



Northumberland
County Council

Science
Course Descriptions



Northumberland Learning & Skills Service Course Description

| | |
|---|---|
| Course title | Fast and Furious Physiology |
| Level | Entry Level |
| Accredited | Non-accredited |
| Who is this course for? | This course is for anyone aged 19 or over. |
| What will I study? (Key modules or content) | <p>Develop your knowledge of Physiology through our five-week intensive course, where you will cover topics surrounding the different vital systems, through practical sessions, including dissection.</p> <p>Within your studies, you will cover some of the different elements of Physiology such as:</p> <ul style="list-style-type: none"> • Hearts • Lung muscles • Nerves • Brains <p>The course will also allow you to measure your own statistics and develop your understanding of what they mean.</p> |
| What are the Entry requirements? | No previous qualifications are required |
| Requirements of the course (e.g. kit/uniform info) | None |
| Progression and Careers | You could look for further progression on to an accredited science course. |
| For more information please contact: | Email: Jane.Dunne@northumberland.gov.uk Tel: 01670 623701 |

Northumberland Learning & Skills Service Course Description

| | |
|---|--|
| Course title | When things go wrong? |
| Level | Entry Level |
| Accredited | Non-accredited |
| Who is this course for? | This course is for anyone aged 19 or over. |
| What will I study? (Key modules or content) | <p>Learn what happens when things go wrong in the human body and understand what causes infectious diseases, genetic disorders and how vaccinations prepare the body to fight diseases.</p> <p>Through this four week course, you will look at;</p> <ul style="list-style-type: none"> • Infectious disease • Immune system • Vaccination • DNA • Genetic inheritance • Genetic disorders • Lifestyle • Disease <p>This course offers even further opportunities to develop your knowledge through a visit to the Centre for Life to participate in a microbiology workshop.</p> |
| What are the Entry requirements? | No previous qualifications are required. |
| Requirements of the course (e.g. kit/uniform info) | There is a field trip to the Centre of Life in Newcastle and you will be expected to arrange your own travel there and back. |
| Progression and Careers | You could choose to take science qualifications. |
| For more information please contact: | Email: Jane.Dunne@northumberland.gov.uk Tel: 01670 623701 |

Northumberland Learning & Skills Service Course Description

| | |
|---|---|
| Course title | What makes Plants Tick? |
| Level | Entry Level |
| Accredited | Non-accredited |
| Who is this course for? | This course is for anyone aged 19 or over. |
| What will I study? (Key modules or content) | <p>If you have a passion for plants and want to gain a better understanding of their processes, then this course is perfect for you.</p> <p>Discover and investigate the importance of plants and what they contribute to our planet and Human life.</p> <p>Over the course of five weeks, you will conduct studies on a wide range of different species of plants such as mosses, ferns and flowering plants. You will be learning how processes such as photosynthesis work, collecting and naming plants and broadening your knowledge of different species of plant on this heavily practical course.</p> <p>The course will include at least one field trip out so you will need to be mobile and require a reasonable level of fitness.</p> |
| What are the Entry requirements? | No previous qualifications are required. |
| Requirements of the course (e.g. kit/uniform info) | A reasonable level of fitness is required for the field trip |
| Progression and Careers | You could progress further on to an accredited science course |
| For more information please contact: | Email: Jane.Dunne@northumberland.gov.uk Tel: 01670 623701 |

Northumberland Learning & Skills Service Course Description

| | |
|---|---|
| Course title | Ecology of Northumberland 2 |
| Level | Entry Level |
| Accredited | Non-accredited |
| Who is this course for? | This course is for anyone aged 19 or over. |
| What will I study? (Key modules or content) | <p>Further your knowledge and understanding of Ecology and recording data, with this five-week progression from the highly successful 'Introduction to Ecology'.</p> <p>This time you will undertake a more detailed study of key habitats including;</p> <ul style="list-style-type: none"> • Rocky Shore • Dunes • Mire • Meadow <p>As well as systematic recording, records will be uploaded onto national databases.</p> <p>A visit to the Natural History of Northumbria library in Newcastle is included in the course, where you will participate in a day of in-depth learning covering different aspects of Ecology in Northumberland.</p> |
| What are the Entry requirements? | No previous qualifications are required. |
| Requirements of the course (e.g. kit/uniform info) | You will require a good level of mobility, a reasonable level of fitness and outdoor gear. You must be able to travel or arrange transport to get to sites. |
| Progression and Careers | The course could ultimately lead to progressing into an accredited course in science. |
| For more information please contact: | Email: Jane.Dunne@northumberland.gov.uk Tel: 01670 623701 |

Northumberland Learning & Skills Service Course Description

| | |
|---|---|
| Course title | Introduction to the Ecology of Northumberland |
| Level | Entry level |
| Accredited | Non-accredited |
| Who is this course for? | This course is for anyone aged 19 or over. |
| What will I study? (Key modules or content) | <p>Get outdoors and explore the breathtaking natural habitats of Northumberland, whilst developing your knowledge of Ecology and Biological recording in an enjoyable hands-on way.</p> <p>This six-week course provides an opportunity to visit and study a range of habitats throughout Northumberland. Covering the basics of biological recording and understanding the ecology of different habitats you visit on this heavily practical course.</p> <p>To partake in this course, you will need to be able to independently travel to the locations although lift sharing may well be possible.</p> |
| What are the Entry requirements? | No previous qualifications are required. |
| Requirements of the course (e.g. kit/uniform info) | Outdoor wear will be useful and a reasonable level of mobility and fitness to ensure you can get to the sites. |
| Progression and Careers | You can progress on to the Ecology of Northumberland 2 Course. |
| For more information please contact: | Email: Jane.Dunne@northumberland.gov.uk Tel: 01670 623701 |

Northumberland Learning & Skills Service Course Description

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|---|--|
| Course title | Step into Science |
| Level | Entry |
| Accredited | No |
| Who is this course for? | This course is designed for anyone aged 19 or over. |
| What will I study? (Key modules or content) | <p>Take a Step into the world of Science and broaden your understanding of different scientific topics, through our in-depth 7-week course.</p> <p>Bringing Science to life. The Step into Science course combines Chemistry, Physics, Ecology and Biology through exciting experiments and explosions, dissections and DNA tests.</p> <p>This course has no formal assessment but your progress and achievement will be recognised and recorded by your lecturer throughout the course.</p> |
| What are the Entry requirements? | No previous qualifications are required |
| Requirements of the course (e.g. kit/uniform info) | None |
| Progression and Careers | You can progress to GCSE Science and Access to Higher Education Diplomas. |
| For more information please contact: | <p>Email: Jane.Dunne@northumberland.gov.uk</p> <p>Tel: 01670 623701</p> |

Northumberland Learning & Skills Service Course Description

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|---|--|
| Course title | AQA Science Certificate (Pre-GCSE) |
| Level | Entry Level |
| Accredited | Accredited |
| Who is this course for? | This course is for anyone aged 16 or over. |
| What will I study? (Key modules or content) | <p>This qualification is a good introduction to GCSE science and will give you a head start if you wish to do the GCSE Trilogy in the future.</p> <p>This in-depth course comprises six components. Each has two assessments and include:</p> <ul style="list-style-type: none"> • The human body • Environment, Evolution and Inheritance • Elements, Mixtures and Compounds • Chemistry in our world • Energy, forces and the structure of matter • Electricity, magnetism and waves |
| What are the Entry requirements? | No previous qualifications are required |
| Requirements of the course (e.g. kit/uniform info) | None |
| Progression and Careers | You could progress on to the GCSE Trilogy course. |
| For more information please contact: | Email: Jane.Dunne@northumberland.gov.uk Tel: 01670 623701 |

Northumberland Learning & Skills Service Course Description

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|---|--|
| Course title | Big Bang Prudhoe Theory |
| Level | Entry Level |
| Accredited | Non-accredited |
| Who is this course for? | This course is for anyone aged 19 or over. |
| What will I study? (Key modules or content) | <p>An introduction to Physics that brings this fascinating subject to life.</p> <p>This seven-week course will look at the principles that govern the physical world around us. Physics is the branch of science concerned with the nature and properties of matter and energy. The subject matter of physics includes:</p> <ul style="list-style-type: none"> • Mechanics • Heat, light and other radiation • Sound • Electricity • Magnetism • Structure of atoms. <p>You will look at some of these topics and carry out some practical experiments.</p> <p>There is no formal assessment for this course. However, your progress will be tracked and recorded over the duration of the programme by your lecturer.</p> |
| What are the Entry requirements? | No previous qualifications are required |
| Requirements of the course (e.g. kit/uniform info) | None |
| Progression and Careers | You can progress on to a further course in the Science area. |
| For more information please contact: | <p>Email: Jane.Dunne@northumberland.gov.uk</p> <p>Tel: 01670 623701</p> |

Northumberland Learning & Skills Service Course Description

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| Course title | Forensic Science - an Introduction |
| Level | Level 1 |
| Accredited | Non-accredited |
| Who is this course for? | This course is for anyone aged 19 or over. |
| What will I study? (Key modules or content) | <p>Discover the skills and techniques used by forensic scientists to prove innocence or guilt.</p> <p>Forensic scientists collect, preserve, and analyse scientific evidence during an investigation. Whilst some forensic scientists travel to the scene of a crime to collect evidence, others occupy a laboratory role, performing analysis on objects brought to them.</p> <p>Delve into the world of forensic science by enrolling on our 15-week introductory course, where you will cover topics such as:</p> <ul style="list-style-type: none"> • Crime Scene Investigation • Blood and DNA • Fingerprinting and hair • Marks and Impressions • Chemical Analysis • Cells and Microscopes • Anatomy of an Autopsy |

What are the Entry requirements?

No previous qualifications are required

Requirements of the course (e.g. kit/uniform info)
Progression and Careers

None

You can progress on to a level 2 science course such as GCSE Science

For more information please contact:

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Northumberland Learning & Skills Service Course Description

Course title

Anatomy for Beginners

Level

Level 1

Accredited

Non-accredited

Who is this course for?

This course is for anyone aged 19 or over.

What will I study?
(Key modules or content)

If you have an interest in the study of living bodies and how they work; this could be the perfect course for you.

Why do we pass on genes?

How do we digest?

How does a signal from the brain manage to make us move?

Over the course of 15 weeks, you will cover a wide range of topics such as:

- The digestive system
- The heart and lungs
- DNA and Inheritance
- Movement and the Skeleton
- Reproduction
- History of Medicine
- The Nervous System



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What are the Entry requirements?

Requirements of the course (e.g. kit/uniform info)
Progression and Careers

For more information please contact:

This course will develop your knowledge of Anatomy and on completion will provide you with the appropriate understanding to progress onto a GCSE science course.

No previous qualifications are required

None

You can progress on to a level 2 science course such as GCSE Science

Email: Jane.Dunne@northumberland.gov.uk

Tel: 01670 623701

Northumberland Learning & Skills Service Course Description

Course title

Environmental Science

Level

Level 1

Accredited

Non-accredited

Who is this course for?

This course is for anyone aged 19 or over

**What will I study?
(Key modules or content)**

You can become a part of bringing the fields of natural history and medicine together through environmental science.

Environmental Science provides an integrated, quantitative, and interdisciplinary approach to the study of environmental systems.

Environmental Science is the integration of:

- Ecology
- Biology
- Physics
- Chemistry
- Plant science
- Zoology
- Geology

Topics we will cover include:

- Soils and samples



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Northumberland

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- Acid rain and Erosion
- Pollution and the Environment
- Global Warming
- The Churning Earth
- The Atmosphere
- Conservation of Life

Follow the work of environmental scientists and develop your knowledge of environmental issues facing the planet.

What are the Entry requirements?

No previous qualifications are required

**Requirements of the course
(e.g. kit/uniform info)
Progression and Careers**

None

You can progress on to a level 2 science course such as GCSE Science

For more information please contact:

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