ARE WE ALONE? THE SEARCH FOR EXTRATERRESTRIAL LIFE

OVERVIEW
The question of whether we are alone in the Universe is one of the most fundamental that humankind can ask. If we are truly alone, does this mean that we are in some way special? If there are other civilisations out there, do they look and think like us? Would we be able to recognise their signatures and communicate with them?

This unit introduces the astrophysical, biological and social factors that influence the probability of the emergence of long-lived, intelligent, technical civilisations. It explores the signatures that might reveal advanced civilisations and the new instruments currently under development that will enable future searches.

If we are not alone, we need to consider dissemination strategies, legal issues associated with first ‘contact’, the construction of interstellar messages, and the implications for society and culture in terms of global politics, the world economy, theology, art, literature and science.

The unit provides a comprehensive overview of the most recent developments in the search for life and intelligent civilisations, elsewhere in the Universe. It also discusses issues such as the sustainability of humankind and our own possible futures. Are the challenges we face the same that all long-lived technical civilisations must also face and overcome?

This unit is delivered online and includes contributions from leading researchers located in Manchester and around the world.

The unit is delivered entirely via Blackboard (with one face-to-face session) and is made up of 10 online modules, which will be released at intervals. It is highly interactive and adopts a blend of approaches including video inputs and case studies.

LEARNING OUTCOMES
On completion of this unit students will be able to:

• Describe and explain the contributions of scientific, historical, social and cultural perspectives to current understanding of the topic and its impact
• Defend well-argued contributions to interdisciplinary group discussions
• Collaborate within a team to exchange and analyse different viewpoints
• Generate innovative ideas about potential future directions for SETI, drawing from their own disciplinary perspective
• Write well-structured summaries, using evidence-based examples to support their case

ASSESSMENT
1. Ongoing, end of module assessments - mix of online discussions and short online tests (20%)
2. 2 x written assignments - choice of tasks; 1500 words (40% each)

BECOMING AN INSPIRATIONAL INDIVIDUAL

OVERVIEW
This unit investigates and explores what makes certain people successful - from all walks of life, such as business, sport and music. Then, through practice and theory, we seek to identify key traits and skills from these inspirational people that can be applied to our everyday lives to make us more successful as individuals.

The unit aims to provide an understanding of what ‘inspiration’ is and why successful people inspire us. It asks if inspirational individuals can be created or are they born with the innate sets of skills that make them successful?

Students will be enabled to assess their own strengths, weaknesses, opportunities and threats, to better understand what is driving them to be the person they could be. Students will use this understanding to create a positive Roadmap to reach their goals.

This unit forms part of the Enterprise Challenge (pg 47).

LEARNING OUTCOMES

On completion of the unit students will be able to:

• Define the key traits and behaviours that enable people to become inspirational individuals
• Critically analyse and debate the different theories and methodologies used in research into inspirational individuals
• Identify and reflect upon their own personal values, motivations and responsibility in the development of individual effectiveness
• Demonstrate information literacy and effective communication skills by presenting ideas, evidence and arguments clearly, logically and accurately in a range of formats

ASSESSMENT
1. A set of narrated PowerPoint Slides (0%)
2. Group presentation (50%)
3. 2,000 word individual self-development Roadmap (50%)
CLIMATE CHANGE AND SOCIETY

OVERVIEW
Why does climate change policy, despite attracting a worldwide interest, remain a disappointment? Is it because the world is not working hard enough to implement existing climate policies, or because the issue is so difficult that no amount of good work will be sufficient to control the rising greenhouse emissions?

This unit explores why climate change has attracted so much public, political and economic attention during the last 50 years. Is climate change changing everything? Is it changing anything? The unit covers the issue from various perspectives: scientific, cultural, political, economic and media. It explores the role of science, the function of politics, and the promise of industry in bringing the problem under control and the fore of public policy. It further analyses how climate change features in the public sphere and whether the media works to be transparent in conveying scientific knowledge.

The unit suits students of all academic backgrounds, including humanities students, who are keen to use creative approaches to think about today’s environmental issues.

LEARNING OUTCOMES
On completion of the unit students will be able to:
• Describe the scientific, economic and cultural foundation and key concepts that underlie global climate change
• Discuss methods that are used to study climate change from different historical, cultural and social perspectives
• Identify how environmental issues emerge as social problems that require policy measures
• Evaluate climate policy and the politics of climate negotiation with reference to a wide range of stakeholders

In addition, for 20 credits:
• Research and write a literature-based review, integrating scientific, historical and social viewpoints

ASSESSMENT
10 Credits
1. 1500 word essay (50%)
2. Exam (50%)

20 Credits
1. 1500 word essay (25%)
2. Exam (25%)
3. 3500 word project report (50%)

COMMUNICATING WITH CONFIDENCE

OVERVIEW
Jerry Seinfeld, the American actor, comedian, director, writer and producer, famously said that people would rather be the subject of a eulogy than have to deliver one! Whether this is true of you or not, your ability to communicate, and to do so with confidence and impact, will have a significant influence on your success in life, both personally and professionally.

This unit starts from the belief that we all have a unique ability to communicate with charisma and impact, and that this ability can be developed and learnt. Drawing on theories from biology, psychology, sociology, anthropology, and on techniques from the world of theatre and acting, the unit will support participants in learning how to manage nerves, communicate effectively and to engage with a wide variety of audiences.

The unit is a very interactive and practical one and participants will learn by doing and by sharing the learning, as well as through group and individual tuition. The learning process will be tailored to the needs and experiences of the students, who will work towards producing a performance that allows them to put into practice the skills that they have learnt during the unit.

LEARNING OUTCOMES
On completion of the unit students will be able to:
• Define the relationship between cognition, body language, speech and impact upon an audience
• Critically appraise published research in the fields of communication and confidence
• Analyse personal strengths and areas for improvement with respect to communication
• Apply practical skills for the management of anxiety
• Deliver and defend a well-argued presentation with confidence, appropriate for challenging situations such as interviews, negotiation, and influencing an audience

In addition, for 20 credits:
• Identify a topic from the course, suitable for further research and exploration
• Research and write a literature-based review, integrating material from the fields of biology, psychology, sociology, anthropology and drama

ASSESSMENT
10 Credits
1. 12 minute presentation (50%)
2. 600 word mid-unit reflective summary - formative (0%)
3. 1500 word reflective essay (50%)

20 Credits
1. 12 minute presentation (25%)
2. 600 word mid-unit reflective summary - formative (0%)
3. 1500 word reflective essay (25%)
4. 3500 word research project report (50%)
CREATING A SUSTAINABLE WORLD: 21st CENTURY CHALLENGES AND THE SUSTAINABLE DEVELOPMENT GOALS

OVERVIEW
The Sustainable Development Goals (SDGs) are a call from the United Nations for all countries to tackle the global challenges faced by humanity. The SDGs cover a wide range of challenges, with 17 goals backed up by 169 indicators. The goals include poverty, inequality, climate change, environmental degradation, prosperity, and peace and justice. The SDGs are designed for everyone to be able to play their part, including The University of Manchester and students.

This unit will equip students with the knowledge and skills needed to address the SDGs. It presents the concept of sustainable development and explains the basis of partnership working that underpins the SDG approach. Each SDG is explored through its own module, drawing on cutting-edge research carried out by world-leading experts across The University of Manchester, together with input from external experts and international policy-makers and practitioners.

Students taking 10 credits can choose which six goals they explore in detail. 20 credits students will take all of the SDG modules. The unit offers a unique opportunity to engage with multiple real-world challenges and develop applied knowledge and skill sets that are highly prized by employers from the public, private and third sectors. Through this unit students will make positive social change.

The unit is delivered online via Blackboard (with one face-to-face session). It is highly interactive and adopts a blend of approaches including video inputs, discussion space and case studies.

LEARNING OUTCOMES
On completion of the unit students will be able to:
- Describe the key interlinked, interdisciplinary concepts and theories that underpin sustainable development, as presented by the SDGs
- Analyse diverse ways in which sustainable development plays out across different spaces and scales, including policy spheres, everyday lives, and infrastructures
- Identify and defend their own social positioning in the world and feel empowered to make positive change

In addition, for 20 credits:
- Apply their knowledge to a specific problem and devise an action plan and communicate this in a well-argued report

ASSESSMENT
10 Credits
1. Ongoing module assessment (40%)
2. End of unit problem-driven exercise in choice of format (60%)

20 Credits
1. Ongoing module assessment (20%)
2. End of unit applied sustainability project (60%)
3. End of unit reflective paper (20%)

ESSENTIAL ENTERPRISE

OVERVIEW
Commercial acumen, regardless of subject discipline, is essential for anyone who aspires to succeed in the world of business, or who wishes to understand the importance of enterprise in society. The philosophy behind this unit is to help students to think like a business professional - in many situations, there is not a 'right or wrong' answer.

Students will explore the principles that are key to success in enterprise. The unit will examine aspects of enterprise that support a range of different organisations, from business to charities, in order to understand how these create and deliver value to their customers. Topics include how the enterprise is organised, the assessment of technology, marketing, finance and risk factors. Students will develop their information search and analysis skills by investigating existing companies, their products and services.

This unit aims to support graduate employability through improving awareness and understanding of key business and enterprise principles.

This unit forms part of the Enterprise Challenge (pg 47).

LEARNING OUTCOMES
On completion of the unit students will be able to:
- Identify key business principles that inform contemporary business practice
- Analyse elements of value creation across different organisations
- Evaluate how innovation may be used to develop new, improved products and services
- Create a structured business report, using the evidence base to support their case
- Reflect on how the enterprise principles discussed in the unit will help with their own future learning and professional practice

ASSESSMENT
1. 750 word formative Individual Report (5%, optional but advised)
2. 2500-3000 word Individual Business Report (100%)

Lee Webster
Alliance Manchester Business School
10 Credits
Level 2 (FHEQ Level 5)
FROM CHOLERA TO AIDS: A GLOBAL HISTORY OF EPIDEMICS

OVERVIEW
This unit covers the global history of epidemics, starting from the outbreaks of cholera in the 1830s in Asia, Africa, Europe and America to the 21st century history of HIV/AIDS and Ebola. It brings together insights from history, medicine, public health, bacteriology and economics.

The unit enables students to understand the wider and deeper social, economic, political and cultural histories that lead to disease and mortalities. Students will investigate why, in the contemporary world, some countries are relatively free from epidemics while others continue to suffer from them. They will identify the larger structural factors, such as the economy, trade, labour movements, gender and class, that lead to epidemics and see that disease is often caused by global inequality and poverty. The unit will also analyse the experiences of communities and individuals living in the time of epidemics.

LEARNING OUTCOMES
On completion of the unit students will be able to:

• Discuss the complex historical relations between epidemic disease outbreaks and their cultural, social and political context
• Describe the experiences of populations and communities living with epidemics under diverse environmental, social and economic conditions
• Analyse the history of epidemics within a global context of movements of people, ideas and commerce
• Deliver – orally and in writing – well-argued and evidence-based summaries of course readings

In addition, for 20 credits:

• Prepare a well-structured written review, integrating social, economic, political, historical and medical contexts and arguments

ASSESSMENT
10 Credits
1. 1000 word essay (50%)
2. Exam (50%)

20 Credits
1. 1500 word essay (25%)
2. Exam (25%)
3. 3000 word project report (50%)

FROM SHERLOCK HOLMES TO CSI: A HISTORY OF FORENSICS

OVERVIEW
We all know what a crime scene looks like today – hooded, white-suited investigators carefully searching for traces of evidence from behind police tape. But what do we know about its history? What did a crime scene look like a century ago, and what happened in it?

Through a historical perspective, students will look at a wide range of forensic investigation techniques. From lie detectors and DNA ‘fingerprinting’ to detective fiction, newspaper reports of murder trials, and present-day TV forensic dramas; students will investigate who make claims to forensic truth and what tools and techniques they use to arrive at that conclusion.

The unit investigates the growing literature on the legal application of medical and scientific expertise. It contextualises contemporary understandings of and interest in forensics and its popular representations, and considers the history of forensics as a practical example of the dynamics of public understanding of science.

This unit does not require prior scientific, legal or historical knowledge; just a curiosity about styles of forensic investigation, past and present.

LEARNING OUTCOMES
On completion of the unit students will be able to:

• Describe historical developments in 19th and 20th century forensic medicine and science
• Describe and analyse the social, institutional and technical foundations of specific forensic techniques
• Review the historical impact of popular representations of forensics
• Identify and interpret debates in the medical, scientific, legal and public domains concerning the ethics and credibility of forensic evidence
• Prepare and defend well-argued contributions to interdisciplinary group debates

In addition, for 20 credits:

• Research and write a literature-based review, integrating scientific, historical and social viewpoints

ASSESSMENT
10 Credits
1. 1500 word essay (50%)
2. Exam (50%)

20 Credits
1. 1500 word essay (25%)
2. Exam (25%)
3. 3000 word project report (50%)

Pratik Chakrabarti
Centre for the History of Science, Technology and Medicine
10 & 20 Credits
Level 2 (FHEQ Level 5)

Elizabeth Toon
Centre for the History of Science, Technology and Medicine
10 & 20 Credits
Level 3 (FHEQ Level 6)
GLOBAL CITIZENSHIP AND INTERCULTURAL UNDERSTANDING

OVERVIEW
This unit adopts an intercultural approach to ‘global citizenship’ and sustainability in an interconnected world. Students will use knowledge from their own disciplinary area and from the disciplinary areas of fellow students, to gain deeper cultural understandings of complex global challenges and how to respond to these challenges.

The unit reflects on ways of developing the ethics of care we need in a world in which our lives are inextricably linked to the lives of people across the globe, to nature that sustains us, and ultimately to future generations. Students will work to better understand complex global challenges, and how we can work together to shape the ethics of care and address these challenges. Students will analyse how viewpoints on global challenges are articulated in textual (written and pictorial) sources and in the action of individuals, communities and organisations.

LEARNING OUTCOMES
On completion of the unit students will be able to:
• Recognise the complex and multileveled influences on global issues
• Recognise the viewpoints of people living in diverse environmental, cultural and economic contexts across the world
• Identify perspectives that are absent from any representation of global issues and propose potential reasons for this
• Collaborate with those from other disciplines to bring together knowledge of global issues
• Analyse ways in which global issues are communicated and discussed in mainstream news and social media
• Design and conduct a small-scale exploratory research project on a selected global issue
• Communicate on global challenges in interculturally sensitive ways

ASSESSMENT
1. 600 -700 word written appraisal of a corporate social responsibility policy (30%)
2. 10 minute digital presentation (70%)

INTRODUCTION TO BRITISH SIGN LANGUAGE - PART 1

OVERVIEW
This unit gives students a basic knowledge of British Sign Language (BSL), together with practice in signing, so that they are able to participate in simple everyday communication with members of the deaf community. In addition, students will learn about deaf awareness and deaf culture.

The unit will be of particular value for students seeking a career in health or education, or for those who have contact with deaf people through work, friends or family. It will also be of intrinsic interest to linguists. The unit does not lead to a formal vocational qualification, but students who successfully complete it may register with the Manchester Deaf Centre to take the Signature 101 (this is the first part of the Signature BSL Level 1). Note that this is optional; it is an external examination, which will incur a fee and will not replace the assessment of this unit.

LEARNING OUTCOMES
On completion of the unit students will be able to:
• Understand short, simple messages in BSL
• Make themselves understood using BSL in simple, everyday situations
• Use and understand basic BSL signs and grammar
• Discuss current issues relating to the deaf community
• Analyse their experience of learning BSL, and communicate this in writing

ASSESSMENT
1. Conversation (30%)
2. Presentation (25%)
3. Comprehension test (25%)
4. 750 word reflective report (20%)
OVERVIEW

How do young children acquire language so easily? What role do social structures play in the development of language? How are reading and writing different from speaking and listening? This unit addresses these questions and explores the cognitive underpinnings of human language.

The unit introduces students to the foundational concepts in the study of language from a cognitive perspective. We will explore questions that are still a matter of debate in the field, critically examining both evidence and arguments. Students will come away with a deeper understanding of how language works, some of the principles governing the complex interactions between language and other cognitive dimensions (such as attention, perception, and thought), and a basic understanding of how language functions in the brain.

Along the way we’ll examine evidence from babies, chimpanzees and other animals, the birth of new languages, perceptual illusions, stroke patients, chimpanzees and other animals, the birth of new languages, perceptual illusions, stroke patients, the development of language, and the role of the brain in developing and employing language, including key arguments surrounding issues such as modularity of mind, the nature of language, of swearing on pain, together with modern brain experiments on the influence of alcohol on speech and language, perceptual illusions, stroke patients, chimpanzees and other animals, the birth of new languages, perceptual illusions, stroke patients, the development of language, and the role of the brain in developing and employing language, including key arguments surrounding issues such as modularity of mind, the nature of language, and the role of the brain in developing and employing language.

LEARNING OUTCOMES

On completion of the unit students will be able to:

- Distinguish the differences and similarities between language and other communication systems
- Evaluate the role of the brain in developing and employing language, including key arguments surrounding issues such as modularity of mind
- Critically assess scholarly and scientific claims from the literature, and the arguments supporting them
- Engage in interdisciplinary group discussions to compare competing approaches and hypotheses, using evidence-based reasoning
- Research and prepare coherent written communications

ASSESSMENT

1. 100 word written exercise (10%)
2. 100 word written exercise (10%)
3. 1,000 word written exercise (50%)
4. Quizzes (5%)
5. Seminar participation (10%)
6. Participation in a linguistic experiment (5%)

OVERVIEW

The Leadership in Action (MLP) units aim to help students understand what it means to be a leader in the 21st century. They explore complex current problems and ask: How does change happen? Who makes it happen? And what does that tell us about leadership and how we do it?

This unit will equip students with the tools to critically evaluate models and approaches to leadership and to apply these to a range of complex 21st century problems, such as poverty, inequality, and climate change. The unit will also explore the relationship between contemporary issues and the practice of leadership so that students can develop a toolkit of transferable skills that will boost their employability.

Students will hear from leaders who are influencing change in the world around us, including some of the University’s leading academics and leaders from the public, private and voluntary sectors. Apart from core leadership lectures, the each semester’s lecture programme is different.

Students will also explore the relationship between contemporary issues and the practice of leadership so that students can develop a toolkit of transferable skills that will boost their employability. They will also explore the relationship between contemporary issues and the practice of leadership so that students can develop a toolkit of transferable skills that will boost their employability. They will also explore the relationship between contemporary issues and the practice of leadership so that students can develop a toolkit of transferable skills that will boost their employability. They will also explore the relationship between contemporary issues and the practice of leadership so that students can develop a toolkit of transferable skills that will boost their employability.

LEARNING OUTCOMES

On completion of the unit students will be able to:

- Analyse the ways in which leaders influence change and develop a toolkit of transferable skills
- Work within an interdisciplinary team to present an idea, drawing on a range of perspectives and expertise

ASSESSMENT

1. Group project (50%)
2. Group project (50%)
3. 1500 word written exercise tasks (choice of task; 45%)

OVERVIEW

This unit introduces students to the foundational concepts in the study of language from a cognitive perspective. We will explore questions that are still a matter of debate in the field, critically examining both evidence and arguments. Students will come away with a deeper understanding of how language works, some of the principles governing the complex interactions between language and other cognitive dimensions (such as attention, perception, and thought), and a basic understanding of how language functions in the brain.

Along the way we’ll examine evidence from babies, chimpanzees and other animals, the birth of new languages, perceptual illusions, stroke patients, chimpanzees and other animals, the birth of new languages, perceptual illusions, stroke patients, the development of language, and the role of the brain in developing and employing language, including key arguments surrounding issues such as modularity of mind, the nature of language, and the role of the brain in developing and employing language, including key arguments surrounding issues such as modularity of mind, the nature of language, and the role of the brain in developing and employing language, including key arguments surrounding issues such as modularity of mind, the nature of language, and the role of the brain in developing and employing language.

LEARNING OUTCOMES

On completion of the unit students will be able to:

- Distinguish the differences and similarities between language and other communication systems
- Evaluate the role of the brain in developing and employing language, including key arguments surrounding issues such as modularity of mind
- Critically assess scholarly and scientific claims from the literature, and the arguments supporting them
- Engage in interdisciplinary group discussions to compare competing approaches and hypotheses, using evidence-based reasoning
- Research and prepare coherent written communications

ASSESSMENT

1. 100 word written exercise (10%)
2. 100 word written exercise (10%)
3. 1,000 word written exercise (50%)
4. Quizzes (5%)
5. Seminar participation (10%)
6. Participation in a linguistic experiment (5%)

OVERVIEW

The Leadership in Action (MLP) units aim to help students understand what it means to be a leader in the 21st century. They explore complex current problems and ask: How does change happen? Who makes it happen? And what does that tell us about leadership and how we do it?

This unit will equip students with the tools to critically evaluate models and approaches to leadership and to apply these to a range of complex 21st century problems, such as poverty, inequality, and climate change. The unit will also explore the relationship between contemporary issues and the practice of leadership so that students can develop a toolkit of transferable skills that will boost their employability.

Students will hear from leaders who are influencing change in the world around us, including some of the University’s leading academics and leaders from the public, private and voluntary sectors. Apart from core leadership lectures, the each semester’s lecture programme is different.

Students will also explore the relationship between contemporary issues and the practice of leadership so that students can develop a toolkit of transferable skills that will boost their employability. They will also explore the relationship between contemporary issues and the practice of leadership so that students can develop a toolkit of transferable skills that will boost their employability. They will also explore the relationship between contemporary issues and the practice of leadership so that students can develop a toolkit of transferable skills that will boost their employability. They will also explore the relationship between contemporary issues and the practice of leadership so that students can develop a toolkit of transferable skills that will boost their employability.
OVERVIEW

The Leadership in Action (LIA) units aim to help students understand what it means to be a leader in the 21st century. The units explore complex current problems, such as poverty, inequality and climate change. The unit will also explore the relationship between contemporary issues and the practice of leadership and help students to develop a toolkit of transferable skills that will boost their employability.

Students will hear from leaders who are influencing change in the world around them, including some of the University’s leading academics and leaders from the public, private and voluntary sectors.

The LIA Online unit is delivered entirely via Blackboard. Students work through 10 online learning modules, released at intervals through the semester. Each uses a range of bespoke video inputs, case studies, and interactive eLearning activities designed to enhance students’ learning and understanding.

The LIA units are part of the Manchester Leadership Programme (MLP) (pg 46). Students who successfully complete an LIA unit and 20, 40 or 60 hours of approved volunteering will be awarded the prestigious MLP Certificate (Bronze, Silver or Gold).

LEADERSHIP IN ACTION ONLINE (MLP)

LEARNING OUTCOMES

On completion of the unit students will be able to:

- Evaluate different models and theories of leadership, within a 21st century global context
- Analyse the ways in which leaders influence change and how leadership skills may be applied in both learning and occupational contexts
- Employ reflective learning skills in order to relate models of leadership to personal practice
- Analyse complex, ‘wicked’, problems and leadership in response to them

ASSESSMENT

1. 1,000 word written assignment; choice of tasks with a leadership focus (30%)
2. Ongoing, end of module assessments (40%)
3. Online multiple choice test (10%)

OVERVIEW

Through a placement in a Manchester school, this unit gives students the opportunity to support online learning of the children and young people they meet and, simultaneously, further their own learning through completing a weekly reflective learning journal, and one or two related assignments.

Students will share and learn from others about their differing beliefs and understandings about education, and the complexities of their experiences of working in their placement schools.

Students will also develop their understanding of the education system; their professional skills through working alongside professionals and pupils in schools; and their critical reflective skills through using a provided critical framework. Other skills include communication, problem solving, planning, management, observation, analysis and self-evaluation. The unit also gives students knowledge and understanding of many aspects of leadership and professionalism.

Please note: Attendance at Leadership of Learning seminars is mandatory. Students should enrol onto the unit unless they are able to attend all of the seminars.

Please see UCIL Leadership of Learning website page for further details about eligibility and requirements for this unit.

LEARNING OUTCOMES

On completion of the unit students will be able to:

- Analyse complex, ‘wicked’, problems and leadership in response to them
- Evaluate different models and theories of leadership, within a 21st century global context
- Employ reflective learning skills in order to relate models of leadership to personal practice
- Analyse complex, ‘wicked’, problems and leadership in response to them

ASSESSMENT

10 Credits
1. 2,000 word written assignment on reflective practice (100%)
20 Credits
1. 2,000 word written assignment on reflective practice (50%)
2. 2,000 word written assignment on leadership (50%)
SCIENCE AND THE MODERN WORLD

OVERVIEW
What is science? And why does science have such authority in our society and culture? You don’t have to be Einstein to find an answer!

This unit explores the place of science in human affairs using examples from past and present. It uses non-specialist vocabulary to help us understand why we trust scientists and where that reliance comes from historically. It also invites students to reflect critically on the methods scientists use and the influence they exercise in the modern world.

Through a variety of case studies showing scientists at work, this unit analyses their ambitions, successes and the controversies that their research created. A variety of resources, from scientists’ writings to literature and film, will be used to introduce humanities and science students to different ways of understanding science in the past and the present.

LEARNING OUTCOMES
On completion of the unit students will be able to:
• Describe the range and complexity of the modern sciences in the context of their historical development
• Describe the role of the sciences in modern culture
• Analyse different ways of thinking about the sciences within contemporary society, including the views of non-scientific audiences and issues around authority and trust
• Defend well-argued contributions to interdisciplinary group debates
• Prepare a well-argued and evidence-based written report

In addition, for 20 credits:
• Research and write a literature-based review, integrating scientific, historical and social viewpoints

ASSESSMENT
10 Credits
1. 1000 word essay (50%)
2. Exam (50%)

20 Credits
1. 1000 word essay (25%)
2. Exam (25%)
3. 3000 word project report (50%)

LEARN A LANGUAGE

OVERVIEW
The advantages of learning a new language are clear. Students can enhance their employability, develop cross-cultural understanding, and become better learners.

Through UCIL, students can study a language at an introductory or beginners level (10 credits) or at a more advanced level (20 credits). Beginners units are available in the following languages: French, German, Spanish, Italian, Japanese, Chinese and Arabic and are two semesters long. In addition, eight other languages are available at an introductory level 20 credits). Visit the University Language Centre website to find out more and to apply:
https://www.languagecentre.manchester.ac.uk/learn-a-language/courses-for-students/

LEARNING OUTCOMES
Each unit will have its own specific learning outcomes. In general, on successful completion of a language unit, students will be able to:
• Handle some of the basic grammatical structures of the language
• Communicate orally in a limited number of social contexts and perform at Level A1 (Speaking and Listening) of the Common European Framework

ASSESSMENT
Usually includes a written, speaking and listening test.
See University Language Centre website for details of the assessment for each unit.
AI: ROBOT OVERLORD, REPLACEMENT OR COLLEAGUE?

OVERVIEW
Artificial intelligence (AI) – the ability of machines to learn from data, make decisions and perform actions – is now creeping into every aspect of our lives. Using a series of case studies, we will consider the science behind the headlines to help students develop an informed opinion regarding the complexities of the use of AI in society.

This unit will de-mystify AI, explaining how it works, and demonstrating its limitations. It aims to equip Manchester graduates from all disciplines with an understanding of the impact this technology currently has, the way this is likely to change in the future and, crucially, the ability to grasp the opportunities it brings, whatever their chosen career.

Students will work alongside other students from a wide range of disciplines, to understand the benefits and opportunities AI offers now, and how this might change in the future.

This online unit is delivered via Blackboard. It is made up of online modules, which are released at intervals. The unit is highly interactive and adopts a blend of approaches including video inputs and case studies.

LEARNING OUTCOMES
On completion of the unit students will be able to:
• Describe and review the basic concepts underlying AI and Machine Learning
• Identify and debate the impact of AI on society both now and in the future, and from diverse, interdisciplinary and non-technical viewpoints
• Employ computational thinking approaches to formulate a problem in such a way that a computer can tackle it
• Critically evaluate AI applications in an innovative and socially responsible way towards ensuring that technology is used in the future to improve the way we work and live
• Collaborate within a team to analyse and evaluate a case study

ASSESSMENT
1. Essay (50%)
2. Group case study (30%)
3. Project (20%)

THE ART OF ENTERPRISE

OVERVIEW
This unit addresses the ‘art of enterprise’: the activities needed in order to make things happen. Turning ideas into innovation doesn’t happen by accident – it requires an organised and systematic process of managed change in order to take ideas forward to reality.

This unit focuses on five key areas: innovation, creativity, characteristics of creative and innovative organisations, enterprising competences and organisational learning. These topics enable students to develop an appreciation of the wide range of perspectives that contribute to the identification and creation of good ideas and to their development within the operational arena of a business.

Good ideas, opportunity spotting and the ability to innovate are vital for any organisation in any discipline. We explore the areas of history, music, art and the natural world in order to appreciate the diversity and range of ideas and their related opportunities. Students will use the entrepreneurial management model to assess the importance of creating synergy between the entrepreneurial aspects of an organisation and the managerial aspects.

This unit will expand students’ appreciation of the working environment whilst developing the practical skills that employers are demanding. Students will appreciate the nature of creating value with innovative approaches to business thinking and practices. The assessment allows them to apply their learning to a business of their choice.

LEARNING OUTCOMES
On completion of the unit students will be able to:
• Outline the process of idea generation, evaluation, and creating value for both entrepreneur and organisations
• Review the relationship between creativity, innovation, management and entrepreneurship within an organisation
• Identify internal and external forces that impact on businesses, in both profit and not for profit sectors
• Apply analytical, problem solving, teamwork and oral communication skills to evaluate the role of creativity in the value creation process
• Generate a structured report, showing in-depth analysis of a selected area of study

ASSESSMENT
1. 4000 word report (100%)
BIOETHICS: CONTEMPORARY ISSUES IN SCIENCE AND BIOMEDICINE

OVERVIEW
Should active euthanasia be prohibited? What makes life valuable? Should we be attempting to eradicate disability? Should we prohibit genetic modification or gene editing? Is it morally acceptable to use animals and humans for scientific research?

Bioethics identifies, defines and examines ethical questions raised by developments in biological and medical research, drawing on a range of disciplines in terms of approach, methodologies and knowledge.

This unit provides a stimulating, engaging and structured overview of ethical issues in the life sciences. It enables students to develop their knowledge of this area and their skills in analysis and critical thinking, and to explore these issues with confidence to come to a position that they can justify and defend convincingly.

The unit consists of focused, engaging and accessible online material, to guide students through a variety of, often controversial, bioethical questions, supported by informal discussion seminars.

LEARNING OUTCOMES
On completion of the unit students will be able to:

• Identify a range of contemporary ethical issues in science and biomedicine
• Identify approaches to present clear bioethical arguments and justify and defend the position taken on these issues
• Identify organisation and presentation skills to prepare and defend an argument
• Identify organisation and presentation skills to research and prepare an assessed reflective diary

ASSESSMENT
1. Reflective learning diary (35%)
2. Group video presentation (35%)
3. MCQ and short note exam (30%)

COMMUNICATING WITH CONFIDENCE

OVERVIEW
Jerry Seinfeld, the American actor, comedian, director, writer and producer, famously said that people would rather be the subject of a eulogy than have to deliver one! Whether this is true of you or not, your ability to communicate, and to do so with confidence and impact, will have a significant influence on your success in life, both personally and professionally.

This unit starts from the belief that we all have a unique ability to communicate with charisma and impact, and that this ability can be developed and learnt. Drawing on theories from biology, psychology, sociology, anthropology, and on techniques from the world of theatre and acting, the unit will support participants in learning how to manage nerves, communicate effectively and to engage with a wide variety of audiences.

The unit is a very interactive and practical one and participants will learn by doing and by sharing the learning, as well as through group, and individual, tuition. The learning process will be tailored to the needs and experiences of the students, who will work towards producing a performance that allows them to put into practice the skills that they have learnt during the unit.

LEARNING OUTCOMES
On completion of the unit students will be able to:

• Define the relationship between cognition, body language, speech and impact upon an audience
• Critically appraise published research in the fields of communication and confidence
• Analyse personal strengths and areas for improvement with respect to communication
• Deliver and defend a well-argued presentation with confidence, appropriate for challenging situations such as interviews, negotiation, and influencing an audience

ASSESSMENT
1. 12 minute presentation (50%)
2. 600 word mid-unit reflective summary - formative (0%)
3. 1500 word reflective essay (50%)
CRISIS OF NATURE: ISSUES IN ENVIRONMENTAL HISTORY

OVERVIEW
This unit aims to familiarise students with the fundamentals of environmental history and to provide an introduction to environmental advocacy and policy, using case studies that include ocean crisis, electronic pollution, plastics, environmental health, climate change disasters and food security.

The unit explores key environmental issues and trends during the last two hundred years, examining the cultural and economic histories of ‘nature’, and their relation to the emergence of risk society and the politics of environment. We will look at the origins of key environmental crises and analyse how societies define risk and sustainability, produce waste and conceptualise cleanliness.

Students will be asked to think locally and globally, working to understand how the two different scales influence the availability of solutions.

LEARNING OUTCOMES
On completion of the unit students will be able to:
• Explore environmental issues in the light of their historical, scientific, economic and ethical background
• Describe the connections that link environmental changes and how culture and technology have influenced our relationship with nature globally
• Analyse the political and cultural origins of the environmental movement and environmental regulation
• Interpret the ideas and ideology that underpin environmental politics and use this knowledge to analyse a local environmental issue

In addition, for 20 credits:
• Research and write a literature-based review, including material from scientific, historical and social contexts

ASSESSMENT
10 Credits
1. 1500 word essay (50%)
2. Exam (50%)

20 Credits
1. 1500 word essay (25%)
2. Exam (25%)
3. 3000 word project report (50%)

CURRENT TOPICS IN BIOLOGY

OVERVIEW
Entertainment or news media frequently sensationalise biological and biomedical stories, either by oversimplifying the topic or through inaccurate reporting.

The aim of this unit is to introduce students to topical areas of bioscience, building from basic knowledge towards engaging with current research literature.

The unit considers topical issues within biology, exploring the science behind the headlines to help students develop an informed opinion, and to discuss potential future directions of selected topics.

Topics will include:
• The basics of DNA … and beyond
• Development and stem cells
• Precision medicine
• Human brain function
• Microbes and infectious disease
• Conservation biology

LEARNING OUTCOMES
On completion of the unit students will be able to:
• Describe and evaluate the basic science underpinning current topical issues in the biological sciences
• Debate and defend informed opinions about current biology issues including their impact on society
• Work collaboratively in an interdisciplinary team to investigate and present an aspect of bioscience research

In addition, for 20 credits:
• Prepare written communications aimed at both scientific and non-technical/public audiences

ASSESSMENT
10 Credits
1. Short note exam (40%)
2. Coursework assignment from a choice (40%)
3. Group activity (20%)

20 Credits
1. Short note exam (20%)
2. 4 x coursework assignments from a choice (70%)
3. Group activity (10%)
DIGITAL SOCIETY: YOUR PLACE IN A NETWORKED WORLD

OVERVIEW

As citizens of a networked world, our access to information has never been greater. But what are the implications for individuals and societies when we live so much of our life online? In this online unit, students will explore their place in today’s networked world through digital learning and collaboration. They will discover the connectedness of digital life, its relationship between the individual and the state, the smart cities of the future (and now), ethics of the online world, and the impact of digital and mobile technology on business and marketing.

Using digital media to share their findings, students will take a critical look at their own digital identity to influence how the world perceives them online. The unit uses a mix of approaches to enable digital learning, discussion and teamwork. All unit information, content and discussions are held in Medium—a public writing/blogging platform. Students will contribute to the development of unit materials with their comments, thoughts and coursework, joining over 100 others as a writer for Digital Society, an online publication with over 200 posts.

Delivered entirely online, Digital Society gives students the flexibility to study in a way which suits them. They will be given a suggested study schedule and access to a tool to track their progress. Online tutors will guide them to stay on track with the unit.

LEARNING OUTCOMES

On completion of the unit students will be able to:

- Identify the key concepts of a ‘digital society’, the ethics of online information use and the skills needed to be effective and successful digital scholars and citizens.
- Think and write critically about information, using self-reflection and an interdisciplinary perspective.
- Use the internet and social media to develop communication skills, share information and analyse online profiles.
- Apply existing knowledge and that of peers to solve and confront new challenges.
- Find, evaluate and share information online, incorporating issues of intellectual property and recognising the potential for this to apply other aspects of academic, personal and professional life.

ESSENTIAL ENTERPRISE

OVERVIEW

Commercial acumen, regardless of subject discipline, is essential for anyone who aspires to succeed in the world of business, or who wishes to understand the importance of enterprise in society. The philosophy behind this unit is to help students to think like a business professional—-in many situations, there is not a right or wrong answer.

Students will explore the principles that are key to success in enterprise. The unit will examine aspects of enterprise that support a range of different organisations, from business to charities, in order to understand how these create and deliver value to their customers. Topics include how the enterprise is organised, the assessment of technology, marketing, finance and risk factors. Students will develop their information search and analysis skills by investigating existing companies, their products and services.

This unit aims to support graduate employability through improving awareness and understanding of key business and enterprise principles. This unit forms part of the Enterprise Challenge (pg 47).

LEARNING OUTCOMES

On completion of the unit students will be able to:

- Identify key business principles that inform contemporary business practice.
- Analyse elements of value creation across different organisations.
- Evaluate how innovation may be used to develop new, improved products and services.
- Create a structured business report, using the evidence base to support their case.
- Reflect on how the enterprise principles discussed in the unit will help with their own future learning and professional practice.

ASSESSMENT

1. 750 word formative Individual Report (0%, optional but advised)
2. 2500–3000 word Individual Business Report (100%)
FROM ANTARCTICA TO OUTER SPACE: SURVIVING AND THRIVING IN EXTREMES

OVERVIEW
For centuries, humans have chosen extremes for purposes of exploration, adventure and scientific discovery. Since sailing off the edge of the map, we have scaled Earth's highest mountains, crossed polar ice caps, dived to the ocean floor and stood on the surface of the Moon. Today, people continue to live, work and play in some of the most extreme environments on earth and beyond. Why is it that, despite the risk, people remain drawn to these extreme places? Who has the right stuff for extremes and what is it that allows them to thrive at the limits? What, if anything, can we learn from these people and how might that help us tackle challenges facing everyday life?

This unit introduces key historical, cultural, physiological and psychosocial perspectives on human life, survival and thriving in extremes. Using case studies and contemporary theory, students explore the physical, psychological and social demands faced by people in extreme settings, what motivates them to go to these places and what they do to cope. Throughout the unit, students will journey through a range of study topics including the history of bravery and heroism in polar exploration, how to select astronauts for a mission to Mars, the mental health of humanitarian aid workers, and lessons for trauma, resilience and psychological wellbeing in an extreme world.

Students will explore how they can apply what they learn to their own challenges, including coping with stress in daily life, making effective decisions under pressure, and leading others in moments of crisis. This unit will be delivered online with supplementary face-to-face seminars. It will include contributions from leading experts at the University of Manchester and abroad. Learning materials will include academic and popular texts, historical records and video and audio insights from well-known 21st century explorers.

LEARNING OUTCOMES
On completion of the unit students will be able to:
• Describe historical and contemporary perspectives on human life and survival in extremes
• Discuss the cultural, physiological and psychosocial theories that explain differences in surviving and thriving in extreme environments
• Apply findings from the study of people in extremes to challenges faced in everyday life

ASSESSMENT
1. Ongoing end-of-module assessments (20%)
2. 1500 word report (choice of task) (50%)
3. Public engagement resource (30%)

Course Unit Code
UCIL20142
Semester 2
Nathan Smith, Emma Barrett, Amy Hughes and Max Jones
Schools of Social Sciences, Arts, Languages and Cultures, and Humanitarian and Conflict Response Institute
10 Credits
Level 2 (FHEQ Level 5)

HEALTH, DEVELOPMENT AND PEOPLE: THE GLOBAL JOURNEY TOWARDS HEALTH FOR ALL

OVERVIEW
The 20th century witnessed the most fundamental changes in global healthcare. In Britain it gave birth to the National Health Service, ensuring free access to healthcare. In Asia, Africa and Latin America, health was aligned to questions of poverty, nutrition, maternity and children's health. Through a historical perspective, this unit introduces students to the contemporary global challenges of public health. It analyses the various national projects in Europe, Latin America and Asia to tackle problems of poverty, malnutrition, sanitation, medical infrastructure, and curative and preventive health measures in rural and urban areas. The unit studies various movements around public health, showing how public health became fundamental to national development, and how nations sought to provide access to healthcare to a larger population. As a unit on the history of public health, it brings together insights from history, population studies and economics.

LEARNING OUTCOMES
On completion of the unit students will be able to:
• Identify historical approaches to public health
• Describe the chronology of major challenges in global health
• Analyse political, economic, ethical and historical debates surrounding models of public health and universal health coverage
• Present and defend informed arguments on the topic

In addition, for 20 credits:
• Research and write a literature-based review, integrating a range of disciplinary approaches

ASSESSMENT
10 Credits
1. 1500 word essay (50%)
2. Exam (50%)
20 Credits
1. 1500 word essay (25%)
2. Exam (25%)
3. 3500 word project report (50%)

Course Unit Codes
UCIL30232 (10 Credits)
UCIL30732 (20 Credits)
Semester 2
Pratik Chakrabarti
Centre for the History of Science, Technology and Medicine
10 & 20 Credits
Level 3 (FHEQ Level 6)
THE INFORMATION AGE

OVERVIEW
How did information-processing equipment come to dominate so many areas of our lives? Who are the winners and losers in a computerised, automated, data-driven world? And what about users? Now that computer technology is on tap all around us, are the ‘boffins,’ ‘nerds’ or ‘code junkies’ still a breed apart?

This unit uses historical case studies to show how and why digital information processing occupies a crucial role in present-day life. Combining strands from technical, social, cultural and economic history, it describes the development of mass-produced computer technology and mass public access to information systems and their consequences for society. It will also show the role of hopes, fears and other visions in informing public ideas, using examples ranging from employment forecasting to science fiction dreams.

We will look at images of computer users – from Victorian capitalists and Second World War boffins to 1970s techno-radicals, 1980s whizzkids, hackers, crackers, phreaks, geeks, techno-libertarians and millennial wage-slaves – and at what they say about the computer’s role in wider society.

The unit is accessible to students who have no background in computing, but is also designed to help computer specialists understand the history and influence of their field.

LEARNING OUTCOMES
On completion of the unit students will be able to:

• Outline the key developments in the history of information technology and its impact on society
• Describe, compare and assess the different motivations of various players – both innovators and users – in the history of information technology
• Analyse and discuss the different factors – social, technical, economic, sometimes accidental – that have shaped the history of computing
• Engage in informed group debates and present their own arguments effectively

In addition, for 20 credits:

• Identify a topic and write an in-depth, critical essay or report based on primary and secondary source material

ASSESSMENT
10 Credits
1. 1500 word essay (50%)
2. Exam (50%)

20 Credits
1. 1500 word essay (25%)
2. Exam (25%)
3. 3000 word project report (50%)

INTRODUCTION TO BRITISH SIGN LANGUAGE - PART 1

OVERVIEW
This unit gives students a basic knowledge of British Sign Language (BSL) together with practice in signing, so that they are able to participate in simple everyday communication with members of the deaf community. In addition, students will learn about deaf awareness and deaf culture.

The unit will be of particular value for students seeking a career in health or education, or for those who have contact with deaf people through work, friends or family. It will also be of intrinsic interest to linguists.

The unit does not lead to a formal vocational qualification, but students who successfully complete it may register with the Manchester Deaf Centre to take the Signature 101 (this is the first part of the Signature BSL Level 1. Note that this is optional; it is an external examination, which will incur a fee and will not replace the assessment of this unit).

LEARNING OUTCOMES
On completion of the unit students will be able to:

• Understand short, simple messages in BSL
• Make themselves understood using BSL in simple, everyday situations
• Use and understand basic BSL signs and grammar
• Discuss current issues relating to the deaf community
• Analyse their experience of learning BSL and communicate this in writing

ASSESSMENT
1. Conversation (30%)
2. Presentation (25%)
3. Comprehension test (25%)
4. 750 word reflective report (20%)
INTRODUCTION TO BRITISH SIGN LANGUAGE - PART 2

OVERVIEW
This unit is for students who have successfully completed British Sign Language (BSL) Part 1. In Part 2, students will continue to develop their ability to communicate with deaf people in a range of familiar and work-related contexts.

Students will further develop their knowledge of signs, fingerspelling, phrases and grammatical structures, as well as gaining further practice in signing so that they are able to participate in everyday communicative situations with members of the deaf community.

The unit will be of particular value for students who are seeking a career in health or education, or for those who have contact with deaf people through work, friends or family. It will also be of intrinsic interest for students studying linguistics.

After completion of the unit, there is an optional opportunity to take Signature BSL Level 1 to gain a national accreditation. However, for this students will need to make their own arrangements and payment for examination with the Manchester Deaf Centre.

LEARNING OUTCOMES
On completion of the unit students will be able to:
• Understand and use frequently-used signs for everyday communication
• Identify linguistic patterns within BSL
• Communicate complex ideas via a simple set of signs
• Demonstrate an increased awareness of the difficulties faced by Deaf people

ASSESSMENT
1. Conversation (30%)
2. Presentation (25%)
3. Comprehension test (25%)
4. 1000 word reflective report (20%)

LEADERSHIP IN ACTION (MLP)

OVERVIEW
The Leadership in Action (LIA) units aim to help students understand what it means to be a leader in the 21st century. They explore complex current problems and ask: How does change happen? Who makes it happen? And what does that tell us about leadership and how we do it?

This unit will equip students with the tools to critically evaluate models and approaches to leadership and to apply these to a range of complex 21st century problems, such as poverty, inequality and climate change. The unit will also explore the relationship between contemporary issues and the practice of leadership and help students to develop a toolkit of transferable skills that will boost their employability.

Students will hear from leaders who are influencing change in the world around us, including some of the University’s leading academics and leaders from the public, private and voluntary sectors. Apart from core leadership lectures, each semester’s lecture programme is different.

The LIA units are part of the Manchester Leadership Programme (MLP) (pg 46). Students who successfully complete an LIA unit and 20, 40 or 60 hours of approved volunteering will be awarded the prestigious MLP Certificate (Bronze, Silver or Gold).

LEARNING OUTCOMES
On completion of the unit students will be able to:
• Evaluate different models and theories of leadership in a 21st century global context
• Analyse the ways in which leaders influence change and how leadership skills may be applied in both learning and occupational contexts
• Employ reflective learning skills in order to relate models of leadership to personal practice
• Analyse complex, ‘wicked’ problems, and leadership in response to them
• Work within an interdisciplinary team to present an idea, drawing on a range of perspectives and expertise

ASSESSMENT
1. Group project (30%, includes element of peer scoring)
2. Ongoing assessments, including short online tests and discussions (30%)
3. 1500 word written assessment task (choice of task; 40%)
LEADERSHIP IN ACTION ONLINE (MLP)

OVERVIEW
On completion of the unit students will be able to:

- Analyse complex, ‘wicked’, problems and leadership in contemporary contexts
- Demonstrate transferable skills such as observation, problem solving, collaboration, critical thinking, leadership and ethical practices such as maintaining anonymity
- Explain and apply principles of reflective practice with respect to their placement experiences
- Reflective learning activities designed to enhance critical reflective skills through using a provided critical reflective learning journal, and one or two related assignments

ASSESSMENT
1. 1000 word written assignment: choice of tasks with a leadership focus (50%)
2. Ongoing, end of module assessments (50%)
3. Online multiple choice test (10%)
MADNESS AND SOCIETY IN THE MODERN AGE

OVERVIEW
This unit introduces students to the social, cultural, intellectual and institutional history of madness, psychiatry and mental health. Through lectures, interactive workshops and reading a combination of primary sources and secondary analyses, students will gain an appreciation of:

• How madness has been understood, by experts and by everyday people
• How madness has been managed, socially and institutionally
• How science, medicine, and culture interact in shaping responses to madness

The unit explores the history of psychiatry from the late 18th century to the present, primarily in the UK, but with some discussion of Western Europe and North America. It examines how insanity has been understood, treated, and represented within larger social, cultural, and intellectual frameworks. It also relates changing ideas and approaches to mental illness, health, and functioning to larger questions in the history of the medical and biological sciences.

LEARNING OUTCOMES
On completion of the unit students will be able to:

• Identify historical approaches to medical thinking and practice
• Describe how approaches to madness changed from 1780 onwards, including changing definitions of both mental health and insanity
• Analyse historians’ arguments, through exploration of primary sources and historical data
• Contribute to informed group discussions and debate, including presenting your own arguments effectively
• Write a short, structured report/essay combining a range of viewpoints

In addition, for 20 credits:
• Research and write a review essay incorporating both primary sources and secondary literature, and integrating historical medical and social contexts

ASSESSMENT
10 Credits
1. 1000 word essay (50%)
2. Exam (50%)

20 Credits
1. 1000 word essay (25%)
2. Exam (25%)
3. 3000 word project report (50%)

THE NUCLEAR AGE

OVERVIEW
Since the Cold War, fear surrounding nuclear weapons remains prominent. This unit provides students with an introduction to the history and politics of nuclear weapons and to the culture of the nuclear age.

The unit addresses the use of nuclear bombs at the end of the Second World War through to the current threats of nuclear terrorism - from the atomic bombing of Hiroshima to nuclear proliferation and testing up to modern times.

Students will develop an understanding of the culture of the nuclear age (films, literature, music, art) over the second half of the 20th century to the present, as well as assessing the impact of the nuclear age on human affairs.

LEARNING OUTCOMES
On completion of the unit students will be able to:

• Identify the origins of nuclear weapons and the debates surrounding their use in 1945
• Describe the reasons underlying the proliferation and control of nuclear weapons and their effect on military strategy
• Assess the roles and relationships of science, politics and state during and after the Cold War
• Analyse cultural phenomena associated with nuclear weapons, including film, literature, television and the media
• Prepare written reviews/essays aimed at different audiences

In addition, for 20 credits:
• Research and write a literature-based review, integrating historical, technical and cultural contexts

ASSESSMENT
10 Credits
1. 1000 word book review (25%)
2. 1000 word mini-research project (25%)
3. 2000 word essay (50%)

20 Credits
1. 1000 word book review (12.5%)
2. 1000 word mini-research project (12.5%)
3. 2000 word essay (25%)
4. 3000 word project report (50%)

Course Unit Codes
UCIL30832 (10 Credits)
UCIL30332 (20 Credits)
Semester 2

Carsten Timmermann
Centre for the History of Science, Technology and Medicine
10 & 20 Credits
Level 3 (FHEQ Level 6)

Simone Turchetti
Centre for the History of Science, Technology and Medicine
10 & 20 Credits
Level 3 (FHEQ Level 6)
Why are Japanese people obsessed with being punctual? Why did only China adopt such a drastic population measure as the ‘one-child policy’? Why did the South Korean professor Youngh-Woo Park fabricate his biomedical research and why did this become a global scandal? This unit adopts the perspectives of social and cultural history to ask questions of this kind, and examines key issues—e.g. colonisation, nation building and globalisation—by exploring the interactions between science, culture and civilisation in East Asia.

We start the unit by asking the question proposed by Joseph Needham, British biologist, first head of the science division of UNESCO and one of the greatest Sinologists of the 20th century. He asked why modern science only developed in Europe even though Chinese civilisation was more efficient in applying natural knowledge to practical human needs between the 1st century BC and the 15th century AD. The unit then explores how modern science, technology and medicine did eventually emerge in East Asia during the 19th century and examines their sociopolitical, cultural and economic backgrounds, as well as what the notion of civilisations and modernity meant for East Asia. The unit also looks at contemporary issues, and aims to find out particular themes, accompanied by a 1500 word scholarly commentary on the chosen theme, and a 3000 word review essay (50%).

On completion of the unit students will be able to:
- Describe key historical events underlying the development of science, technology and medicine in East Asia
- Analyse how history, society and culture influence engagement with science and how it is practiced and applied
- Apply their own intellectual interests and cultural awareness to areas beyond English-speaking countries
- Demonstrate skills in academic writing, in particular reviewing academic literature including primary sources
- Research and write a scholarly review, integrating a range of disciplines

## ASSESSMENT

<table>
<thead>
<tr>
<th>10 Credits</th>
<th>20 Credits</th>
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<tbody>
<tr>
<td>1. Creation of 10 multiple choice questions on a particular theme, accompanied by a 1500 word scholarly commentary on the chosen theme (90%)</td>
<td>1. Creation of 10 multiple choice questions on a particular theme, accompanied by a 1500 word scholarly commentary on the chosen theme (60%)</td>
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<tr>
<td>2. 10 multiple choice activities (10%)</td>
<td>2. 10 multiple choice activities (10%)</td>
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<tr>
<td>3. 1000 word review essay (50%)</td>
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## LEARNING OUTCOMES

- The unit will be delivered online via Blackboard and includes contributions from leading researchers, both from Manchester and external to the University.
- It comprises 10 modules, which will be released at intervals.

### TRUST AND SECURITY IN A DIGITAL WORLD: FROM FAKE NEWS TO CYBERCRIMINALS

**OVERVIEW**

Rapid advances in technology and connectivity have led to new opportunities for cybercriminals to steal our data, our money, and our identities, lock us out of our homes, poison our water, and switch off our lights. How does the use of digital media change the nature of democracy and affect trust in democratic institutions and established authorities? And what technical, behavioural and legal measures are available to prevent harm and maintain trust in digital systems?

This unit explores the risks to security in our super-connected, data-driven world and what can be done to preserve trust in our digital environment. It addresses social, psychological, legal and technical aspects of threats to security in digital contexts, and the impact on trust. We will cover the nature of digital harms, from online crimes to the malicious manipulation of information to influence behaviours and attitudes – transcending the digital boundaries to effect physical and psychological atacks. We will explore the different ways in which those harms can be reduced or prevented so that we can make well-informed choices about countering security threats in personal, societal and business contexts.

On completion of the unit students will be able to:
- Distinguish the nature and range of cyber threats and ways to counter them
- Identify the skills and knowledge required by professionals working in the industry
- Apply this knowledge in their own personal, societal and business contexts
- Put acquired knowledge and skills into practice to manage a cyber security incident using an interactive case study

### ASSESSMENT

1. Ongoing, end of module assessments (20%)
2. A short written assignments (70%)
3. Case study (10%)

The unit comprises 10 modules, which will be released at intervals.
UNDERSTANDING MENTAL HEALTH

OVERVIEW

This unit explores why and how mental health and wellbeing are important to all of us. Mental health problems are estimated to cost the UK economy as much as £105 billion each year. As a frequent topic of conversation in politics and the media, mental health generates significant intellectual and professional disputes. The unit will introduce students to some of these discussions, including how people’s experiences come to be labelled as ‘mental illness’ in some cultures but not others.

Students will gain new perspectives on longstanding questions in the field, such as the ‘nature vs nurture’ debate, causes of mental health problems, and the history and controversies relating to psychiatric labelling, diagnosis and treatments. They will consider contrasting theoretical perspectives - specifically biological, social and psychological models - on mental health problems and their management. Within a historical and social context, they will evaluate the evidence-base for these perspectives, and consider their implications. Students will also be introduced to research, theory and practice that have helped shape interventions for mental health problems.

The unit aims to help students reflect on the ways in which we might protect and improve our own mental health and wellbeing and that of others.

This online unit will be delivered via Blackboard. It is made up of online modules, which will be released at intervals. It is highly interactive and adopts a blend of approaches including video inputs and case studies.

LEARNING OUTCOMES

On completion of the unit students will be able to:

• Describe and evaluate differing theoretical approaches to understanding mental health and wellbeing
• Identify the common causes of mental health problems
• Discuss the impact of mental health problems on individuals and society, including cultural and economic impacts
• Compare and assess different interventions for mental health problems and enhancing wellbeing
• Recognise key ways in which the law relates to mental health
• Research and prepare written communications aimed at both specialist and non-specialist/public audiences
• Apply the knowledge gained towards increasing self-awareness and protecting their own mental health and wellbeing and also providing support to others

ASSESSMENT

1. Ongoing end of module assessments e.g. short answer tests and online discussions (20%)
2. Three written tasks (80%)
   a. 500 word newspaper article (20%)
   b. 500 word critique of a journal paper (20%)
   c. 1500 word essay (40%)

UNDERSTANDING THE UNIVERSE: THE GRAND CHALLENGES OF TODAY

OVERVIEW

Many of the global issues being addressed by society today have complex scientific and technical backgrounds. Informed discussion and debate around these issues requires an appreciation of the underlying science. This non-mathematical unit introduces students to the science behind some of these issues. It will help them to better understand topics ranging from quantum technology, nuclear power, climate change and natural disasters, to the origin and contents of the Universe.

If students are interested in the science of the world and Universe around them and some of the issues society faces, but haven’t had the opportunity or scientific background to study it, this is the unit for them. Very little scientific knowledge will be assumed.

This unit provides students with the knowledge and conceptual understanding of topical aspects of physics and the processes by which scientific knowledge is developed. It evaluates the important scientific and technological issues and challenges facing the modern world.

LEARNING OUTCOMES

On completion of the unit students will be able to:

• Describe the science behind a range of major scientific and societal challenges, including the evolution of the Universe, global sustainability, natural global events, and technological advances
• Identify the scientific principles used to measure and evaluate these challenges
• Interpret numerical and observational data in a way that imparts meaning to both scientists and non-scientists
• Communicate scientific issues to a non-technical audience

ASSESSMENT

1. 1 x 1500 word essays (50%)
2. Exam (50%)
LEARN A LANGUAGE

OVERVIEW
The advantages of learning a new language are clear. Students can enhance their employability, develop cross-cultural understanding, and become better learners.

Through UCIL, students can study a language at an introductory or beginners level (Level 1). Beginners units (20 credits) are available in the following languages: French, German, Spanish, Italian, Japanese, Chinese and Arabic and are two semesters long. In addition, eight other languages are available at an introductory level (10 credits). Visit the University Language Centre website to find out more and to apply: https://www.languagecentre.manchester.ac.uk/learn-a-language/courses-for-students/

LEARNING OUTCOMES
Each unit will have its own specific learning outcomes. In general, on successful completion of a language unit, students will be able to:

• Handle some of the basic grammatical structures of the language
• Communicate orally in a limited number of social contexts and perform at Level A1 (Speaking and Listening) of the Common European Framework

ASSESSMENT
Usually includes a written, speaking and listening test. See University Language Centre website for details of the assessment for each unit.
Unique to The University of Manchester, the Manchester Leadership Programme (MLP) allows students to combine academic study with 20, 40 or 60 hours of accredited volunteering, to be awarded Manchester Leadership Programme Certificate at Bronze, Silver or Gold level.

The MLP has two components:

1. Completion of a ‘Leadership in Action’ UCIL unit:
   - UCIL20020: Leadership in Action
   - UCIL20021: Leadership in Action
   - UCIL20022: Leadership in Action
   - UCIL20031: Leadership in Action Online
   - UCIL20032: Leadership in Action Online

2. Completion of 20 to 60 hours of approved volunteering in the community. MLP students have taken part in a wide range of volunteering including environmental campaigns, volunteering, mentoring young people, fundraising and much more. To find out more volunteering opportunities visit: manchester.ac.uk/ucil/mlp

The MLP will be listed on students’ Higher Education Achievement Report (HEAR). For more information contact leadership@manchester.ac.uk

The Enterprise Challenge has two components:

1. Completion of an ‘enterprise’ UCIL unit:
   - UCIL24002: The Art of Enterprise
   - UCIL21331: Becoming an Inspirational Individual
   - UCIL22001: Essential Enterprise
   - UCIL22002: Essential Enterprise

2. Completion of an approved ‘enterprise’ activity project, which will involve working with a locally based business, charity or social enterprise to address and analyse a specific improvement opportunity (assuming around 20 hours of work).

The outcomes and recommendations from the final report will be presented as a PowerPoint ‘pitch deck’ enabling students to bring together their UCIL study and the project.

Students who successfully pass a UCIL ‘enterprise’ unit and complete an ‘enterprise’ activity project will receive an Enterprise Challenge Certificate. The Enterprise Challenge will also be listed on students’ Higher Education Achievement Report (HEAR).

For more information contact ucil-challenges@manchester.ac.uk