiple stressors on aquatic ecosystems and the use of monitoring data in environmental management.

Tilly Collins
An applied ecological entomologist by training, Tilly is a Senior Fellow in the CEP. In the research role she has several strands of interest. One is Urban Ecology with a particular interest in the use, integration and qualities of green spaces. Another is loosely termed ‘missing bricks’ and identifies specific key components of education that could deliver substantial gains in aspects of sustainability. And a third is in the growth of sustainable insect protein. Tilly also contributes regularly to the wider media on ecological and entomological topics and has appeared on (amongst others) Radio 4’s TODAY show, Blue Peter, Nature’s videos and several 'Insect Eating' documentaries.

Caroline Howe
Caroline Howe is a Lecturer in Ecosystem Science at Imperial College, and was previously a Fellow at the Sheffield Institute for International Development. Her work focuses on the interaction and conflicts between people and nature, focusing particularly the value of ecosystem services and their contribution to human well-being. She was a member of Directorate for the Ecosystem Services for Poverty Alleviation Programme (ESPA) from 2012-2013 and is a contributing author to the programme’s final summary book (to be published mid 2018), as well as a contributing author on ecosystem services trade-offs for the Intergovernmental Panel on Biodiversity and Ecosystem Services (IPBES) Global Assessment.
John Mumford
Formerly the Director of the CEP, John Mumford is an agricultural entomologist and agricultural economist with broad interests in sustainable agricultural development in the tropics. He was trained at Purdue University, USA and at Imperial College (as a PhD student). He has designed, managed and evaluated major research and implementation projects in pest management in Asia, Africa and Latin America. He has also contributed to the debate on pesticide and pest management policies in Europe and in the developing world and is a key member of several DEFRA committees including that recently convened to address plant health. He has a specific interest in risk as applied to natural resources ranging from fisheries to plant and animal biosecurity.
Quantitative Skills and Uncertainty (aka QS Module)

Coordinators: Dr Tilly Collins and Prof John Mumford

Aims:
- To ensure that students have a basic understanding of the operation of a spreadsheet package and of how to apply this in different contexts
- To illustrate some important uses of quantitative methods in environmental and ecological studies
- To ensure that students are able to select, apply and interpret simple statistical tests
- To alert students to common misunderstandings, misapplications and misinterpretations of statistics
- To provide an introduction to the concepts of uncertainty in parameter estimation and outcome probability distributions
- To provide a conceptual and practical understanding of risk analysis (concern, assessment, management and communication)
- To understand the importance of risk analysis in environmental decision making

Learning outcomes:
After this module, students should be able to:
- Understand that there are different methodological approaches to research and recognise that appropriate methods are necessary for progress
- Identify, interpret and view critically the most important uses of statistics in their fields
- Understand and know how to apply simple statistical concepts fundamental to sampling design and statistical inference
- Understand how to evaluate uncertainty and how to weight this in decision making
- Recognise that more than one method can be used as part of a research project in environmental technology

Assessment:
Assessment of this module comes in two forms. Firstly, there will be an online assessment in blackboard towards the end of term that will cover the lecture and practical material. Secondly, material from these sessions will be expected to inform your answers in the general integrating question section of the December examinations

Key learning tips for this module:
What should students aim to be able to do with statistics as an MSc in ET?

- be basically statistically literate – know the basic concepts well
- have some basic technical proficiency in dealing with data
- know well the steps of hypothesis testing and how to avoid common errors
- know how to do a one-sample t-test and simple linear regression analysis well
- critically analyse the validity of scientific arguments

How can students achieve this?

- understanding well course notes and lecture material
- reading relevant textbooks and related literature
- doing exercises on statistical problems and data analysis
- learning to use Excel and statistics software (e.g., SPSS or R) to do statistics
- asking PhD demonstrators and tutorial leaders to explain when students are unsure
- actively testing understanding of concepts

**Lecture sequence**

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<td>Using Excel with confidence: top tips and practical skills</td>
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<td>Making Simple Population Models in Excel (linked to lectures in EC module)</td>
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<td>A gallop through some fundamentals: Data Types and Distributions, what is a model? Concepts of parametric and non-parametric stats, introduction to prior inference and Bayesian theory. Presenting findings and phrasing your results</td>
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<th>Key statistical tests</th>
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Lecture Chi Squared tests and count data. Contingencies, what is your 'null model'? And how to proceed without a parameter?

Practical Chi Square Practical

Lecture ANOVA, Regression and Correlation - tools you might need

Practical ANOVA & Regression Practical

Lecture Power and Inference by eye

Practical Power and Inference Practical

Teaching staff

**Mark A. Burgman**
Current Director of the CEP and Editor-in-Chief of the journal Conservation Biology, Mark works on expert judgement, ecological modelling, conservation biology and risk assessment (see EC module for more detail).

**Tilly Collins**
An applied ecological entomologist by training, Tilly is a Senior Fellow in the CEP (see EC module for more detail). Tilly likes doing statistical analyses, especially in R.

**John Mumford**
Formerly the Director of the CEP, John Mumford is an agricultural entomologist and agricultural economist with broad interests in sustainable agricultural development in the tropics (see EC module for more detail).

**Demonstrating Team Lead: Andrea Calderon-Irazoque**
Andrea is a PhD student in the CEP. Her research is at the intersection of climate change and air quality studies. She aims to evaluate air-quality and health co-benefits of carbon mitigation strategies for the transport sector in cities. This will help to bridge scientific research and policy-making. Her research is funded by the Ministry of Energy of Mexico. Andrea holds an MA in Climate Sciences from Columbia University and a BS in Physics from the National Autonomous University of Mexico. Before starting her PhD studies, Andrea worked for the Mexican government, assessing the country’s climate change mitigation targets.

The other demonstrators for these practical sessions are PhD students from within the department. They have a varied range of experience and are an excellent resource to get to know.

**Environmental Policy and Management (EP&M)**
Coordinators: Dr Bill Sheate and Professor Clive Potter

**Aims:**

- To provide an introduction to environmental governance and the ideas, policy processes and institutional structures surrounding it;
- To review the role of environmental planning and key assessment and management tools in environmental policy implementation.

**Learning Objectives:**

At the end of the module students will have:

- An understanding of what environmental governance is and why governments and the policies, instruments and agreements they put in place remain critically important in the future management of the environment;
- An historically derived understanding of institutional change in contemporary environmental policy and management processes;
- A critical understanding of the science-policy relationships and the nature of risk and uncertainty in decision making;
- A sound empirical grasp of key assessment and evaluation tools, their role in integrating the environment into decision-making and in promoting sustainable development.
- An appreciation of the role of stakeholder and public participation in policy and environmental management.

This module is designed to provide an overview of some of the key conceptual and practical issues concerning environmental governance, environmental planning and management in the world today. We begin with a discussion of what environmental governance is and how it has developed as a policy project in industrialized countries over the last 5 decades. We look at some of the key informing ideas and debates behind environmental policy and the management of common property resources and reflect on some of the still unresolved tensions between consumption, economic growth and environmental protection and conservation. Opening lectures will compare the relative merits of states, markets and communities in resolving these tensions. We go on to explore the critical interface between science and policy, aiming to provide students with an interdisciplinary set of lenses through which to evaluate environmental management and mismanagement. The module then focuses on decision making procedures and techniques for effective environmental policy and management, covering ex ante assessment: Environmental Impact Assessment and Strategic Environmental Impact Assessment, and policy evaluation, with a strong emphasis on lessons from case examples. UK Energy policy is examined as a specific case study of policy making in practice while the UN Sustainable Development Goals are the focus for a broader consideration of governance for sustainability. The module concludes with a session exploring the nature and challenges of environmental policy-oriented research for government/agencies through a number of topical case studies.

Environmental Policy and Management will be delivered chiefly through lecture presentations, but with a strong case study focus and interactive sessions. Students
are strongly encouraged to contribute to class discussion through questions and comment. Lectures will be underpinned by directed learning using electronic journals, electronic databases, and other readily available literature sources. The lectures provide an introduction to the topic and opportunity for discussion; students will be expected to follow up core material, read around the subject and develop their own thinking and critiques.

1. EP&M I – Governing Sustainability: Key concepts and influential discourses

Clive Potter

In this first lecture session, students will be introduced to the concept of environmental governance and the challenges facing governments in managing the long and difficult transition to sustainable development. The session begins with a discussion of what environmental governance is and why the state remains an important player in attempts to promote sustainability, both domestically and internationally. We will then look specifically at the relative contribution made by state action, market processes and community engagement in addressing environmental conflicts and common property management issues, identifying the way these different types of intervention have developed, advocated and applied in recent years.

Suggested reading:


[A core text which offers a very good overview of the processes and outcomes of contemporary environmental governance];


[wide-ranging text which reviews some of the key ideas and discourses behind environmentalism and presents a critical analysis of sustainable development as a policy idea]

2. EP&M II - Environmental governance in practice: the policy process and the growing importance of risk management

Clive Potter

Taking up themes identified in the opening lecture, this session goes on to look specifically at how the management of various types of environmental risk is approached by policymakers and those who advise or seek to influence them. The relationship between societal and reputational risk is outlined and we discuss a series of case studies to show how the tension between these two concepts is increasingly important in determining environmental outcomes. I conclude these opening lectures conclude by widening the focus to explore some of the broader discourses, ideas and assumptions which currently frame the way we think about, and attempt to resolve, conflicts between sustainability and economic growth. We will end by debating the critical question of ‘how much is enough?’ in consumption terms and the extent to which individual action can ever substitute for state intervention and structural reform.

Suggested reading:

3. EP&M III - The Science-Policy Interface (A)

Bill Sheate

In an era of so-called evidence-based policy making, this session looks at the nature of the science-policy interface. Employing an interactive case study (students will be provided with some opposing position statements that they need to read in advance) on bovine tuberculosis in cattle and badgers we will explore the challenge of working at the interface between science (scientific evidence) and policy making. How does policy making work when science is contested, for example, or under conditions of uncertainty? The session will explore our understandings of knowledge (e.g. ‘expert’, ‘lay’ etc.), what constitutes evidence and how this is used in policy making – theoretically in terms of the so-called ‘policy cycle’ and so-called ‘evidence-based policy making’, and what happens in practice (which tends to be much messier). The value of an interdisciplinary approach to environmental policy making will be highlighted.

Pre-session reading:

See Blackboard for documents on bovine tuberculosis and badgers – please familiarise yourself with key issues from different perspectives, e.g. farmers, wildlife NGOs etc


4. EP&M IV – The Science-Policy Interface (B)

Bill Sheate

This second session on Science-Policy looks at how long-term futures thinking – increasingly important for environmental and sustainability policy making – can be embedded in policy making through institutional and governance arrangements. The session focuses on understanding what futures-thinking is and how it can influence policy-making. It will include an interactive plausibility assessment of a set of long term transport scenarios for innovation, which students are asked to look at in advance.

Pre-session reading (please ensure you read this before the lecture session):


https://www.rand.org/pubs/research_reports/RR1377.html

Suggested reading:


Bill Sheate

These two sessions (EP&M V & VI) on tools are intended to provide a broad introduction to **ex ante and ex post assessment and evaluation tools** – at the project, programme, plan (spatial planning) and policy levels. How can decision-making and policy making be supported by upfront assessment tools and how can we know how effective policy interventions actually are in practice (evaluation). Central to all these tools is the concept of **accountability** – the extent to which assessment and evaluation processes can help to support democratic, corporate and professional accountability – and particularly the role of the public, stakeholders and NGOs.

The first session covers EIA – environmental impact assessment, and SEA – strategic environmental assessment - as key ex ante **assessment** tools that are well established in legislation, internationally and nationally around the globe. It also outlines the role of **evaluation** in testing out and implementing **policy** interventions, and the conceptual relationship between all these tools in supporting environmental and sustainability policy making and implementation.

**Suggested reading:**

This session sets out the policy and tool landscape of ex ante and ex post tools and some key principles and approaches for application; the detail of individual tools is for you to explore in your own time with the readings given.

**See Blackboard** for specific supporting documents on EIA, SEA and evaluation as well as links to other assessment and management tools.


Bill Sheate

This second session on tools focuses on real-life case studies and the lessons that can be learned from them at project EIA level (e.g. controversial road and rail schemes), at programme/plan SEA level (national level sectoral plans/strategies), and at policy level (evaluation of policy interventions). The session explores why we need both ex ante assessment as well as ongoing and ex post evaluation to support decision making and policy making and the challenges these bring.

Suggested reading:
As above EP&M V.

Suggested background sources:
Planning Portal website at http://www.planningportal.gov.uk/


European Commission EIA/SEA website at http://ec.europa.eu/environment/eia/home.htm


Rob Gross

This session explores the various means by which energy policymakers seek to address environmental problems and balance them against other objectives in the energy policy arena. It explores first why governments have historically played an important role in energy markets, then considers how they do so. It discusses the processes through which policies are formulated and implemented, explaining how various actors in the system interact. It reflects upon the way in which policy development appears to be an ongoing process, with new policy emerging through an interaction of ideas and vested interest in the light of changing priorities. It considers, for example, how concepts in environmental economics have found their way into the energy policy landscape, and considers whether and why some theoretical ideas appear to have gained greater traction than others amongst policymakers. The session moves from energy policy in general to policies that seek specifically to promote the development of low carbon technologies. It reviews the development of policy support for renewable energy in the UK, and asks what lessons can be learned from the ‘UK experiment’ with liberalised markets and specific interventions. It considers why the UK policies have been formulated as they have and assesses their effectiveness in comparison to rather different conditions in other countries. Finally it provides a brief global overview of major development trends in renewable energy.

Suggested reading (select max of three from the list to look at)


Clive Potter, Helen ApSimon and Bhopal Pandeya

This session focuses on policy-oriented research currently being carried out in the Centre for Environmental Policy in relation to a number of developing policy areas. Very different in terms of the topics covered, instruments involved and stakeholders affected, they demonstrate a range of more generic features of contemporary environmental governance

- Tree Health and Plant Biosecurity (Clive Potter)
  Confirmation that a new tree disease pathogen, Chalara fraxinea (ash dieback) had been found in the UK in October 2012 triggered a major government response. Chalara is one of a number of current disease threats to UK trees and woodland and the need to prevent further invasions is a key Defra priority. Preventing these introductions is likely to be difficult, however, due to a variety of economic and operational reasons and there are growing conflicts between the commercial interests of plant importers (whose actions contribute to the spread of disease) and the need to safeguard public goods. This case study will explore the lessons for risk governance and stakeholder engagement following publication of the Government’s Expert Taskforce report on tree health and plant biosecurity.

- Scientific underpinning of international protocols: a case study of transboundary air pollution in Europe (Helen ApSimon)
  As countries addressed local air pollution problems of growing industrialisation in the latter half of the last century, the longer range effects on a European scale eventually became apparent, starting with the problem of “acid rain”. This case study will describe how scientific collaboration between countries has underpinned development of international protocols under the UN ECE Convention on Transboundary Air Pollution, CLRTAP (now the “Air Convention”), starting with sulphur dioxide and acidification and extending to a wider range of atmospheric pollutants and impacts on human health, crops, ecosystems and biodiversity in Europe. It will illustrate the interdisciplinary nature of the input to negotiations and
how this is brought together; and the building of interfaces between science and policy. This has led to successful agreement of national emission ceilings under the Gothenburg Protocols, and the EU’s National Emission Ceilings Directive, leading to successively tighter limits on the quantities of pollutants emitted by each country up to 2030. Each country then has to decide how best to reduce its pollutant emissions to achieve compliance.

Since the collected sensor data can be directly used in operational flood early warning system in the basin, an opportunity has been created for integrating both affordable technology and citizen science into existing hydrological monitoring practice. Finally, a successful integration could become a testament for upscaling the practice and building flood risk resilient communities in the region.

- **Third case tbc**

9. EP&M IX - Governance for Sustainable Development Goals (SDGs)

The Sustainable Development Goals

Caroline Howe and Jem Woods

This session introduces the concept of sustainable development, including its rise and fall, and subsequent rebirth in the form of the Sustainable Development Goals (SDGs). It looks at the evolution of the SDGs within the context of environmental/sustainability governance and the role of global goals for international cooperation with respect to global megatrends, such as climate change and human demographic changes. The session will review the potential interactions, synergies and trade-offs between the individual goals and explore, through case studies and past agreements such as the Millennium Development Goals, the challenges and opportunities the SDGs present.

**Suggested reading:**


**LECTURING STAFF**

**Professor Clive Potter**

Clive is Professor of Environmental Policy, Centre for Environmental Policy, Imperial College London and Adjunct Professor at Cornell University, New York. He is an environmental policy specialist with a particular interest in applying interdisciplinary approaches to policy relevant research, especially in the agriculture and forestry fields. A geographer by training and intellectual inclination, he has spent most of his academic career to date working on the environmental problems and policy challenges associated with agricultural restructuring and rural change in industrialised countries. His PhD was one of the first to explore how the intensification of agriculture was changing Europe’s farmed landscapes and he was involved at an early stage in campaigns to reform the Common Agricultural Policy to make it more environmentally sensitive and less commodity orientated. He continues to be closely involved in public policy debates surrounding land use change and the protection of Europe’s
countryside and is particularly interested in the way the globalisation of agro-food systems challenges traditional understandings of nature in rural space and the role of agriculture in producing public goods. Since coming to Imperial in 2001, Clive has become increasingly interested in interdisciplinary research, leading investigations into biodiversity protection in Europe’s mountain areas and, more recently, into the threat to ecosystems and landscapes of major tree disease epidemics. He is the author of two books and over 100 journal articles and book chapters and is a member of the editorial boards of Land Use Policy and the Journal of Environmental Management.

Dr Bill Sheate

Bill is Reader in Environmental Assessment (p/t) in the Centre for Environmental Policy at Imperial College London, and Technical Director with Collingwood Environmental Planning Ltd, London (p/t). Originally an ecologist, but now firmly interdisciplinary, he has worked, lectured and published widely on environmental assessment and policy for over 30 years in consultancy, academia and in the voluntary sector and has led major EU research projects on environmental and sustainability assessment and long term future studies. His expertise and interest lies in the development and application of environmental policy and legislation in the European Union, assessment procedures, methodologies, and public and NGO participation. He has been Director of the Core Course since 1998. He was founding Editor of the Journal of Environmental Assessment Policy and Management (JEAPM) (1998-2009); is an academic member of Francis Taylor Building barristers’ chambers in London; and Honorary Professorial Research Fellow in the School of Environment, Education and Development at the University of Manchester. In 2014 he was Specialist Adviser to the House of Commons Environmental Audit Committee inquiry into HS2 and the Environment and in 2015 testified at the International Court of Justice in The Hague on behalf of the Nicaraguan Government in the case of Nicaragua v Costa Rica (Border Road). Bill is also a registered cognitive behavioural hypnotherapist specialising in anxiety and stress in higher education.

Dr Robert Gross

Robert Gross is Reader in Energy Policy and Technology in the Centre for Environmental Policy at Imperial College. He is Head of the Technology and Policy Assessment function at the UK Energy Research centre (UKERC), and Director of ICEPT (Imperial Centre for Energy Policy and Technology). He co-authored the Cabinet Office’s 2002 Energy Review, was Specialist Advisor to the House of Lords European Union Select Committee during their 2008 investigation into the feasibility of the EU 2020 targets for renewable energy, and in 2011, was Special Advisor to the House of Commons Energy and Climate Change Committee during their scrutiny of the Electricity Market Reform consultation.

Dr Caroline Howe

Caroline Howe is a Lecturer in Ecosystem Science at Imperial College, and was previously a Fellow at the Sheffield Institute for International Development. Her work focuses on the interaction and conflicts between people and nature, focusing particularly on the value of ecosystem services and their contribution to human well-being. She was a member of Directorate for the Ecosystem Services for Poverty
Alleviation Programme (ESPA) from 2012-2013 and is a contributing author to the programme’s final summary book (to be published mid 2018), as well as a contributing author on ecosystem services trade-offs for the Intergovernmental Panel on Biodiversity and Ecosystem Services (IPBES) Global Assessment.
Environmental Pollution and Control (EP&C)
Coordinator: Professor Nick Voulvoulis

Aim:
This module introduces pollution and degradation of environmental quality as an example of the interactions between natural and human systems. It will enable students to understand environmental problems, looking at causal linkages between pollution sources, exposure pathways and impacts to environmental quality and human health.

The complex relationships between environmental factors and human health, taking into account multiple pathways and interactions, will be assessed in a broader spatial, socio-economic and cultural context.

Students will learn how to assess pollution sources, study exposure pathways and fate, and evaluate consequences of human exposure to pollution and its impacts to environmental quality. Providing the evidence base to support decision and policy making, students should be able to understand pollution problems, consider ways to respond to them, and propose appropriate solutions/actions to reduce (protect, mitigate or prevent) pollution risks when necessary.

Learning Objectives:
At the end of this module, students will:

- Have gained awareness of current forms of environmental pollution and an overview of both their causes and consequences to natural, economic and social systems.
- Have gained an understanding of the fundamental principles governing the interactions between those systems (i.e. transport of pollutants in the environment),
- Have been exposed to learning examples of good practice of technologies and options used to remediate reduce/eliminate pollution of the environment,
- Be able to analyse, synthesise, and evaluate evidence to understand problems and accordingly select control measures and techniques concerning atmospheric, water or terrestrial challenges.

Learning methods provide the basic understanding of the complex cross-disciplinary issues associated with environmental problems, their identification and their resolution. As is appropriate with learning at Masters level, the emphasis is on analysis, synthesis and evaluation. Making a shift from traditional research methods and tools to systems based frameworks, the module focuses on the need to understand problems in order to assess how environmental challenges can be addressed.
Module themes:

The module covers three thematic areas as examples of environmental challenges and central to its mission is an integrated theme, dealing with pollution issues in a wider context. As most environmental problems are interrelated, systems’ thinking is introduced and employed for analysing, understanding and addressing them.

**INTRO AND INTEGRATION THEME**

This theme deals with pollution issues within a wider context. Environmental problems are interrelated and therefore a systemic approach in their analysis and evaluation is necessary. The linkages between the natural systems will be revealed along with their implications to policy and decision making.

**THEME 1: WATER MANAGEMENT**

This theme focuses on water supply and treatment processes for drinking, in addition to current and emerging water management issues. The basics of sewage treatment including biological treatment, percolating filters, activated sludge and nitrification and sludge treatment such as anaerobic digestion and other biosolids management practices are included.

**THEME 2: ENVIRONMENT AND HEALTH**

This theme addresses pollutants and their relationship to human health and the quality of the natural environment. More specifically, attention will be shed on the sources, pathways and routes of exposure of contaminants and their potential hazardous effects.

**THEME 3: RESOURCES MANAGEMENT**

Attention in this theme will concentrate on the most efficient way to manage resources and reduce impacts of our waste. Focusing on sustainable consumption and production closing loops in resources management and decoupling from nature will be investigated as the way forward, dealing with resources within a systemic approach.

Learning Approach:

In order to have more in-class discussion and activity time and to effectively get to higher-order learning objectives, the module champions a shift from traditional research methods and tools to system-based frameworks. Moreover, it focuses on the need to understand problems before any solutions are derived, conceptualizing environmental problems as the interactions and interrelationships between natural and human systems.

Active, enquiry-based learning aims to disseminate knowledge that the students can understand and apply because of the module’s interactivity and contextual basis. Preparation includes studying online material in advance, with the aim of enhancing active class time, participation and communication. Class time is spent interactively examining the context and implications of the knowledge acquired.

Videos and notes provided need to be studied in preparation of classroom sessions to enable students’ active participation. Practicals offer the venue for analysis, evaluation and synthesis of knowledge acquired. Here students are challenged to examine their assumptions and to question information. Active participation is encouraged and demanded, with practicals designed to stimulate debate. Such blended learning methods help increase science literacy and make it easier and faster for the 150 students each year to develop confidence in their active, enquiry-based learning. The module effectively disseminates knowledge that the students can understand and apply because of its interactivity and contextual basis. This is further supported by the module’s examination and assessment, placing greater emphasis on assessment for learning rather than assessment of learning.
Module sessions:

There are three types of sessions:

- **Preparation**: Students need to prepare using the notes provided and videos that provide the evidence necessary for active classroom participation.
- **Lectures** provide the venue for more traditional knowledge sharing to support analysis, evaluation and synthesis in pursuit of critical thinking.
- **Practicals**: Students are challenged to assess their learning and to apply what has been learnt. They are given tasks and questions which are then discussed in class to further improve learning, increasing their confidence in the process.

<table>
<thead>
<tr>
<th>EP&amp;C sessions</th>
<th>Date (time)</th>
<th>Preparation required (study in advance)</th>
</tr>
</thead>
</table>
| **EP&C1: Introduction to Module (NV)**      | 19 October (15:00-18:00) | **Handouts (Blackboard)**: -  
**Videos (YouTube)**: Intro to module  
The learning process |
| **EP&C2: Understanding environmental problems and history PRACTICALS (NV)** | 26 October (15:00-17:00) | **Handouts (Blackboard)**: Task for EP&C2  
**Videos (YouTube)**: Environmental History  
Tasks for EP&C2 and Template for notes  
Environmental Pollution Intro: Anthropocene |
| **EP&C3: Water management (NV)**            | 2 November (15:00-18:00) | **Handouts (Blackboard)**: -  
**Videos (YouTube)**: The Aral Sea (Optional) |
| **EP&C4: Air Pollution Basics (HAS)**        | 8 November (10:00-12:00) | **Handouts (Blackboard)**: -  
**Videos (YouTube)**: - |
| **EP&C5: Drinking Water Treatment and Wastewater treatment and Sludge PRACTICALS (NV)** | 9 November (15:00-18:00) | **Handouts (Blackboard)**: Water treatment Study Notes  
**Videos (YouTube)**: Drinking water treatment  
Wastewater treatment study notes  
Wastewater treatment - biosolids management |
| **EP&C6: Risk management of Chemicals PRACTICAL (NV)** | 16 November (15:00-18:00) | **Handouts (Blackboard)**: Chemicals study Notes  
**Videos (YouTube)**: Chemicals in the Environment - Dehumanising Humanity  
Insight to EU policy development on EDCs (Optional) |
| **EP&C7: Waste and Resources management issues (NV)** | 22 November (15:00-17:00) | **Handouts (Blackboard)**: Waste Management study notes  
**Videos (YouTube)**: Waste and resources management  
The story of waste management in the UK (Optional) |
| **EP&C8: Air pollution and Control (ADN)**   | 23 November (10:00-12:00) | **Handouts (Blackboard)**: -  
**Videos (YouTube)**: - |
| **EP&C9: Pollution and human health (ADN)**  | 28 November (10:00-12:00) | **Handouts (Blackboard)**: -  
**Videos (YouTube)**: - |
<table>
<thead>
<tr>
<th>EP&amp;C10: Sustainable production and consumption (NV)</th>
<th>30 November (15:00-18:00)</th>
<th>SP and C study notes</th>
<th>Overpopulation or overconsumption Consumerism (Optional)</th>
</tr>
</thead>
<tbody>
<tr>
<td>EP&amp;C11: Conclusion - The Way Forward (NV)</td>
<td>4 December (13:00-15:00)</td>
<td>-</td>
<td>Environmental Pollution: the way forward</td>
</tr>
</tbody>
</table>

* Preparation required

**Key papers**

- Voulvoulis N, Skolout JWF, Oates CJ, et al., 2013, From chemical risk assessment to environmental resources management: the challenge for mining, Environmental Science and Pollution Research, 20, ISSN:0944-1344, Pages:7815-7826
- Plant JA, Korre A, Reeder S, et al., 2004, Chemicals in the environment, Geochimica et Cosmochimica Acta, 68, ISSN:0016-7037, Pages:A527-A527

**Additional videos**

- The Balance of Nature
- Bingham Canyon Copper Mine
- Man and the Environment – Differences between religions
- Mass media: Perception creates reality
- The real causes of poverty
- How the Earth works
- Climate Change in the Anthropocene
- Climate Change Controversy: the truth
- Thatcher UN Speech on Global Environment (1989)

**Textbooks**

Lecturing staff

Professor Nick Voulvoulis is a Professor of Environmental Technology and was the Director of the MSc Course between 2008 and 2017. He is an international expert in environmental management, especially where science and engineering interface with public policy. His research focuses on environmental quality management, with a focus on environmental systems and processes across many areas and diverse sectors. He has graduated more than 20 PhD students and supervised the research of more than 250 MSc students, many of whom have gone on to take up leading positions in the field. The underlying principle for the interdisciplinary nature of his research is the application of science to solve environmental problems and sustainability challenges, in other words environmental technology in its original meaning. He delivers high quality research that has been published in some of the top journals in the field and has a citation h-index of 42 in Google Scholar and 36 in Scopus (September 2018). He is the Associate Editor of Environmental Management published by Springer and sits on the Editorial Board for AIMS Environmental Science and for Environmental Nanotechnology, Management and Science. Impacts to society, community participation in science and links between knowledge management and environmental behaviour are also important areas of his work. For example, Nick is the Director of the OPAL Soil Centre.

Dr Audrey de Nazelle is a senior lecturer in air pollution management. She is an expert in risk assessment, mathematical modelling and exposure science. She conducts cutting-edge multidisciplinary research at the intersection of environmental sciences, health behavior, transportation, and urban planning. While a post-doc at the Centre for Environmental Epidemiology in Barcelona, Spain, she worked on exposures of pregnant women to air pollution and greenery, pollutant exposure and inhalation in different transportation modes and health effects of urban active transportation policies. Her research includes novel approaches to assessing behaviours and exposures using smartphone technology. She holds a PhD from the University of North Carolina at Chapel Hill in Environmental Sciences and a Maîtrise in Mathematics from the University of Paris VI Pierre et Marie Curie.

Professor Helen ApSimon is Professor of Air Pollution Studies at Imperial College London. Her research in air pollution developed from modelling studies of nuclear accidents, and diversified into international issues such as acid rain, and air pollution problems in Eastern Europe. She has worked extensively for Task Forces under the UN ECE Convention on Long-Range Transboundary Air Pollution, undertaking modelling and assessment of cost-effective strategies to reduce acidification, eutrophication, excess tropospheric ozone, and fine particulate concentrations. She also has strong interests in urban air pollution, particularly in London, where she chaired the APRIL (Air Pollution Research in London) network. She was a founder member, Chairman and President of the European Association for the Science of Air Pollution (EURASAP). She has been a member of numerous expert groups and committees, including the Airborne Particles Expert Group, the National Expert Group on Transboundary Air Pollution, and the Air Quality Expert Group of DEFRA. Her work is now highly interdisciplinary, linking science and policy development.
Environmental Economics (EE)
Coordinator: Dr Yiannis Kountouris

Aims:
1. To introduce the broad principles of economic reasoning in relation to environmental problems and solutions;
2. To illustrate how economics can help explain the causes of current environmental problems;
3. To describe how economics can be used to mitigate environmental damage.

Learning objectives:
After following this module, students will be able to
- Understand how economic agents’ incentives influence behaviour and impact on the natural environment.
- Explain environmental degradation in economic terms.
- Evaluate policy interventions in terms of their costs and benefits.
- Critically comment on current environmental policy issues.

Purpose and Content:
What is the relationship between human behaviour and the natural environment? How can we quantify and optimize human impact on the natural environment? This module will introduce a set of concepts and tools to systematically analyse and answer these questions.

Environmental Economics 1: Introduction
The aim of the lecture is to introduce economic science and the field of environmental economics. We will discuss some basic economics and introduce the supply and demand model and the concept of market equilibrium.

Environmental Economics 2: Markets and market failure
We will present economic efficiency and its relationship to competitive markets, analysing how divergence from competitive markets (market failure) leads to inefficiency. In this context we will discuss issues relating to external economies, public goods, common property and market power.

Environmental Economics 3: Policy instruments
We will turn to pollution control, introduce Marginal Damage and Marginal Abatement Cost functions and discuss command and control and market based approaches to environmental policy.
Environmental Economics 4: Environmental valuation
We will discuss the concept of economic value in reference to the environment. We will introduce stated and revealed preference approaches to environmental valuation and provide examples.

Environmental Economics 5: Cost-benefit analysis
This lecture will introduce one of the basic tools of economic policy decision making, namely Social Cost-Benefit analysis, and illustrate its usefulness for environmental policy. We will discuss issues relating to discounting, especially in the context of climate change.

Environmental Economics 6: Macro Issues
In this lecture we will discuss the relationship between economic growth and aggregate economic activity.

Environmental Economics 7: Development Economics (Caroline Howe)
Development economics deals with the economic, social, political and institutional mechanisms required to bring about improvements in human wellbeing. This session will introduce different economic development theories, including sustainable development. It will explore intrinsic (non-monetary) values for nature as well as how to measure poverty and human well-being. It will finish with a brief exploration of macroeconomics with respect to megatrends, such as climate change, and how these influence intergenerational and global equity.

Useful readings:
Hanley, Shogren and White: “Introduction to Environmental Economics”
Hanley and Barbier: “Pricing Nature: Cost Benefit Analysis for Environmental Policy”
Tietenberg: “Environmental and Natural Resource Economics”
Stiglitz and Walsh: “Principles of microeconomics”
Field and Field: “Environmental Economics: an introduction”
Acemoglu, Laibson and List: “Microeconomics”

Additional reading material may be provided in class and on Blackboard.

Lecturing staff
Dr Yiannis Kountouris
Dr Caroline Howe
Caroline Howe is a Lecturer in Ecosystem Science at Imperial College and was previously a Fellow at the Sheffield Institute for International Development. Her work focuses on the interaction and conflicts between people and nature, focusing particularly the value of ecosystem services and their contribution to human well-being. She was a member of Directorate for the Ecosystem Services for Poverty Alleviation Programme (ESPA) from 2012-2013 and is a contributing author to the programme’s final summary book (to be published mid 2018), as well as a contributing author on ecosystem services trade-offs for the Intergovernmental Panel on Biodiversity and Ecosystem Services (IPBES) Global Assessment.
Environmental Law (EL)
Coordinator: Zen Makuch

Environmental law provides a significant framework within which environmental issues can be understood, managed and resolved. This course provides an understanding of the structure of environmental law, with a focus upon England and aspects of the European Union (EU or EC) and international law. Its aim is to provide insight into the contribution of legal analysis to environmental problems. The comparative value of UK and EU environmental law to other jurisdictions is an accepted part of the course methodology.

Aims

Given that environmental problem solving relies to a significant extent on an objective framework of knowledge, this course aims to:

- Provide a detailed understanding of how UK, European Union (EU) and international sources of law are used to solve environmental problems and emerging challenges;
- Teach critical legal and other reasoning skills in order to reveal the significant inadequacies that exist in conventional institutional environmental problem solving;
- Convey a new and effective framework for environmental problem solving by teaching MSc candidates how to think about and resolve environmental problems and conflicts;
- Understand multi-layered methods for environmental problem solving anchored to dialectical thought and reasoning skills; and,
- Offer a lively peer-to-peer “learning by doing” method for resolving complex environmental disputes.

Learning objectives

MSc students will learn how to:

- Apply multi-layered methods in environmental problem solving;
- Assess the relative weight and importance of stakeholders and institutions in environmental problem solving;
- Understand environmental problem solving by reference to UK, EU and international law;
- Argue and defend positions by reference to dialectical and related analytical reasoning skills;
- Recognise and be effective in the real politik of environmental problem solving by reference to a varied and detailed range of real world scenarios; and,
- Use a range of tools and knowledge to actually solve environmental problems.
Introduction to Environmental Law - Structure, Sources and Instruments
This introductory lecture offers a summary of the content of the course. It is followed by a detailed outline of the structure and sources of law. There will be a particular focus on the legal regime found in the United Kingdom. In this regard, the role of law as an instrument of environmental protection will be given detailed scrutiny. This will be contrasted with the use of economic instruments and voluntary agreements.

EU Environmental Law – Treaty For European Union (TFEU), Case Law and the Environmental Acquis
It is with increasing frequency that the environmental law of the European Union (EU) is the main driver of environmental protection efforts in Member States. The United Kingdom is no exception. This session will trace the key elements of EU law with specific reference to the TFEU, the case law of the European Court of Justice and the body of environmental legislation known as the "Environmental Acquis" Communautaire.

Remedies Part I - Private Law Applications and Liability Issues
The roots of environmental law reach more deeply than the “flower power” generation of legislative change that began in 1969. Equally, the strength of the United Kingdom as the mother of the Common Law is illustrated in the use of her private law remedies for environmental protection efforts worldwide. This session will bring the law to life through the illustration of practical “private law” remedies for addressing environmental and human health-related harm.

Remedies Part II - Enforcement of Environmental Law in the UK and EU
Enforcement activity is a key means by which environmental protection efforts maintain their legitimacy. It is a significant litmus test for measuring societal environmental commitments. Yet, little is generally known about the actual methodology for developing and successfully prosecuting an environmental case. This session provides an in-depth account of this process, illustrating how the "sharp end of the enforcement stick" works in UK and EU practice.

Remedies Part III - The Public Law Approach
While the roots of UK Environmental Law may extend to the Common Law they are also sourced in the body of public or administrative law. As such, the right to challenge government competent authority decision-making processes is a tool in the arsenal of environmental protection efforts. This and other remedies for seeking environmental redress will be the focal point of the session. In particular, a recent judicial review hearing will serve as the case study for addressing procedural, strategic and substantive public law issues as they pertain to environmental protection efforts.
International Law and the Environment. International Economic Law and the Environment - The Absence of Environmental Protection Regulation?

In the aftermath of our General Agreement on Tariffs and Trade (GATT) Uruguay Round international trade negotiations, there was great hope that the environmental law goals would be integrated into domestic and commercial trade policy. The same hope applied to all international institutions in the wake of the UN Conference on Environment and Development. This goal has yet to be realised. International institutions (i.e., the WTO) regulate approximately 15 billion pounds sterling (2016) in commercial/industrial activity annually and yet they are without a sound environmental law basis. This session addresses this issue by reference to direct experience with contemporary international disputes to protect the environment.

Addressing Climate Change through Law; The Climate Change Convention, Kyoto, Copenhagen and Paris

As with many issues that arise in contemporary public law, particularly those draped in the language of “crisis”, there is a tendency to introduce “quick fix” regulatory solutions. What the evolving climate change debate has taught us is that, for the foreseeable future, environment, energy and sustainability will remain as enduring challenges for civil society locally and globally. Borrowing upon the direct experience of negotiating international law addressing climate change, after an introduction to key legal language and emerging case law, we will turn to regulatory efforts at the international, EU and Member State levels in order to stabilise climate change. In particular, implementation strategy will be examined as the backdrop for positing legally codified solutions to the climate change problematic.

How to Approach the Law Assessment - Preparation Strategy

This wrap-up session will focus your minds on the Law Assessment Exercise. It is designed to familiarise you with the assessment process itself. Details on a suggested revision and practice strategy will be provided. A sample answer structure will be discussed. In addition, you will be given the opportunity to ask any questions concerning the Environmental Law Course itself in the run-up to the assessment. The aim is to optimise your opportunity to perform well on the day.

Law Course Assessment – Monday 26th November 2018

Course Materials

Everything that you need will be provided by me on Blackboard or in class. If you really want to learn even more then you can look at:

** S. Bell and D. McGillivray, Environmental Law (OUP, 8th ed, 2013)

What is below is not a replacement for Bell and McGillivray
Selected Information and Sources on Environmental Law in the UK

1. Introduction

As between England and Wales, environmental law is highly similar in nature though the Welsh “yes” vote on devolution of powers to Wales (including the power to make environmental legislation) gives rise to minor changes in circumstances. Environmental law in Scotland and Northern Ireland is different to that of England and Wales as the former two legislative assemblies pass regulations that are particular to their respective jurisdictions.

2. Practical Law: A Thomson Reuters Legal Solution

http://uk.practicallaw.com/6-503-1654?source=relatedcontent

This is a Question and Answer (Q&A) Guide to environmental law in England and Wales.

This Q&A Guide provides a high level overview of environment law in the UK (England and Wales) and looks at key practical issues including emissions to air and water, environmental impact assessments, waste, contaminated land, and environmental issues in transactions. In addition, answers to questions can be compared across a number of jurisdictions to assist in the management of cross-border transactions.

3. United Kingdom Environmental Law Association

http://www.ukela.org/rte.asp?id=14

Provides a one page introduction to environmental law history, sources and evolution plus 15 sets of URLs variously covering Air Law to Wild Law.

4. Law and Your Environment: The Plain Guide to Environmental Law

http://www.environmentlaw.org.uk/

This site aims to provide information on environmental law and the everyday problems. It provides a brief overview of the law on key areas, more specific information and then access to other information providers or the relevant law.

5. Environmental Regulations – GOV.UK

https://www.gov.uk/browse/business/waste-environment/environmental-regulations

Guidance on legislation based on conservation and sustainability, and aimed at reducing air, water and land pollution, carbon emissions and energy use. Provides many URLs linked to particular environmental regulation issues.
Small Group Seminar Series (SGS)
Coordinator: Dr Bill Sheate and Dr Caroline Howe

During the Core Course Term, a small group seminar series is offered. The series comprises a Seminar made up of 3 x 1.5 hour sessions examining a particular topic, spread over weeks 3-5. Students may choose from a range of topics on issues in contemporary environmental science and policy.

Aims
To facilitate the development of higher-order learning skills – analysis, synthesis and evaluation – and their application to environmental and sustainability issues.

Learning Objectives
After following this module students will be:
- Able to undertake independent critical research in contemporary environmental and sustainability issues
- Confident in engaging in group discussions
- Able to present a succinct essay reporting on their independent research and the group’s analysis, synthesis and evaluation of a contemporary environmental/sustainability issue.

This seminar series comprises 3 x 1.5 hour sessions examining a particular topic, spread over weeks 3-5 and a 1 hour feedback session. Students may choose from a range of topics on issues in contemporary environmental science and policy. Places are limited on each seminar, and you will therefore be required to sign up on Blackboard – see links from the Home Page which will be made available one week before the seminar series begins. You will then be allocated to one of your preferred seminar topics, on the basis of a ‘maximising happiness’ algorithm which seeks to give everyone their highest preference possible. This is a much fairer way of allocation than the alternative of first come first served. There will be a wide variety of seminar topics so you should have no difficulty in finding a number that will interest you.

Seminar topics will cover subjects across the four main cross-cutting themes in the core course. Recent seminars offered have included:

- Do Environmental Pressure Groups Concentrate on the Issues and Play down the Real Problem?
- How Much Is It Worth Spending On Saving Endangered Species?
- Environmental Pressure Groups: Lobbying, Direct Action and their role in Governance
- Is Nuclear Power the Answer to Global Warming?
The Precautionary Principle: Can It Be Effectively Applied As A Tool for Environmental Protection?

Policy Related Research - Inherently biased or objective?

Emphasis is placed on active learning and participation, and the application of critical thinking: students are expected to lead discussion based on their research on the topic in question. In each seminar round, the staff member will facilitate and moderate student discussion in each of the three sessions leading to the presentation of a short written paper (max 2000 words) by each student after the final session.

In each seminar,

The first session will involve general discussion around the topic, and identify topics for independent research by the student (analysis).

The second session will be concerned with the presentation of initial results and further discussion (synthesis).

The third session will be concerned with student presentation and conclusions on the topic in Question (evaluation).

The written paper is assessed and carries 15% of the total Core Course Marks. Students are expected to spend no more than 4 hours in preparation for each Seminar Session. Seminar essays must be submitted online on Blackboard. A fourth reflective session (1 hr) is scheduled to allow for group feedback and critical discussion after the essays have been returned (around week 9).
Policy Seminars

The Policy Seminar programme for the Autumn Term will be held on the following Thursdays at 5.00pm in a number of lecture theatres, as specified in the timetable), and will be followed by a glass of wine or soft drinks in the Common Room and CEP Gardens). Policy seminars will also continue in the Spring Term. All students are expected to attend these policy seminars, as they provide valuable information and insight into integrating the Core Course material, and material that is potentially examinable in the Core Course Exams.

More importantly, however, they are the social event of the week for the MSc students and provide the means by which you get to know each and make lifelong friends and contacts. **Do use the opportunity to socialise and network with your colleagues, external speakers and potential employers.** Drinks after the policy seminar have been an ‘institution’ from the first year of the MSc course run in 1977! For overseas students in particular it is a real opportunity to immerse yourself in the cultural exchange of knowledge and experience - **make the most of it** – it is invaluable and the key memory for most alumni!

For your information, prior to each seminar a more detailed description of the seminar topic and the speaker’s background will be advertised on Blackboard – see the link from the home page, where this timetable can also be found. **Please refer to this regularly.** Where speakers are happy to make them available, PowerPoint slides will also be posted on Blackboard as soon after the event as possible.
<table>
<thead>
<tr>
<th>Date</th>
<th>Speaker</th>
<th>Position</th>
<th>Title</th>
<th>Room</th>
<th>Chair</th>
</tr>
</thead>
<tbody>
<tr>
<td>04/10/18</td>
<td>Gary Kass</td>
<td>Deputy Chief Scientist at Natural England</td>
<td>The changing landscape of environmental policy and its relationship with science and evidence</td>
<td>SAF G16</td>
<td></td>
</tr>
<tr>
<td>11/10/18</td>
<td>Chris Eves</td>
<td>Forestry Officer- Zoological Society of London (ZSL)</td>
<td>Disclosure and engagement: incentivising best practice in biodiversity-risk commodity sectors</td>
<td>RSM G20</td>
<td></td>
</tr>
<tr>
<td>18/10/18</td>
<td>Annie Goransson</td>
<td>Consultant, Fitwel Ambassador, Energy, Infrastructure &amp; Sustainability EMEA</td>
<td>What does sustainability mean for commercial real estate owners &amp; investors?</td>
<td>RSM G20</td>
<td></td>
</tr>
<tr>
<td>25/10/18</td>
<td>James Whittingham</td>
<td>Senior Sustainability Consultant-Luminous</td>
<td>“Why organisations are engaging with their stakeholders about purpose - a sustainability practitioner’s perspective”.</td>
<td>RSM G20</td>
<td></td>
</tr>
<tr>
<td>01/11/18</td>
<td>Tamsin Cooper</td>
<td>Head of strategy, DEFRA</td>
<td>UK Environmental Policy Before and After Brexit</td>
<td>RSM G20</td>
<td>Clive Potter</td>
</tr>
<tr>
<td>08/11/18</td>
<td>Sadia Ahmed</td>
<td>Head of innovation at AB Sustain</td>
<td>‘Sustainability at AB Sustain’</td>
<td>SAF G16</td>
<td></td>
</tr>
<tr>
<td>15/11/18</td>
<td>Ben Summers</td>
<td>Sustainability Manger- Innocent Drinks</td>
<td>TBC</td>
<td>SAF G16</td>
<td></td>
</tr>
<tr>
<td>22/11/18</td>
<td>Matt Georges</td>
<td>Senior Advisor, Environment and Business, Environment Agency</td>
<td>The economics of flood risk: If you were given half a billion pounds to protect people from flooding, how would you spend it?</td>
<td>RSM G20</td>
<td></td>
</tr>
<tr>
<td>29/11/18</td>
<td>Katherin Nield</td>
<td>UK Clean Air Lawyer</td>
<td>“Clean Air: our right, but whose responsibility?”</td>
<td>RSM G20</td>
<td></td>
</tr>
</tbody>
</table>
CEP Lunchtime Research Seminars

CEP runs a department lunchtime research seminar series during the Autumn and Spring terms on current research activity in the department and with visiting researchers. MSc students attend these (subject to space) if you wish to find out more about specific in-depth research areas at CEP and from across campus. The seminars will help to engage with researchers from different fields and backgrounds and establish departmental and interdepartmental collaborations. The overarching topic of the series is "environmental research"; a short 15-20 minute presentation by the speaker(s) will be followed by a 20-30 minute discussion creating an interactive session with room for exchange of ideas.
Course Regulations

The course is currently offered as a full-time (Mode J9UF) one year course and as part-time (J9UF24) two year course with an industrial placement, and both lead to the MSc degree and the Diploma of Imperial College (DIC).

Students complete the Core Course in the first term (October-December) which comprises of six taught modules, a risk practical, a small group seminar series, with continuous course work assessment. Environmental policy seminars conducted by external speakers also occur throughout the first and second terms.

In the Option Course in the second term (January-March) students complete their selected option based on their decision at course application. The following options are offered: Business and the Environment; Environmental Resource Management; Energy Policy; Environmental Analysis and Assessment; Environmental Economics and Policy; Global Environmental Change and Policy; Pollution Management; and Water Management. Written examinations are held in December (Core Course) and at the end of the spring term (Option Course).

The remainder of the course comprises an individual (18 week) research project including an interim-viva assessed within the Department, a thesis and an executive summary also assessed. The overall pass mark is 50% and the core course (including course work), option course (including course work) and the research project contribute 30%, 30% and 40% respectively. A student following the course part-time will have to complete the Core Course and the Option term in the first year and do the remainder of the course in the second year.

Nearly all the learning on the course receives formal assessment. The exceptions are study tours on certain options and the environmental policy seminars by outside speakers during the first two terms, although these provide a general background for other assessed exercises such as the ‘integrated questions’ in the Core Course exam papers. In addition, although students have a degree of choice when answering exam questions, the exam papers are structured in such way that all modules are examined, requiring students to revise for all taught subjects.

The course is assessed on the basis of 30% for the first term core course, 30% for the second term option, and 40% for the project, it being necessary to pass all these three elements. The MSc in Environmental Technology is awarded on the successful completion of each of the three sections listed above. If any student fails any part of the course, depending on the situation and circumstances involved, it may be possible to resit the exam or resubmit the project the following year.

In the case of distinction, students must achieve a minimum of 70% mark in all three elements to fulfil the criteria for the award of a distinction. Similarly, a minimum of 60% in all three elements is required to fulfil the criteria for the award of a merit.
Term 1 - Core Course

30% weighting of MSc award

Coursework (to be completed in Term 1)  
1. Small Group Seminar (15%)  
2. Quantitative Skills Assessment (10%)  
3. Environmental Law Assessment (10%)

Exams (Week 11)  
1. Core Course Paper I  
2. Core Course Paper II

Sixty five percent of Core Course marks come from two closed book examinations which assess the learning from the modules on introduction to ecology, environmental pollution and control, environmental policy and management, environmental law, environmental economics, research methods and a half module on risk assessment. These exams are on two separate days and both papers are three hours in length. Students are required in each exam to answer three out of a choice of questions based on the teaching matter of the first term.

The remainder consists of an open-book environmental law examination (10%), a quantitative skills assessment (10%), and a small group seminar assignment (15%). The latter assesses the ability of the students to examine critically particular environmental problems, working as teams in small groups and to come to an agreed conclusion.

Successful completion of this part of the course depends on the student being awarded a grade of at least 50% for the Core Course overall.

Term 2 - Specialist Option

30% weighting of MSc award

Each Specialist Option sets coursework assignments which are completed in Term 2 and all students sit one Specialist Option Exam (three hours in length) in Week 11. The ratio of marks given to coursework and exams is the same for each option: 50% for coursework & 50% for the exam.

The Options are assessed as follows:
The use of practical, group-work or case-study related coursework and its assessment and associated examinations provide a very effective learning opportunity with multiple additional benefits. Students working in teams are required to submit verbal and written individual and/or group reports for different coursework case studies depending on the Option they study. The case studies are designed to provide graduates with the skills to enter a wide range of environmental careers, with particular emphasis on environmental sustainability, and their assessment has been designed to be part of the learning process.

Successful completion of this part of the course depends on the student being awarded a grade of at least 50% for the Specialist Option overall.

Term 3 - Research Project
40% weighting of MSc Award

Each student carries out an individual five-month research project often based on the Specialist Option studied in Term 2. The length of this project is 10,000 - 20,000 words (depending on the nature of the project). In addition to the dissertation, each student must submit an executive summary of the dissertation (accounts for 5% of the project mark) by the end of the academic year (end September). If of an acceptable quality, the summary may be made available online (course website).

Training in research techniques is integrated across the core course and options, culminating in a two week course on social sciences techniques at the start of the project period. All of this is utilised in a project proposal which is formally assessed. At the start of the project all students give short presentations in small groups and in July/August are subjected to a formal internal viva, whose outcome is recorded and can be used in any later moderation of project marks. The project reports are marked by the supervisor(s) and a second examiner (usually the option convenor).
Successful completion of this part of the course depends on the student being awarded an overall grade of at least 50% for the Research Project.

All examinations required must be taken, and failure to do so other than on grounds of illness or the death of a near relative can result in students being failed in the examinations as a whole and therefore required to re-sit all elements in the following academic year. If students are ill at the time of an examination, a medical certificate must be supplied within 7 days and any examinations missed on account of illness cannot necessarily be taken until the following academic year. If possible, a Core Course exam resit will only be offered in the week before the Project term and an Option Exam resit within the last week of August and only for those who have met the conditions above. Students are informed that any request for deferral of an element of the examinations, if it is supported by the Course Director, must be first approved by the appropriate College committee and that approval is only agreed in truly exceptional circumstances.

Similarly, the rules for late submission and excessive length of assignments and MSc thesis are in accordance with College guidelines, i.e. up to 10% may be deducted for excessive length beyond the stated word limit of 2,000 (in the case of Seminar essays). College rules are that a zero mark (0%) is given for late submission. If, in exceptional circumstances, students are unable to meet a particular deadline, students are advised to discuss this in advance with the member of staff concerned. Exceptional circumstances are only those beyond your control, normally illness or bereavement. The final Examination Board, involving internal and external examiners, takes place in mid-November.

For further information you can download the Programme Specification at:
http://www3.imperial.ac.uk/environmentalpolicy/teaching/msc/course_description

Option Field Trips

Option Field Trips will generally take place at the end of the Spring Term, between the end of teaching and the Option examinations.
Projects

You will start your Specialist Project after the Option Exam. The Project Review Day which will take place at the end of April occurs during a two-week Research Methods course and later you submit the Project Proposal on Monday 20th May. A more detailed booklet giving Project Guidelines will be distributed towards the beginning of the Spring Term.

Summer Term Research Methods Training
The first two weeks of the Summer term – from 30th April to 11th May are set aside for compulsory training in research methods relevant to your summer term thesis research project - a research methods summer school. This training focuses particularly on social science research methods to complement the more natural science focus of the Quantitative Skills and Uncertainty module of the Core Course.

There are three key dates for your diary:

1. Project Review Day (where you present your project idea) on Friday 3rd May 2019,
2. Research Proposal hand-in day on Monday 20 May 2018,

In addition to these two key milestones, the following sessions (subject to timetabling) will also be covered during these two weeks of training, which will also allow you to incorporate the most appropriate research methods into your research proposal:-

- Research Proposal and Overview of Project Guidelines (Rob Gross)
- Research Design (Judith Cherni)
- Literature Review
- Research Methods – Referencing

Nuts and Bolts: Appropriate advance planning & estimating parameters from data (Tilly Collins)
Research Methods Interviewing Data collection (Judith Cherni)
Research Methods Coding (Susanne Raum)
Research Methods Mixed Methods (Richard Hanna)
Research Strategy Case Studies (Mike Tennant)
Research Methods Ontology (Clive Potter)

Epistemology (Raph Slade)
LCA (Joana Portugal)
Water Foot printing (Eva Sevigne)
GIS Introduction Session
Python basic (Huw Woodward)
You should therefore plan your project taking into account that you will need to be present in London in May up to the research proposal submission. These are the key transferable skills that will be valuable to you in your future careers, whether or not you use any or none of them during your actual project research.

Notes about Core Course Timetable

We try to stick as closely as possible to the arrangements and lecture times as set out in the Core Course timetable. However, it is occasionally necessary to move lectures owing to the illness of a lecturer or other unforeseen circumstances. You should not therefore rely on slots which are currently free in the timetable as necessarily remaining free. Notice of any changes in the timetable will be emailed to you and made available to you via the online Outlook calendar and posted on Blackboard.

Please note that all dates are subject to change and you should check your email regularly to make sure that you are up to date with any changes before booking air tickets etc.

Option Group Meetings

There will be three Option Group meetings during the Core Course term. The first is on the first day where you will be introduced to the Option and your Option Convenors. Two further meetings will be held in the middle and towards the end of the term to provide a link between the Core Course and your specialist Option. These will be arranged by your Option Convenors, but check with them to fix a date.
The MSc in Environmental Technology maintains strong links with alumni students in the business sector and has been privileged to be awarded a series of prizes from some of the top companies in the environmental arena.

**Adnams Prize**
A Prize for excellence in Business and the Environment.

**AECOM Prize**
A first prize award of £750, given annually for an outstanding overall performance on the MSc course as a whole, and a second prize of £250 for the runner up.

**The Charlotte Rich Memorial Prize**
A prize awarded to a Natural Sciences Option student, worth £200, for the highest mark for a thesis related to waste or wastewater management.

**Environmental Resources Management (ERM) Prize for an outstanding thesis**
The environmental consultancy, Environmental Resources Management (ERM), has generously offered a prize of £1000 per annum for an outstanding MSc thesis.

**Nigel Bell Prize (introduced in 2013-14)**
An award of £250 for the best research Thesis on a topic related to pollution management.

**Ross Makuch Prize**
Zen Makuch directs the Environmental Law programme on the Core Course in term one of the MSc in Environmental Technology. In honour of his father, who was a modest supporter of legal education, Zen has very kindly donated a prize of £100 per annum to the MSc candidate who achieves the highest grade on the Environmental Law examination in the Core course.

**Veolia Prize**
A prize awarded for the top mark in the Environmental Pollution & Control module exam of the Core Course to the value of £300
3. Assessment

Examination Dates & Course Work Assessment Deadlines – Important Dates

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**Week 11 Examinations**

**Thursday 13\textsuperscript{th} December 2018 - Queens Tower Rooms (QTR) - Core Course Exam Paper I**

**Friday 14\textsuperscript{th} December 2018 - Queens Tower Rooms (QTR) - Core Course Exam Paper II**

**Course Work Deadlines**

Small Group seminars essay

**Wednesday 7\textsuperscript{th} November 2018 4.00pm Blackboard only.**

**Law Course Assessment**

**Monday 26\textsuperscript{th} November 2018 - Queens Tower Rooms**

**Quantitative Skills Statistics Assessment**

**Thursday 6\textsuperscript{th} December 2018 - SAFB G29**
Exams

The Core Course Exams will be held on Thursday 13th and Friday 14th December 2018. These are two 3-hour exams. The Option exam is scheduled for Wednesday 27th March and is to be confirmed. The exam may last for 3 to 4 hours depending on your option.

Instructions for exam procedures are emailed to you and placed on Blackboard prior to exams, and you should check the regulations regarding the use of calculators, dictionaries and so on, in good time.

In the event of illness or exceptional circumstances, such as bereavement, repeat examinations (where needed) will be scheduled for the week before the summer term (Core Course exams) and the last week of August (Option exams).

It is necessary to pass each set of assessments. Failure in either the Core Course or Option term may mean that you are not able to complete the course.

SPECIAL EXAM ARRANGEMENTS & CEP DISCLOSURE PROCEDURE

If you wish to apply for special examination arrangements, or disclose any particular circumstance, please first discuss your situation informally with your tutor. If you need detailed advice, please also make an appointment to see the College Disabilities Officer. You may of course discuss your situation directly with the Senior Tutor if you prefer.

The CEP disclosure procedure is co-ordinated by the Senior Tutor, Dr Yiannis Kountouris. Once you have discussed your circumstance with your tutor please make an appointment with the Senior Tutor. If you are applying for special examination arrangements, please bring the information required to complete the relevant documentation available at:

http://www3.imperial.ac.uk/registry/exams/specialexamarrangements

Please ensure that you progress your disclosure as quickly as possible on arrival at College. All special arrangements must be approved by a College Panel. This can take up to six weeks from the date an application is submitted.

TYPICAL ALLOWANCES IN EXAMINATIONS

This section is intended to provide a general indication of the more common allowances. The nature of any allowance is decided by the Special Examination Arrangements Panel on a case by case basis.

- Dyslexia: A small amount of additional time during an examination.
- Impaired writing ability: Additional time during an examination, typically at a rate of 10-20 extra minutes per hour.
- Inability to write: Use of an amanuensis or technological aid, as is most appropriate both to the candidate and to the examination s/he is taking.
- Visual impairment: Registered-blind candidates are automatically allowed an extra half hour per paper. There is no automatic time allowance for partially sighted candidates but great attention shall be paid to the medical recommendation. Most candidates type their answers or use an amanuensis.
- Note that the following are not usually acceptable to the Panel: Requests for allowances for habitually illegible handwriting, unless this arises from a specific disability; Requests for rest periods during examinations.
Guidelines for Referencing

Cite all references, with the name of the author(s) and year of publication, in the text (Harvard style referencing). More than two authors are quoted as first author et al followed by the date. Collect all references together at the end of the report and list alphabetically in standard form. The Harvard system is the most commonly used form in the natural sciences, but the APA system is also used widely. You may also come across a number of variations to these. Examples of Harvard and APA are given below:

<table>
<thead>
<tr>
<th>Harvard System</th>
<th>APA* System</th>
</tr>
</thead>
</table>

no punctuation after initials or date

full stops after initials and dates; for multiple authors, comma separates authors

names joined by and

names joined by &

book and journal names in title case

book names in sentence case

journal names in title case

Commas separate publishing elements

full stop after title or edition

colon after place of publication

Edition without brackets or punctuation

Edition with brackets and full stops

Publisher followed by place of publication

Place of publication followed by publisher

(* American Psychological Association)

Please note that there are many variations of the Harvard style (APA is just one of these, e.g. in terms of use of punctuation etc); the important thing is that you are consistent in the style you use throughout your essays or thesis. List only the references you cite in the text. Any references not seen in the original should be
marked with an asterisk (*). If only seen as a translation, follow references with "English translation".

Websites should be referenced as other references (by author or organisation), except that in the final reference list the full URL should be quoted, the authority or organisation concerned, and the date at which it was accessed (since websites may change and may not be able to be accessed subsequently). You should avoid relying too heavily on websites alone – try to reinforce your referencing with sufficient academic literature. Journals accessed electronically are still journals and quoted as normal. Further guidance will be given in training sessions organised by the library in the first weeks of the Core Course. **You must attend these sessions as you will be required to reference correctly for all essays, reports and your dissertation.** As full guidance on referencing is provided **you will be penalised for incorrect referencing** in seminar essays.
### MSc Environmental Technology Examiners’ Marking Scheme

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A Distinction</td>
<td>70 - 100%</td>
<td>First class piece of work showing a thorough grasp of the subject, and ability to synthesize and criticize, and critical use of supplementary reading. &lt;br&gt; 90 – 100% Outstanding – making an original contribution, by questioning or challenging prevailing paradigms, offering new insights that are informed by critical evaluation of current research/practice, clearly demonstrating innovative/creative thinking. &lt;br&gt; 80 – 89% Excellent throughout, demonstrating a detailed knowledge and systematic understanding of key aspects of the subject, with strong evidence of independent thinking and original insights to the subject. &lt;br&gt; 70 – 79% Showing a thorough grasp of the subject, and ability to synthesize and criticize, with critical use of supplementary reading, occasionally falling below a general level of excellence (i.e. original insights and innovative thinking).</td>
</tr>
<tr>
<td>B Merit</td>
<td>65 - 69%</td>
<td>A very good grasp of the subject and evidence of ability to synthesize and criticize including use of supplementary reading, but falling short of excellence in one or more of these aspects. &lt;br&gt; 60 - 64% A good grasp of the subject and some evidence of ability to synthesize and criticize.</td>
</tr>
<tr>
<td>C Pass</td>
<td>55 - 59%</td>
<td>Satisfactory, with a good grasp of the relevant concepts and facts, but little evidence of the ability to both synthesize and evaluate, or with marked lapses. &lt;br&gt; 50 - 54% Satisfactory, with a reasonable grasp of the relevant concepts and facts, but little evidence of the ability to synthesize and or evaluate, or with significant lapses.</td>
</tr>
<tr>
<td>F Fail</td>
<td>Below 50%</td>
<td>Inadequate knowledge at Masters level, presenting less than 50% of the expected material (according to the model answer), and showing only a limited grasp of the basic concepts, with poor appreciation of the wider subject and little of evidence of synthesis or evaluation. &lt;br&gt; 35% Shows confused understanding of the question and presents less than 40% of the expected material (according to the model answer), in a context relevant to the question. &lt;br&gt; 25% Too inaccurate, too irrelevant, or too brief to indicate more than a vague understanding of the question, and presents less than a quarter of the expected material (according to the model answer).</td>
</tr>
</tbody>
</table>
model answer) in a context relevant to the question.

15% Answer presents only two or three sentences or facts that are correct and relevant to the question.

5% Answer includes at most one sentence or fact that is correct and relevant to the question.

0% Answer contains nothing that is correct and relevant to the question

Instruction to Candidates for Examinations
Students who are candidates for examinations are asked to note that all examinations are conducted in accordance with the College’s Academic Regulations, the Regulations for Programmes of Study and the Examination Regulations.

Instructions for exam candidates can be found here:

Academic Integrity and Academic Misconduct
As your programme of study continues, you will be taught the concept of academic integrity and how you can ensure that any work that you complete now, or in the future, conforms to these principles. This means that your work acknowledges the ideas and results of others, that it is conducted in an ethical way and that it is free from plagiarism.

Academic misconduct is the attempt to gain an academic advantage, whether intentionally or unintentionally, in any piece of assessment submitted to the College. This includes plagiarism, self-plagiarism, collusion, exam offences (cheating) or dishonest practice. Full details of the policy can be found at:


Definitions of the main forms of academic misconduct can be found below:

Plagiarism
Plagiarism is the presentation of another person’s thoughts, words, images or diagrams as though they were your own. Another form of plagiarism is self-plagiarism, which involves using your own prior work without acknowledging its reuse.

Plagiarism must be avoided, with particular care on coursework, essays, reports and projects written in your own time and also in open and closed book written examinations.
Where plagiarism is detected in group work, members of that group may be deemed to have collective responsibility for the integrity of work submitted by that group and may be liable for any penalty imposed, proportionate to their contribution.

**Collusion:**
This is the term used for work that has been conducted by more than one individual, in contravention of the assessment brief. Where it is alleged that there has been collusion, all parties will be investigated under the Academic Misconduct procedure.

**Exam offences**
Exam offences include behaviour such as bringing authorised material into an exam, attempting to communicate with others apart from the invigilator, trying to remove examination material without permission, taking an exam for someone else or getting someone else to take an exam for you.

**Dishonest practice**
Examples of dishonest practice include bribery, contact cheating (buying work from an essay mill or other individual to submit as your own), attempting to access exam papers before the exam, making a false claim for mitigating circumstances or providing fraudulent evidence, falsifying documentation or signatures in relation to assessment.
## 4. Board of Examiners

### Board of Examiners

<table>
<thead>
<tr>
<th>Role</th>
<th>Name</th>
<th>Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chair of BoE</td>
<td>Dr Mike Tennant</td>
<td>MSc Environmental Technology Course Director</td>
</tr>
<tr>
<td>Core Course</td>
<td>Dr Bill Sheate</td>
<td>Director CC, Deputy Director MSc, Director of Careers</td>
</tr>
<tr>
<td>Water Management</td>
<td>Claire Hunt</td>
<td>Convenor</td>
</tr>
<tr>
<td>Pollution Management</td>
<td>Dr Audrey de Nazalle</td>
<td>Convenor</td>
</tr>
<tr>
<td>Global Environmental Change and Policy</td>
<td>Zen Makuch/Mrs Karen Makuch</td>
<td>Convenor</td>
</tr>
<tr>
<td>Environmental Resource Management</td>
<td>Dr Alex Collins/Dr Caroline Howe/ Dr Vinogradova</td>
<td>Convenor</td>
</tr>
<tr>
<td>Environmental Economics and Policy</td>
<td>Dr Clive Potter/Dr Yiannis Kountouris</td>
<td>Convenor</td>
</tr>
<tr>
<td>Environmental Analysis and Assessment</td>
<td>Dr Martin Head</td>
<td>Convenor</td>
</tr>
<tr>
<td>Energy Policy</td>
<td>Dr Iain Staffell/Dr Paul Balcombe</td>
<td>Convenor</td>
</tr>
<tr>
<td>Business and the Environment</td>
<td>Dr Mike Tennant/Dr Louise Rickard</td>
<td>Convenor</td>
</tr>
<tr>
<td></td>
<td>Dr Tilly Collins</td>
<td>Women’s Tutor</td>
</tr>
</tbody>
</table>

### External Examiners

<table>
<thead>
<tr>
<th>Role</th>
<th>Name</th>
<th>Institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core Course</td>
<td>Dr Alan Bond</td>
<td>University of East Anglia</td>
</tr>
<tr>
<td>Water Management</td>
<td>Mark Gaterell</td>
<td>University of Portsmouth</td>
</tr>
<tr>
<td>Pollution Management</td>
<td>Jo Guy</td>
<td>Environment Agency</td>
</tr>
<tr>
<td>Global Environmental Change and Policy</td>
<td>Prof Duncan French</td>
<td>University of Lincoln</td>
</tr>
<tr>
<td>Environmental Resource Management</td>
<td>Felix Eigenbrod</td>
<td>University of Southampton</td>
</tr>
<tr>
<td>Environmental Economics and Policy</td>
<td>Laura Costanzo</td>
<td>University of Southampton</td>
</tr>
<tr>
<td>Environmental Analysis and Assessment</td>
<td>Simon Chenery</td>
<td>British Geological Survey</td>
</tr>
<tr>
<td>Energy Policy</td>
<td>Jonathan Radcliffe</td>
<td>University of Birmingham</td>
</tr>
<tr>
<td>Business and the Environment</td>
<td>Alan Murray</td>
<td>University of Edinburgh</td>
</tr>
</tbody>
</table>

It is common for Master’s level students to have some form of academic or social interaction with their external examiners at some point during or after their studies as well as during the assessment process itself.
It is inappropriate for you to submit complaints or representations direct to external examiners or to seek to influence your external examiners. Inappropriate communication towards an examiner would make you liable for disciplinary action.

A summary of External examiners reports from the previous academic year can be found here:

5. Location and Facilities

Imperial has a number of campuses in London and the South East. All have excellent travel links and are easily accessible via public transport.

**Your main location(s) of study will be:** Weeks Building, 16-18 Prince’s Gardens, Imperial College London, South Kensington London SW7 1NE

Tel: +44 (0)20 7594 9285 / +44 (0)20 759

**Location and orientation of the department**

Weeks Building Prince’s Gardens – numbers 16-18 - provide the focal point of the MSc in Environmental Technology. Located on the opposite side of Exhibition Road to the main campus, but close to the Ethos Sports Centre on the north side of Prince’s Gardens. There is a shop and Eastside Bar/cafe opposite the buildings in Prince’s Gardens.

The **MSc Common Room**

(your main base) is located in B03 and includes your main printing facilities and is located in the basement of the Weeks Building. It contains a kitchen and is next to a multifunctional computer/project lab in B01 (containing approximately 18 PCs).

**Toilets** are located downstairs in the basement of Weeks Building close to the Common Room.

Administration, academic and research staff and PhD students are located on the ground floor, 1st, 2nd, 3rd, 4th, 5th and 6th Floor of the Weeks Building. Members of the postgraduate office (e.g. the MSc Administrator) can be found in room G03 on the ground floor.

You will each be assigned to a **personal tutor** who you will meet initially with your tutorial group in Week 1 and individually later in the first week of term. After this, you will meet your tutor towards the middle of term to review progress, and at the end of term to discuss exam preparation. Your tutor will arrange these individual meetings personally.

Three 1.5-hour sessions are blocked out for small group seminar meetings from weeks 2 to 5. Only 3 x 1.5 hours of this time over that period will be taken up with the actual seminars and the rest of the time is for your preparation and private study. Similarly, parallel sessions are blocked out for Quantitative Skills (QS) Lectures and Practical’s and sign-up sessions, though again most of the time will be for private study.

The Core Course Lectures will be held around the South Kensington campus, in Sir Alexander Fleming Building, Sherfield Building (Read, Pippard, Sherfield Suite rooms), City and Guilds Building Electrical Engineering, Royal School of Mines, Blacket, Skempton, Huxley and others. The location of all classes is stated in the timetable. **You should familiarise yourself with the locations of these lecture theatres and it is your responsibility to arrive promptly for lectures. Other courses usually precede and/or follow our lecture sessions, so you will have to leave promptly at the end of each session. If you are late arriving you may be excluded to avoid disruption to others, and you may find it difficult to find an accessible seat.** Do not take food or drink (other than bottled water) into lecture theatres. **NO coffee cups!**
Any matters relating to changes in the MSc Core Course Timetable will be emailed to you and will be notified via the Outlook calendar and Blackboard announcements (see below), but you should check your emails and Blackboard daily for any updates (e.g. if a lecturer is ill and has to cancel or postpone at the last minute).

Facilities

CEP Information and Ground Rules

This section outlines some basic dos and don’ts, which are mostly common sense. We want CEP to be an informal and friendly place, without long sets of rules, but would ask you to take note of the following points so that everyone can continue to enjoy the Centre’s facilities in the most pleasant and productive way.

Fire doors - please make sure that all fire doors are always shut after you - do not wedge them open.

Maintenance

Please try to look after the tables and chairs and other furniture. If these are damaged, or breakages occur, please inform Marlon or Shane in the Postgraduate Office as soon as possible so that we can put matters right. It is also helpful if you let us know of any other maintenance problems in as a whole - for example, lights that don’t work properly, windows that don’t shut.

Use of Imperial College Notepaper

Students are not allowed to use Imperial College notepaper or envelopes for their own correspondence. Students should consult the Director, Administrator or Option Convenor before approaching outside organisations in writing - when doing so, the Postgraduate Office can provide you with a letter confirming that you are an MSc student studying in the Centre.

Stationery, printing and photocopying

All students must provide their own stationery and writing materials. CEP provides printing paper, as necessary, for students to print part of their course work. All paper needed during the production of the MSc project thesis must be provided by the students.

All printing and photocopying must be paid for by the individual student. In College this is done by charging money to your swipe card, which then allows you to print or photocopy anywhere in College, e.g. CEP’s computing suite or Central Library. During the Core Course only, the Centre will charge your card with up to £25 for you
to spend on photocopying/printing of Core Course materials during the Autumn Term. During the Core Course all slides and supporting written material will be provided on Blackboard where you can access it online and use as a resource as you would the library. It is up to you how much if any of it you choose to print. As an environmental department, this helps us to minimise wastage (of handouts not collected or discarded) and minimises the amount of photocopying more generally and therefore the amount of paper and toner used. It also encourages you to be selective about what material is really essential to have as hard copy, and encourages you to develop your note taking skills.

Communication with the Press

Any letter to the press written by students must have the student’s home address on the letter, not the CEP address. If the student is writing on a clearly student-related matter, they should see the Student Union, as they may be able to use Student Union notepaper. On no account is Imperial College notepaper to be used to express personal opinions.

Common Room

Please keep the Common Room tidy and always do your washing up. Please throw away rubbish in the bins provided. There is a coffee machine in the shop over the road, But CEP would encourage you to use a Keep Cup to avoid unnecessary waste. Students often set up a tea and coffee kitty. 10p is put in the kitty every time you have a cup of tea or coffee and this money is used to replace tea, coffee, sugar and milk when it runs out. It is your responsibility to buy supplies.

Bicycles

Bicycles are not allowed in the building and must not be chained to the railings. Currently the bicycle parking facilities are located in the Faculty Building. Access, which is from the Queen’s Tower Car Park, is controlled both on entry and exit by ‘swipe card’ and monitored by CCTV. All those using the store must therefore get their cards authorised in advance by contacting Security, using the form provided on that Department’s website at:

http://www3.imperial.ac.uk/estatesfacilities/reportrequest/onlineforms/cyclepark

The completed form should be forwarded to Security as instructed on the website. The bicycle description details on the form are needed to meet the requirements of insurers. Any change of bicycle should also be reported using the same form.

Bicycle owners are advised that spot checks will be carried out to ensure the proper use and security of the facility.

Finally, members of the College are reminded that, for health and safety and fire safety reasons and to avoid inconvenience to others, it is already College policy that cycles, apart from those specifically designed to fold compactly, are not permitted inside any building, with the exception of the Faculty Building cycle store.
We are currently working with College to have dedicated cycle parking provided for Weeks Building.

**Security**

All students will be issued with a College Identity Card shortly after Registration. This is a necessary feature of your life in College as it acts as your Students’ Union membership card, allowing you access to all the sports and union facilities, as well as a security pass allowing you access to appropriate parts of the College and a Library Card. Any loss must be reported to Security.

You will need your ID card to enter and leave the Princes Gardens after office hours. The main security lock goes on at 23.00 hrs before which you should have left the building, otherwise you will be locked in.

Please be particularly vigilant about your own security and that of your belongings. Please remember to keep any valuables locked up and never leave your belongings unattended.

The Security Office is situated in Room 150 Sherfield Building, Ext 48915.

**Smoking**

College is a no smoking zone which extends to and includes the whole of Prince’s Gardens.

**Photocopying/printing**

There is a printer/photocopier in the Common Room for student use, using your swipe card. Any fault should be reported to the Teaching Office. Additionally, there is a photocopy service by Service Point, located off the Walkway on the main campus and photocopiers and printers are available in the library.

**Computing**

14 computers for student use are available in the basement of Weeks Building in BO1 Project room. The department is serviced by ICT IT. Any technical difficulties can be resolved by contacting ICT Helpdesk: ICT helpdesk@imperial.ac.uk, tel. extension 49000.

**Activating your Imperial College account for the first time October 2018**

Welcome to Imperial College London. As a new member of College you will automatically be provided with a College username and email address. These enable you to do the following things, for example:

- send and receive e-mails
- log-on to the College network and Virtual Learning Environment e.g. (Blackboard)
- access electronic information services provided by the Library
There are three ways that you can activate your College username and email address and set up a password.

- **You are staying in a Hall of Residence:**
  You should follow the instructions supplied to open your browser and browse to an external webpage (e.g. www.google.co.uk). When you have done this you will be redirected to the College registration pages which have a link to https://www.imperial.ac.uk/ict/activateaccount

  You can purchase a network cable from the Student Union Shop or from a supplier such as PC World on Kensington High Street.

  *Students in Orient and Piccadilly Halls should find connection instructions in Hall Welcome Pack on arrival or ask their wardening team for further information.

- **You are not staying in a Hall of Residence:**
  If you are not in a Hall of Residence and this is your first day in College you can go to your departmental Teaching cluster/computer room and do the following:

  Enter the username activate and then the password Activate! (Note the Capital A and the ! at the end)

  This will automatically take you to https://www.imperial.ac.uk/ict/activateaccount

- **From outside College**

  Any problems with accessing electronic journals, books and databases services should be reported to the Library at https://imperial.service-now.com/library/. More information about online Library resources can be found on the Library website at http://www.imperial.ac.uk/admin-services/library/

  If you read this information for the first time at home or elsewhere away from College and you want to activate your College username and email address then just open your Internet browser and go to:

  https://www.imperial.ac.uk/ict/activateaccount

  Now please click the box accepting the Conditions of Use of IT Facilities at Imperial College. This is mandatory and you will not be able to proceed unless you do this. Having accepted the College terms and conditions, you will be asked for your full name, your date of birth and your College identifier (CID). This can be found on most official correspondence from College or on your College security card. Read the instructions on how to choose a strong password which satisfies the College password requirements and then enter a password twice.

  When you have completed the form please click on the Activate My Account button. If the details you have entered are correct your College computer account should be activated within a few seconds and your College username and email address will be displayed. Please write these down so you do not forget them.
If you have made a late entry to College or there have been problems with your College registration then it may take a few days before your College computer account can be set up. Please the above again a day or so later before reporting a problem.

If you have problems with activating your account, please contact the ICT service desk on Level 4 of the Sherfield Building, South Kensington Campus or your local campus Service Desk, locations and opening times can be found at http://www.imperial.ac.uk/ict/servicedesk/locationsandopeningtimes

The South Kensington Service Desk telephone number is 020 7594 9000 and it is open 08.30 - 18.00 Monday to Friday.

You can also email service.desk@imperial.ac.uk giving your name and CID, a short description of the problem and they will get back to you as soon as possible.

Any problems with accessing electronic journals, books and databases or with the Athens access service should be reported to the Central Library Help Desk library@imperial.ac.uk. More information about Electronic Library Services can be found on the Library website at http://www.imperial.ac.uk/library/digitallibrary
Eating and drinking

There is Eastside bar and diner opposite the department, on the left in Princes Gardens as well as a small grocery shop. On campus, immediately over Exhibition Road, there is the College Cafe next to the Business School, serving sandwiches, snacks and drinks.

Elsewhere on campus, there is the Junior Common Room (JCR) in the Sherfield Building, which has a hot food bar, serving breakfast from 08.30 and lunch specials. Next door is the ‘QT’ snack bar, open 08.30-17.30, Monday-Friday. ‘The Senior Common Room’ in the Main Dining Hall is on level 1 of the Sherfield Building and offers lunch from 12.00. The Main Library, on the Ground Floor, serves hot and cold food all day. A range of snacks and sandwiches is available in the ground floor cafe of the Biomedical Sciences Building. There are also a couple of pubs nearby: the Queen’s Head and the Bricklayer’s Arms. There is the ‘Eastside’ bar in Prince’s Gardens, which also serves food. And there is a shop next door to it.

Imperial College Union

The Union Bar is in the east corner of Beit Quad. Da Vinci’s, another bar, serves hot and cold meals at lunchtime and during the evening. On the left of the main entrance of the union building is ‘dB’s’, which is used as a lounge and catering area during the day and as an entertainment venue at night. It houses a giant video screen and a baguette bar, open between 10.00-14.00. The Union Shop and Newsagent are on the Main Walkway.

Shuttle bus

A free shuttle bus runs between our South Kensington, White City and Hammersmith Campuses on weekdays. Seats are available on a first-come, first-served basis. You need to show your College ID card to board. Download the timetable at:

www.imperial.ac.uk/estates-facilities/travel/shuttle-bus

Maps

Campus maps and travel directions are available at:

www.imperial.ac.uk/visit/campuses

Accessibility

Information about the accessibility of our South Kensington Campus is available online through the DisabledGo access guides:

www.disabledgo.com/organisations/imperial-college-london-2
Smoke-Free Policy

All Imperial campuses and properties are smoke-free. This means that smoking by staff and students is not permitted on or within 20 metres of College land. The policy covers all College properties, including student accommodation and sports grounds. Please do not smoke directly outside the building. Prince’s Gardens opposite The Weeks Building a nice spot for smoking

www.imperial.ac.uk/smoke-free
6. Placements

The College defines a placement as:

“work experience, assessed project work, a period of course-based study or a period of research (for which academic credit is awarded and/or where the student remains subject to College student regulations during the relevant period) and where there is a transfer of direct supervision of the student to a third party (i.e. where a member of staff at the third party acts as the day-to-day supervisor/manager) for a period of two weeks or more.”

Academic departments are responsible for managing any study or work placement which forms part of your degree programme. It is expected that you will contribute to the process of planning your placement.

For guidance on this, see the College’s Placement and Learning Policy and associated good practice:

www.imperial.ac.uk/about/governance/academic-governance/academic-policy/placement-learning

IMPORTANT - The Department has strict rules on placements and internships during the academic year – most full-time internships during the summer term, for example, are unlikely to be compatible with completing a satisfactory thesis and therefore will not be permitted. You must seek advice and approval from your supervisor/Option convenor/Director with regard to any internship/placement opportunity. Further details are provided in the Project Guidelines issued during the Option term.

Placements/internships during the Autumn and Spring terms are not possible because they are fully timetabled.

The Careers Service provides support on placements and internships, but within our own Departmental guidelines.

Dr Rob Gross is the Director of Summer Term Projects and should be consulted in case of any queries.

For more information on placements visit the Placements website:

www.imperial.ac.uk/placements

If you are considering/planning a placement outside the UK you should also refer to the Placement Abroad Handbook:

www.imperial.ac.uk/placements/information-for-imperial-college-students
7. Working While Studying

If you are studying full time, the College recommends that you do not work part-time during term time. If this is unavoidable we advise you to work no more than 10–15 hours per week, which should be principally at weekends and not within normal College working hours.

Working in excess of these hours could impact adversely on your studies or health.

If you are here on a Tier 4 visa you can work no more than 20 hours a week during term time. Some sponsors may not permit you to take up work outside your studies and others may specify a limit.

If you are considering part-time work during term time you are strongly advised to discuss this issue with your supervisor or Personal/Senior Personal Postgraduate Tutor. If you are on a Tier 4 visa you should also seek advice from the International Student Support team regarding visa limitations on employment.

The College’s examination boards will not normally consider as mitigating circumstances any negative impact that part-time work during term-time may have had on your performance in examinations or in other assessed work. Examinations or vivas cannot be rescheduled to accommodate your part-time working arrangements.
8. Health and Safety

You are responsible for looking after your own health and safety and that of others affected by your College-related work and leisure activities. You must:

- comply with all local and College policies, procedures and codes of practice and with the arrangements which the College has in place to control health and safety risks.
- ensure that your activities do not present unnecessary or uncontrolled risks to yourself or to others.
- attend appropriate induction and training.
- report any accidents, unsafe circumstances or work-related ill health of which you become aware to the appropriate person.
- not interfere with any equipment provided for Health and Safety.
- inform your supervisor or the person in charge of the activity in cases where you are not confident that you are competent to carry out a work or leisure activity safely, rather than compromise your own safety or the safety of others.

The College’s Health and Safety Statement can be found at:


The College Safety Department

The Safety Department offers a range of specialist advice on all aspects of safety. This includes anything which you feel might affect you directly, or which may be associated with teaching, research or support service activities.

The College’s activities range from the use of hazardous materials (biological, chemical and radiological substances) to field work, heavy or awkward lifting, driving, and working alone or late.

All College activities are covered by general health and safety regulations, but higher risk activities will have additional requirements.

The Safety Department helps departments and individuals ensure effective safety management systems are in place throughout the College to comply with specific legal requirements.

Sometimes the management systems fail, and an accident or a near-miss incident arises; it is important that we learn lessons from such situations to prevent recurrence and the Safety Department can support such investigations. All accidents and incidents should be reported online at:

www.imperial.ac.uk/safety
To report concerns or to ask for advice you should contact your programme director, academic supervisor or departmental safety officer in the first instance. You may also contact the Safety Department directly.

**Occupational Health requirements**

The College Occupational Health Service provides services to:

- protect health at work
- assess and advise on fitness for work
- ensure that health issues are effectively managed

The Service promotes and supports a culture where the physical and psychological health of staff, students and others involved in the College is respected, protected and improved whilst at work.

[www.imperial.ac.uk/occupational-health](http://www.imperial.ac.uk/occupational-health)

**Key items to be aware of:**

- Reporting accidents and near misses while studying at Imperial
  Students need to be reassured that the College operates a no blame culture and all incidents, no matter how minor, need to be reported to their supervisor and / or Shane Murphy. If the incident needs to be reported using the online reporting system (SALUS) it can be added to the system and an investigation into how to prevent a similar incident in the future can take place with the Faculty Safety Team.

  Students doing projects in non-Imperial premises or on fieldwork in the UK or abroad must also report any issues concerning their security, health or safety at the earliest opportunity to their project supervisor and Shane Murphy.

- Personal Emergency Egress Plans (PEEPS)
  If during the course of your study you get a temporary impairment (broken ankle, leg or similar) which restricts your ability to evacuate from the building when there is an emergency (i.e. fire alarm) you must notify Shane Murphy so that a Personal Emergency Egress Plan can be put into place. For more information go to: [http://www.imperial.ac.uk/estates-facilities/health-and-safety/fire-safety/peeps/](http://www.imperial.ac.uk/estates-facilities/health-and-safety/fire-safety/peeps/)

- Lone working
  CEP is an office based environment so is low risk. It is anticipated that at times you may be working in an office environment in CEP while alone. If you have any medical condition that would put you at an increased risk while working in a low risk environment alone ensure you discuss this with your tutor or supervisor. If you work alone in an office environment ensure you know the nearest emergency exit and assembly point so that in the event of a fire alarm you can leave easily.

- Extended working hours
  The CEP buildings are accessible with your security card from 07.00 – 00.00 Monday to Sunday (excluding public holidays). All work outside of these times must be planned to be done at your accommodation or the library.

- Safety Training
You will have a Primary Induction in October when you start your course. If you start during the year your supervisor or Shane Murphy will provide you with a Day 1 induction to the CEP area.

Training in offsite risk assessment and fieldwork First Aid will be available for those that require it depending on their project choices.

All students need to complete the online fire safety course. Enrol and complete the course via this link: [http://www.imperial.ac.uk/staff-development/safety-training/safety-courses-/fire-safety-and-awareness-training-e-learning-course/](http://www.imperial.ac.uk/staff-development/safety-training/safety-courses-/fire-safety-and-awareness-training-e-learning-course/)

All student need to complete the online Risk Assessment Foundation Training (RAFT) course and Month One Safety Training (MOST) course. Enrol and complete the course test via the link below:

RAFT: [http://www.imperial.ac.uk/safety/raft/frameset/frameset.htm](http://www.imperial.ac.uk/safety/raft/frameset/frameset.htm)
MOST: [http://www.imperial.ac.uk/safety/most/](http://www.imperial.ac.uk/safety/most/)

- Project planning
  When planning projects follow the guidance below to identify the key safety procedures you need to follow:

**Project types - assessments and induction summary**

### Project in an Imperial College
- *Hazardous Area / Local Laboratory Induction record to be completed for lab based students.
- *Risk assessments for lab work to be in place before the project starts.

- Day 1 induction to be completed.
- Computer safety checklist to be completed for office based projects.

### Project hosted in non-Imperial premises in the UK
- Read guidance on ‘Offsite Work’.
- Complete the Offsite assessment for Hosted work: [Off Site Hosted Research & Teaching Activities Form (Hosted1)](http://www.imperial.ac.uk/safety/raft/frameset/frameset.htm) and return to FoNS Safety Team at least three weeks before work starts for review.

### Fieldwork project on Silwood Park Campus
- Day 1 induction to be completed for all students.
- Go to: [Silwood Fieldwork Experiments page](http://www.imperial.ac.uk/safety/raft/frameset/frameset.htm) and complete the application form and the fieldwork risk assessment.
- Return both documents to the Ecological Analyst at least three weeks before project start date.

### Fieldwork project in the UK.
- Read guidance on ‘Offsite Work’.
- Assess fieldwork using the College Fieldwork Risk Assessment Form (FW1) and send to Faculty Safety Team at least three weeks before departure date.
- Where possible attend the Fieldwork First Aid course.

### Project abroad (hosted or fieldwork)
- Read guidance on ‘Offsite Work’.
- Assess fieldwork using the College Fieldwork Risk Assessment Form (FW1) and send to Faculty Safety Team at least three weeks before departure date.
- Attend Fieldwork First Aid Training.
- Work in countries where the UK Foreign and Commonwealth Office advise...
The College Safety Department

The Safety Department offers a range of specialist advice on all aspects of safety. This includes anything which you feel might affect you directly, or which may be associated with teaching, research or support service activities.

The College’s activities range from the use of hazardous materials (biological, chemical and radiological substances) to field work, heavy or awkward lifting, driving, and working alone or late.

All College activities are covered by general health and safety regulations, but higher risk activities will have additional requirements.

The Safety Department helps departments and individuals ensure effective safety management systems are in place throughout the College to comply with specific legal requirements.

Sometimes the management systems fail, and an accident or a near-miss incident arises; it is important that we learn lessons from such situations to prevent recurrence and the Safety Department can support such investigations. All accidents and incidents should be reported online at:

💻 www.imperial.ac.uk/safety

To report concerns or to ask for advice you should contact your programme director, academic supervisor or departmental safety officer in the first instance. You may also contact the Safety Department directly.

Occupational Health requirements

The College Occupational Health Service provides services to:

- protect health at work
- assess and advise on fitness for work
- ensure that health issues are effectively managed

The Service promotes and supports a culture where the physical and psychological health of staff, students and others involved in the College is respected, protected and improved whilst at work.

💻 www.imperial.ac.uk/occupational-health
9. College Policies and Procedures

Regulations for Students
All registered students of the College are subject to the Regulations for Students, the College Academic and Examination Regulations and such other regulations that the College may approve from time to time.

- [www.imperial.ac.uk/about/governance/academic-governance/regulations](http://www.imperial.ac.uk/about/governance/academic-governance/regulations)
- [www.imperial.ac.uk/students/terms-and-conditions](http://www.imperial.ac.uk/students/terms-and-conditions)

Academic Feedback Policy
We are committed in providing you with timely and appropriate feedback on your academic progress and achievement, enabling you to reflect on your academic progress. During your study you will receive different methods of feedback according to assessment type, discipline, level of study and your individual need. Further guidance on the Policy of Academic Feedback can be found on the Academic Governance website:

- [http://www.imperial.ac.uk/media/imperial-college/administration-and-support-services/registry/academic-governance/public/academic-policy/academic-feedback/Academic-feedback-policy-for-taught-programmes.pdf](http://www.imperial.ac.uk/media/imperial-college/administration-and-support-services/registry/academic-governance/public/academic-policy/academic-feedback/Academic-feedback-policy-for-taught-programmes.pdf)

Provisional Marks Guidance
Provisional marks are agreed marks that have yet to be ratified by the Board of Examiners. These results are provisional and are subject to change by the Board of Examiners. The release of provisional marks is permitted except in certain circumstances. Further information can be found in the Guidelines for Issuing Provisional Marks to Students on Taught Programmes:


Late Submission Policy
You are responsible for ensuring that you submit your coursework assessments on time and by the published deadline. Any piece of assessed work which is submitted beyond the published deadline (date and time) would be classed as a late submission. Further guidance on Late Submission of Assessments can be found on the Academic Governance website:

- [https://www.imperial.ac.uk/media/imperial-college/administration-and-support-services/registry/academic-governance/public/academic-policy/marking-and-moderation/Late-submission-Policy.pdf](https://www.imperial.ac.uk/media/imperial-college/administration-and-support-services/registry/academic-governance/public/academic-policy/marking-and-moderation/Late-submission-Policy.pdf)
Academic Misconduct Policy and Procedures
It is important that you learn how to properly attribute and acknowledge the work, data and ideas of others. Plagiarism is scientific misconduct, and students whose assessments can be shown to contain plagiarism are subject to penalties as outlined in the College’s Misconduct Policy and Procedures.

Appeal and Complaints Procedures
We have rigorous regulations in place to ensure assessments are conducted with fairness and consistency. In the event that you believe that you have grounds for complaint about academic or administrative services, or wish to appeal the outcome of an assessment or final degree, we have laid out clear and consistent procedures through which complaints and appeals can be investigated and considered:

Student Disciplinary Procedure
The College has the right to investigate any allegation of misconduct against a student and may take disciplinary action where it decides, on the balance of probabilities, that a breach of discipline has been committed. The general principles of the Student Disciplinary Procedure are available on the College website:

Intellectual Property Rights Policy
For further guidance on the College’s Intellectual Property Rights Policy is available on the College website:

Use of IT Facilities
View the Conditions of Use of IT Facilities:
10. Well-being and Advice

Student Space
The Student Space website is the central point for information on health and well-being.

www.imperial.ac.uk/student-space

Departmental support and College tutors
Your Department has a system of academic and pastoral care in place to make sure you have access to the appropriate support throughout your time here. This includes:

Personal Postgraduate Tutor
The Department’s Personal Postgraduate Tutor can offer pastoral support and advice. You can arrange to have a meeting with them at any time during your studies – what you discuss will be completely confidential.

If necessary they will direct you to an appropriate source of support. Personal tutorials are intended to provide pastoral support to students, rather than having a specific educational role. You can arrange to have a meeting with him/her at any time during your studies – what you discuss will be completely confidential. Your personal tutor will be available to you throughout the academic year of the MSc course. All being well you will have little cause to see your personal tutor, other for scheduled meetings. However, they are there if you have particular personal or family problems or, for example, find yourself in financial difficulty. Your tutor can also refer you to the other services within College who can help you.

You will meet with your personal tutor, and with the rest of your tutorial group, on the first day of term. At this time, individual meetings will be arranged for later in the week. Tutorial groups are drawn from across the Options, providing an opportunity to meet colleagues with a range of interests and backgrounds.
You will meet with your personal tutor at least three times during the Core Course (including your first week individual meeting). The personal tutor then is also a first point of contact if you have specific problems or worries. The Senior Tutor, Dr Yiannis Kountouris, is an alternative point of contact and can help you and/or your personal tutor with difficult problems or those that require referral elsewhere in College. Dr Tilly Collins is the tutor for women.

Personal tutor groups will be announced during the Senior Tutor's talk on the first day of term and will also be available on Blackboard. Most tutors have two groups of tutees and you need to be clear which personal tutor group is yours.

**College tutors**

College tutors operate outside of any department. They provide guidance and assistance to students in regard to welfare issues and are also involved in College disciplinary matters involving students. For more information see:

- [www.imperial.ac.uk/student-space/here-for-you/college-tutors-and-departmental-support](http://www.imperial.ac.uk/student-space/here-for-you/college-tutors-and-departmental-support)

**Advice services**

The tutor system is complemented by a College-wide network of advice and support. This includes a number of specialist services.

**Careers Service**

The Careers Service has strong links to your Department and you will have a named Careers Consultant and Placement and Internship Adviser who will run both group sessions and individual meetings within your Department. You can arrange to meet with your linked Careers Consultant or Placement and Internship Adviser either in your Department or centrally on Level 5 Sherfield where the Careers Service is based.

Visit the Career Service’s website to:

- Book a careers appointment
- Find resources and advice on successful career planning

- [www.imperial.ac.uk/careers](http://www.imperial.ac.uk/careers)
CEP Careers Information

Graduates of the MSc in Environmental Technology are excellently placed to gain employment in a wide range of organizations dealing with natural resources, conservation and international development. Over 85% of graduates gain employment in the environmental field within months of graduating. Employment is diverse with consulting companies, government, and non-governmental organizations attracting similar shares of graduates.

In order to support you with the process of preparing for job applications and career prospects, you have access to the College Careers Service, located on Level 5 of the Sherfield Building. It has a Careers Library and five Careers Advisers who are available by appointment to talk to you about career possibilities. Jason Yarrow is the Deputy Director of the Careers Service with special responsibility for the Centre for Environmental Policy and the MSc course in particular. He will be introducing the service to you on Thursday 4th October in the TS2 session. He or a colleague will be making themselves available for CV clinic appoints in Weeks Building during the year (from the Option Term onwards)– you will be able to sign up on JobsLive, the Careers Service’s online system for booking events and appointments, searching for jobs and employers (on the Careers Service website) during the Core Course. At other times you can make an appointment to see an advisor, or you can visit the Careers Service or call Ext 48024, weekdays between 10.00 and 17.15 hrs. See the Careers Service website at http://www.imperial.ac.uk/careers where you can book appointments online through Jobs Live. The Careers Service offers CV advice, mock interviews for job applications and access to a wide range of materials and resources. Do make use of them throughout the year.

Dr Bill Sheate is the Director of Careers for the MSc Course (and Departmental Careers Advisor). Both he and Jason Yarrow will give presentations to you during the Option/Summer terms on careers. Bill can also be contacted to arrange an appointment to discuss more specific issues not otherwise available from the Careers Service, e.g. the challenge of changing career into the environmental sector for more mature students, etc. Bill has particular experience of the voluntary/NGO sector and the private/SME consultancy sector as well as multi-tasking multiple part-time jobs.

There is a specific Careers page on Blackboard where seminars and events are posted.

The Careers Service also organises careers talks and workshops throughout the Autumn and Spring Terms both on general topics, such as interviewing techniques and filling out application forms, and specific aspects, such as careers in particular industries. They also have Internships and Placement officers who will also be offering appointments in Prince’s Gardens later in the year. Bill and Jason organise specific MSc Careers events, including sessions/workshops on Environmental Careers, Advice for Career Changers, Environmental Consultancy, Careers ‘Speed Dating’ (with employers), and an end of year Careers Clinic. A tailored Careers Handbook for MSc Environmental Technology is available on Blackboard along with other specialist careers advice.
This year (2018-19) sees the second year of the **CEP Alumni Mentoring scheme** where current year students can be paired with a member of the alumni to understand more about what the world of work is like, and discover the inside knowledge on a specific sector/company/organisation. There will be an application process and further details will be provided by Bill Sheate in the Introduction to Careers and Alumni session (TS2) on Thursday 5 October.

CEP alumni have access to the College Careers Service for three years after graduating and CEPalumni are able to access the CEP jobs list and email network for a lifetime (!) through our fantastic international alumni network. Bill is happy to see past alumni if they need any careers advice later in life.

Every year companies visit Imperial College to interview prospective employees - details will be sent to you by the Careers Service or will be available on their website. Also listed are companies which are giving recruitment presentations both at the College and on their own premises. These presentations begin early in the Autumn Term, although these tend to be geared more for undergraduates. It is worth checking through the listings to see if there are any companies to which you may be interested in applying. For the presentation programme and other information visit the Careers Service Website.

**Counselling and Mental Health**

The Student Counselling and Mental Health Advice Service offers short-term counselling to all registered students. The service is free and confidential. Counsellors are available at the South Kensington, Hammersmith and Silwood Park Campuses.

[www.imperial.ac.uk/counselling](http://www.imperial.ac.uk/counselling)

London Nightline is a confidential listening and information service, run by student volunteers for students, and is supported by Imperial. Open from 6pm-8am every night of term time, well trained volunteers who know university isn't always easy are there to take your calls, for whatever is on your mind. Call 0207 631 0101, text 07717 989 900, Skype londonnightline or nightline.chat. Or you can email us at: [listening@nightline.org.uk](mailto:listening@nightline.org.uk)

Contact [listening@nightline.org.uk](mailto:listening@nightline.org.uk) or call +44 (0)20 7631 0101.

In addition to this, there is there is an organisation called the **Samaritans** – the main number 08457 90 90 90 [http://www.samaritans.org/how-we-can-help-you](http://www.samaritans.org/how-we-can-help-you)

This organisation was originally set up to help people who feel suicidal. However, as it says on their website, *it doesn't matter who you are, how you feel, or what has happened. If you feel that things are getting to you, get in touch.*
**Financial support and tuition fees**

If you’ve got any questions about student financial support (loans, scholarships and research council studentships, US and Canadian loans) then contact the Student Financial Support team:

- 020 7594 9014
- student.funding@imperial.ac.uk

If you suddenly find yourself in financial difficulties or experience an unexpected change in circumstances, you may be eligible to apply for emergency financial help through the Student Support Fund. The Fund offers a one-off payment of up to £2,000 to cover such emergencies as last minute accommodation and travel necessities, equipment and childcare. It does not have to be repaid.

- www.imperial.ac.uk/students/fees-and-funding/student-support-fund

For tuition fees queries, contact the Tuition Fees team:

- 020 7594 8011
- tuition.fees@imperial.ac.uk

**Imperial College Union (ICU) Advice Centre**

Imperial College Union runs the Advice Centre independently of the College with advisers on hand to provide free, confidential, independent advice on a wide range of welfare issues including housing, money and debt, employment and consumer rights, and personal safety.

- www.imperialcollegeunion.org/advice

**Student Hub**

The Student Hub represents a single point of contact for all key administrative information and support. The Student Hub team can help you with enquiries about:

- Accommodation (including checking contracts for private accommodation)
- Admissions
- International student enquiries
- Research degrees
- Student financial support
- Student records
- Tuition fees
Health services

NHS Health Centre and finding a doctor

Even if you’re fit and healthy we recommend that you register with a local doctor (GP) as soon as you arrive in London. For help finding your nearest GP see the Student Space website:

- www.imperial.ac.uk/student-space/here-for-you/find-a-doctor

There is an NHS Health Centre on our South Kensington Campus which you may visit during clinic hours if you’re feeling unwell. Students living within the practice catchment area are encouraged to register with the Centre.

- www.imperialcollegehealthcentre.co.uk

NHS Dentist (based in the Health Centre)

Imperial College Dental Centre offers a full range of NHS and private treatment options.

- www.imperial.ac.uk/student-space/here-for-you/dentist

Disability support

Disability Advisory Service

The Disability Advisory Service provides confidential advice and support for all disabled students and students with specific learning difficulties.

If you think you may have dyslexia or another specific learning difficulty but have never been formally assessed, the Disability Advisory Service offers initial screening appointments.

- Room 566, Level 5, Sherfield Building, South Kensington Campus
- 020 7594 9755
- disabilities@imperial.ac.uk
- www.imperial.ac.uk/disability-advisory-service
At Imperial College we recognise that studying at university can be a challenge, especially if you have a disability. We are keen that you have every opportunity to fulfil your potential and graduate with the degree you deserve. It is therefore important that you let us know about any disability, specific learning difficulty or health problem as soon as possible so that we can give expert advice and support to enable you to do this.

Some people never think of themselves as having a disability, but students who have experienced any of the issues listed below have found that a little extra help and support has made all the difference to their study experience.

- Specific learning difficulties (such as dyslexia, dyspraxia, AD[H]D)
- Autistic spectrum disorder (such as Asperger's)
- Deafness or hearing difficulties
- Long term mental health difficulties (such as chronic anxiety, bipolar disorder, depression)
- Medical conditions (such as epilepsy, arthritis, diabetes, Crohn's disease)
- Physical disabilities or mobility impairments
- Visual difficulties

The Disability Advisory Service works with individual students no matter what their disability to ensure that they have the support they need. We can also help if you think that you may have an unrecognised study problem such as dyslexia. Our service is both confidential (information about you is only passed on to other people in the university with your agreement) and individual in that any support is tailored to what you need.

Some of the sorts of things we can help with are:

- Being an advocate on your behalf with others in the College such as your departmental liaison officer senior tutor or exams officer, the accommodation office or the estates department
- Checking that your evidence of disability is appropriate and up-to-date
- Arranging a diagnostic assessment for specific learning difficulties
- Help with applying to the College for the cost of an assessment
- Help with your application for the Disabled Students Allowance (DSA) see below
- Helping students not eligible for the Disabled Students Allowance in obtaining support from other sources
- Help with arranging extra Library support
- Supporting applications for continuing accommodation for your second or later years

**Departmental Disability Officers**

Departmental Disability Officers are the first point of contact within your department. They can apply for additional exam arrangements on your behalf, and will facilitate support within your Department.
Your Disability Liaison Officer: Senior Tutor, Dr Yiannis Kountouris

The Senior Tutor is your point of contact within your department and is there to help you with arranging any support within the department that you need. Dr Kountouris is also the person who will apply for Special Examination arrangements on your behalf. You need to contact him without delay if you think that you may need extra time or other adjustments for your examinations. Please see the below section on CEP disclosure procedures.

More information on Departmental Disability Officers is available at:

www.imperial.ac.uk/disability-advisory-service/support/ddos

More information on procedures for the consideration of additional exam arrangements in respect of disability is available at:


Disabled Students Allowance:
http://www3.imperial.ac.uk/disabilityadvisoryservice/supportforstudents/dassupport

Students who are home for fees and who have a disability can apply for a grant called the Disabled Students Allowance which can pay any extra costs that are a direct result of disability. This fund is not means-tested and is also a grant not a loan so any home student with a disability can apply and will not be expected to pay it back. Remember students with unseen disabilities such as mental health difficulties, dyslexic type difficulties or long term health problems are also eligible for this fund.

FURTHER INFORMATION ON DYSLEXIA

Dyslexia is a common specific learning difficulty that is often supported by an additional allowance of time in examinations. Many students will be familiar with procedures for requesting extra time at other universities. The system at Imperial College is very similar to that elsewhere but please note the following:

- All requests must be supported by Psychological Assessment Report made by a qualified educational psychologist
- The Psychological Assessment Report must have been conducted after the applicant was sixteen years of age, and be no more than ten years old.
If you suspect you may be dyslexic, or need to arrange for a Psychological Assessment Report, please contact the Disability Advisory Service as soon as possible.
Library and ICT

Using Library resources for your research

Your librarian is Katharine Thompson who is available to answer all your questions by email, phone or personal appointment. Katharine will also provide training sessions during the year to help you get the most from the resources and services the library has to offer.

Contact details for Katharine and other library staff can be found at http://www.imperial.ac.uk/admin-services/library/subject-support/environment/

The Central Library is next to the Queen’s Lawn and is open 24 hours a day. You are automatically registered with the library and your College ID card is your library card - use it to swipe into the library, borrow books and operate our printer-copiers.

You may borrow up to 40 books in total and these will automatically be renewed for up to one year, providing they are not requested by another user. You’ll receive a regular email from the library detailing all the items you have on loan to help you keep track.

Use Library Search http://www.imperial.ac.uk/library/search to find books, e-books, journal articles, theses and conference papers, manage your library account and save lists of useful items.

The library has a range of different study zones; each floor is designated as either group, quiet or silent study to help everyone find their own preferred work space. Our library attendants regularly patrol all floors and will be pleased to help maintain the study environment.

There are PC clusters and printer-copiers on levels 1, 2 and 4. Wireless and extra power outlets are available if you wish to use your own device.

The library has an extensive collection of e-resources, including journals, books and specialist databases. Most of our e-resources can be accessed off-site, allowing you to work from home or from another location.

Lots more information about the library and the services it offers can be found on the website: http://www.imperial.ac.uk/admin-services/library/

Additional information will be posted on the Core Course Blackboard site.

Central Library opening hours

Term Time: Open 24 hours, except Fridays when it closes at 23.00 and reopens on Saturdays at 10.00.

Vacations: Opening hours are reduced during the vacations. Please visit the library website for details.

Information and Communications Technologies (ICT)
If you're having problems with technology (including computers, laptops and mobile devices), you can get help from ICT’s Service Desk.

📞 020 7594 9000  
🖥️ www.imperial.ac.uk/ict/service-desk

**Software shop**

The Software shop offers a variety of general and subject specific software programs and packages for free or at a discounted price for Imperial students.

🖥️ www.imperial.ac.uk/admin-services/ict/shop/software

**Library services**

The Central Library at South Kensington is open around the clock pretty much all year. Make sure you find out who your departmental librarian is as they'll be able to help you find resources for your subject area. Also, don’t forget to check out the Library’s range of training workshops and our other campus libraries for access to specialist medicine and life sciences resources. Alongside these physical spaces and resources, the Library provides over 170,000 electronic books, journals and databases available both on and off campus and a free document delivery service to help you source books and articles from around the UK and the rest of the world:

🖥️ www.imperial.ac.uk/library

**Religious support**

The Chaplaincy Multi-faith Centre has chaplains from many different religions, as well as prayer rooms and information on places of worship. In addition, it runs meditation classes and mindfulness workshops for stress management. There is a student-run Islamic prayer room on campus and separate areas available for male and female Muslims.

🖥️ www.imperial.ac.uk/chaplaincy

**Support for international students**

**English language support**

The Centre for Academic English provides free in-sessional English courses for international students while they are studying. These include classes and workshops on academic language, social language, the four skills of reading, writing, listening and speaking, 1-1 consultations with a tutor to work on a piece of academic writing or an oral presentation, self-study resources in the VLE Blackboard, and the Conversation Project, which partners students with a native-speaker volunteer to practise social and conversational English.
International Student Support team

Students from outside the UK make up around half of our student population, so our International student Support team offers year-round support to help our international students settle into Imperial life. This includes UK visa and immigration advice and trips to different places of interest.

www.imperial.ac.uk/study/international-students
11. Student Records and Data

The Student Records and Data Team are responsible for the administration and maintenance of the student records for all students studying at the College. This includes enrolments, programme transfers, interruption of studies, withdrawals and processing of examination entry for research degree students. The team also use this information to fulfill reporting duties to the Student Loans Company, Transport for London and the UKVI, as well as other external bodies.

The Team is responsible for the processing of student results and awards on the student record system as well as the production and distribution of academic transcripts and certificates of award.

The Student Records and Data Team produce a variety of standard document requests for both current and previous students including council tax letters, standard statements of attendance and confirmation of degree letters.

Student records and examinations

📞 +44 (0)20 7594 7268
💌 records@imperial.ac.uk

Degree certificates

📞 +44 (0)20 7594 8037
💌 certificates@imperial.ac.uk
12. Work-life Balance

The pace and intensity of postgraduate study at Imperial can be demanding so it’s important to find time for outside interests.

Imperial College Union
The Union’s range of 380+ student-led clubs, societies and projects is one of the largest of any UK university, opening up lots of ways for you to enjoy your downtime.

[link](https://www.imperialcollegeunion.org/about-us)

Graduate Students’ Union
The Graduate Students’ Union is the postgraduate arm of Imperial College Union. The GSU works alongside the Imperial College Union President to ensure that the requirements of postgraduate students are catered for. It also organises a number of academic and social events during the year.

Physical Activity Sport
Imperial College has a wide range of sports and activities on offer that cater for all standards and abilities. We have a recreational activity offer, competitive sports teams and an elite sport programme. We are dedicated to ensuring we have a diverse, inclusive and exciting offer for all.

With an annual fee of £30 you will get use of the gym and swimming facilities on our campuses.

[link](https://www.imperial.ac.uk/sport)
13. Student feedback and representation

Feedback from Students
The College and Union is committed to continually improving your education and wider experience and a key part of this is your feedback. Feedback is thoroughly discussed by your student representatives and staff.

Student feedback and evaluation of provision is an essential part of the quality assurance process for the MSc in Environmental Technology.

This relates to both students receiving feedback and also the need for reflection with students giving feedback.

Feedback to Students
The role of feedback in the learning process is to inform of where and how learning and performance can be improved. Feedback on learning can come from fellow students, lecturers, support staff such as demonstrators, external speakers/experts or the student themselves. The course has a number of feedback mechanisms to facilitate this, including:

- Written feedback on students’ individual work, or the work of group of students.
- Verbal feedback either to individuals or groups of students through the tutorial and the option groups.
- Direct feedback in lectures or workshops
- Feedback from external experts and panel members for coursework and its assessment (reports and presentations)
- Feedback from exams through marking and discussions with the Personal Tutor for the Core Course and option convenor(s) for the Option term
- Overall performance feedback in discussion with the Personal Tutor

In general, our feedback mechanisms focus on the activity and what was expected when this activity is assessed, aim to be constructive, providing meaningful information to students about their learning and correct misunderstandings, identify and reinforce students’ strengths, guide them on how to improve and allow them to take a more active role in their learning.
Feedback from students

We value all feedback we receive and we aim to communicate what it means and how we use it to improve the course. We hope that the process is not too onerous, and therefore utilise a series of different mechanisms throughout the year.

The student representatives and the Staff Student Committee play a central role to the continuous and systematic dialogue between our teaching teams and our students, which aims to enhance and continuously improve our course.

Student Representatives are recruited from every department to gather feedback from students to discuss with staff. More information about the role, and instructions on how to become an academic representative, are available on the Imperial College Union (ICU) website.

www.imperialcollegeunion.org/your-union/your-representatives/academic-representatives/overview

The Staff-Student Committee is designed to strengthen understanding and improve the flow of communication between staff and students and, through open dialogue, promote high standards of education and training, in a co-operative and constructive atmosphere. College good practice guidelines for staff-student committees are available here:

www.imperial.ac.uk/about/governance/academic-governance/academic-policy/student-feedback

We hold student rep elections at the end of the 2nd week of the Core Course term, following student hustings in the first week. Three student reps are elected using the Single Transferable Vote (STV) proportional electoral system. We actively encourage candidates to stand from across the community, e.g. from overseas and across different Option interests. In additional a volunteer computer rep is appointed to liaise directly with ICT over computing issues. Other students are co-opted by the reps to help with social functions.

The timing for feedback follows the structure of the course and is requested as follows:

CORE COURSE

- Blackboard weekly feedback
- Direct feedback via student reps and to the Core Course Director
- Meetings with Personal Tutors
- One option meeting in the middle of the term
- Staff student Committee Meeting;
- Core Course External Examiner meets students at the end of January when reviewing examination and course work marking;
- Post graduate SOLE Questionnaire/End of term Staff student Committee Report
Staff-Student Committee

Staff-Student Committees are designed to strengthen understanding and improve the flow of communication between staff and students and, through open dialogue, promote high standards of education and training, in a co-operative and constructive atmosphere. College good practice guidelines for staff-student committees are available here:

www.imperial.ac.uk/about/governance/academic-governance/academic-policy/student-feedback
14. Student Surveys

Your feedback is important to your department, the College and Imperial College Union.

Whilst there are a variety of ways to give your feedback on your Imperial experience, the following College-wide surveys give you regular opportunities to make your voice heard:

- PG SOLE lecturer/module Survey or departmental equivalent
- Student Experience Survey (SES)

The PG SOLE survey runs at the end of the autumn and spring term(s). This survey is your chance to tell us about the modules you have attended and the lecturers who taught them.

For PG SOLE your lecturers will receive their individual numerical results and comments shortly after the survey closes. To make the most of your opportunity to give your feedback, please do not use offensive language or make personal, discriminatory or abusive remarks as these may cause offence and may be removed from the results. Whilst this survey is anonymous, please avoid self-identification by referring to personal or other identifying information in your free text comments.

The Student Experience Survey (SES) is another opportunity to leave your views on your experience. This survey will cover your induction, welfare, pastoral and support services experience.

The Postgraduate Taught Experience Survey (PTES) is the only national survey of Master’s level (MSc, MRes, MBA and MPH) students we take part in. This is the only way for us to compare how we are doing against the national average and to make changes that will improve our Master’s students’ experience in future. PTES covers topics such as motivations for taking the programme, depth of learning, organisation, dissertation and professional development. PTES last ran in spring term 2018 and will next run in Spring 2020.

All these surveys are anonymous and the more students that take part the more representative the results so please take a few minutes to give your views.

The Union’s “You Said, We Did” campaign shows you some of the changes made as a result of survey feedback:

- [www.imperialcollegeunion.org/you-said-we-did](http://www.imperialcollegeunion.org/you-said-we-did)

If you would like to know more about any of these surveys or see the results from previous surveys, please visit:

- [www.imperial.ac.uk/students/academic-support/student-surveys/pg-student-surveys](http://www.imperial.ac.uk/students/academic-support/student-surveys/pg-student-surveys)

For further information on surveys, please contact the Registry’s Surveys Team at:

- surveys.registrysupport@imperial.ac.uk
15. And finally

Alumni Services
When you graduate you will be part of a lifelong community of over 190,000 alumni, with access to a range of alumni benefits including:

- discounts on further study at the College and at Imperial College Business School
- alumni email service
- networking events
- access to the Library and online resources
- access to the full range of careers support offered to current students for up to three years after you graduate
- access to our Alumni Visitor Centre at the South Kensington Campus, with free Wifi, complimentary drinks, newspapers and magazines, and daytime luggage facility

Visit the Alumni website to find out more about your new community, including case studies of other alumni and a directory of local alumni groups in countries across the world.

www.imperial.ac.uk/alumni

CEP/MSc Environmental Technology Alumni
When you graduate from the MSc you join the world-wide community of the CEP/ET alumni network, over 4000 alumni. We recent celebrated the 40th anniversary of the MSc course where over 750 people attended from all over the world – a fantastic reflection of the strength of connection felt by all that graduate from this course and from the Department.

Our alumni have strong connections with the course, through teaching, prizes offered by their companies, and through the constant stream of job opportunities circulated often exclusively via our alumni list server. You will have access to these job opportunities in the summer term and will be able to join the network.

The MSc Environmental Technology LinkedIn Group has over 750 members (it open only to genuine CEP/MSc graduates). Both this LinkedIn group and our email list server are distinct and separate networks from the wider College alumni services, which offer other valuable benefits listed below.

http://www.imperial.ac.uk/environmental-policy/alumni/

Further ways to network with alumni:

Facebook or Linkedin
College Alumni services
When you graduate you will be part of a lifelong community of over 190,000 alumni, with access to a range of alumni benefits including:

- discounts on further study at the College and at Imperial College Business School
- alumni email service
- networking events
- access to the Library and online resources
- access to the full range of careers support offered to current students for up to three years after you graduate
- access to our Alumni Visitor Centre at the South Kensington Campus, with free Wifi, complimentary drinks, newspapers and magazines, and daytime luggage facility

Visit the Alumni website to find out more about your new community, including case studies of other alumni and a directory of local alumni groups in countries across the world.

www.imperial.ac.uk/alumni