

# **APPLIED SCIENCE**

Your preparation guide to get you ready for September



## Applied Science









## Congratulations on choosing an Applied Science Course starting in September 2020!

We are a large curriculum area delivering a wide range of courses in Science, Health & Social Care, Child Care, Access to Higher Education, and Counselling; as well as Apprenticeships in Health Care, Health & Social Care, Child Care & Dental Nursing.

## You have chosen to study one of the following courses as Part of a Study Programme:

Level 1 Diploma in Science

Level 2 Diploma in Science

Level 3 Year 1 Foundation Diploma in Applied Science

Level 3 Year 2 Diploma in Forensic Science or Medical Science

#### As well as the main course, your Study Programme also includes

Maths

**English** 

**Tutorials** 

Personal Development

**Employability** 

**Work Experience** 

#### **Course Details**

- Your course will run over 3 days per week.
- We expect you to have 100% attendance in all lessons
- Book your holiday's during the college holidays, and not in term time.

#### **Course Enrolment**

You will be sent a letter inviting you to our enrolment day at the end of August, you must bring with you:

ID (Birth Certificate/Passport)

Course fees (books/materials)

GCSE Certificates/ Results slips

Don't worry if you haven't achieved the GCSE results you were hoping for, we will be able to offer you a place on an alternative course in science.

#### **Work Placement**

1st Choice:

Work placement is a mandatory requirement of your course. It is a great opportunity for you to gain experience, knowledge and work skills from within the Science/Health sectors. You can choose the area in which you would like to complete a work placement provided it is relevant to the science course and your future career path. You cannot use your place of work if you have a part-time job.

The work placement team at the college will arrange your work placement for you, after checking it is safe and appropriate for you to go there.

Between now and September research where you would like to go on placement, record the details here to give the Work Placement Team at the start of the course:

Organisation:
Contact Name:
Address:
Telephone Number:
Reason for choosing this employer
2nd Choice: Organisation:
Contact Name:
Address:
Telephone Number:
Reason for choosing this employer

#### **Enrichment**

The student experience is enhanced through educational visits and fun trips, include:

The Houses of Parliament The Hunterian Museum

Body Worlds Exhibition LUSH

Winter Wonderland & London Bowling

The Old Bailey & Royal Courts of Justice

#### **Preparation for the Course**

In this section we have included a variety of websites, books and journals for you have a look at in preparation for starting your science course; as well as careers information and some activities for you to complete.

#### **Useful websites:**

www.biologymad.com

www.cellsalive.com

www.chemguide.com

https://phet.colorado.edu/en/simulations/category/physics

<u>https://www.youtube.com/watch?v=5fYkPljB9Zk</u> (search backyard scientist on YouTube)

https://www2.grenfell.mun.ca/physics/physlets.html

#### **Books:**

CGP Revision guides (Chemistry, Biology and Physics)

#### **Journal Articles:**

We recommend having a look at the new scientist for up to date news and developments within the science industry https://www.newscientist.com/

#### Careers in Science – Research you career path now...

#### **Careers Assessment**

Which career is right for you? Find out by using the following link, Match your personality with an animal type, and then suitable careers <a href="https://icould.com/buzz-animals/">https://icould.com/buzz-animals/</a>- scroll down on the webpage to click on 'Take the Buzz quiz'.

#### Where can I work in science?

With further training, science courses can lead to working in the following professions:

Biomedicine	Marine Biologist	Pathology
Criminology	Medicine	Pharmacist
Dental Hygiene	Midwifery	Physiotherapy
Forensic Science	Nursing	Psychology
Health Care Assistant	Nutrition	Radiography
Lab Technician	Paramedic	Support Worker

#### **Useful Careers Websites**

http://www.sciencecareerpathways.com/home/

https://www.healthcareers.nhs.uk/

https://www.prospects.ac.uk/careers-advice

#### Which university courses could I apply for, from L3 Science?

BSc (Hons) Biomedical Science	BSc (Hons) Medical Science
BSc (Hons) Biological Sciences	BSc (Hons) Midwifery
BA (Hons) Criminology	BSc (Hons) Nursing
BSc (Hons) Dental Hygiene	BSc (Hons) Nutrition
BSc (Hons) Diagnostic Radiography	BSc (Hons) Occupational The

BSc (Hons) Environmental Science BSc (Hons) Paramedic Science

BSc (Hons) Forensic Science

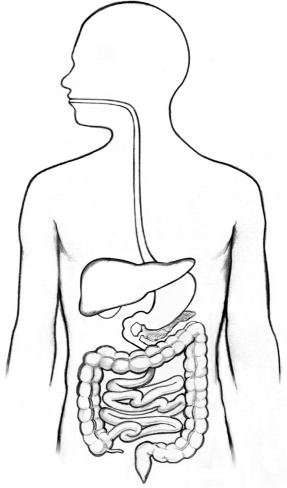
BSc (Hons) Physiotherapy

BSc (Hons) Health Science

BSc (Hons) Psychology

#### **Activity 1 Biology:** The Digestive System

1. Colour in the organs of the digestive system



- 2. Label the organs of the digestive system and research their functions
  - Mouth & Pharynx
  - Oesophagus
  - Liver & Gall bladder
  - Pancreas

- Stomach
- Small Intestine
- Large intestine
- Rectum & Anus

### **Activity 2 Chemistry: The Periodic Table**

Colour in the following periodic table and annotate with information you know about the groups, periods or individual elements 1

The Periodic Table - ∏

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175 Lu lutetium	Lr Iswrencium 103
173 Yb ytterbium	No nobelium 102
169 Tm thulium	Md mendelevium 101
167 Er erbium	Fm fermium 100
165 Ho holmium	Es einsteinium 99
163 Dy dysprosium	Cf Californium 98
159 Tb terbium	-
157 Gd gadolinium	Cm curium 96
152 Eu europium	E
Sm Sm samarium	Pu Pu plutonium 94
Pm promethium	Np neptunium 93
144 Nd neodymium	uranium
141 Pr prateodymium 50	
140 Ce cerium	Th thorium
anthanides .	actinides "

## **Activity 3 Physics: Bending Light**

1.	Follow the link
	https://phet.colorado.edu/sims/html/bending-light/latest/bending-light_en.html
2.	Play about with 'bending' light.
3.	Change the density of the materials and note what happens.
4.	Why does the light change direction when going from <b>less dense to more dense,</b> but reflect backwards when going from <b>more dense to less dense</b> ?
	Notes
	e hope you have enjoyed the activities and research in science, and ook forward to welcoming you to the course in September 2020,
	The Science Team
	Follow the college on:
	https://www.facebook.com/BPCollege/

https://www.instagram.com/thebpcollege/?hl=en

https://twitter.com/BPCollege



### Main sites at:

Lansdowne, Meyrick Road, Bournemouth, BH14 0LS

North Road, Parkstone, Poole, BH14 OLS



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