

Scarborough UTC News Flash Friday 26th November 2021

INTRODUCTION

Dear parent/carer

This week, I would like to focus on the importance of good attendance at college. At Scarborough UTC we set the bar high with a minimum expected attendance of 96.5%.

This high bar is extremely important because missing out on lessons leaves children vulnerable to falling behind. Children with low attendance tend to achieve less in both primary and secondary school.

Table 1 below puts absence from college on the context of the days children miss at school based on a school being open for 190 days per year and Table 2 puts absence in the context of the days children miss at school over a six week period.

Table 1

| Number of days absence | Equals attendance one school year |
|------------------------|-----------------------------------|
| 9.5 days | 95% |
| 19 days | 90% |
| 28.5 days | 85% |
| 38 days | 80% |
| 47.5 days | 75% |
| 57 days | 70% |
| 66.5 days | 65% |

Table 2

| Number of days absence | Attendance over past six weeks |
|------------------------|--------------------------------|
| 2 days | 93% |
| 3 days | 90% |
| 5 days | 83% |
| 8 days | 73% |
| 10 days | 67% |
| 15 days | 50% |

Even short-term absence can have a significant impact on your child's learning. Teachers at the UTC plan and teach lessons that are sequential and that continually build on prior learning so that knowledge, skills and understanding are built over time. This then supports the expected progress your child should make. Missing one or two lessons in this sequence can therefore mean that your child's understanding of a topic is negatively impacted. This is especially important when all students at the UTC are studying GCSE, A level or equivalent syllabuses and preparing for exams and completing coursework that will secure the next steps in their education and career journey.

I urge you all to work closely with your child to ensure that each week you have a 100% target for attendance at college. Sometimes this is hard work but the rewards in terms of educational outcomes and destinations are most definitely worth that effort. To support this weekly 100% attendance drive

we will be holding a draw each week for those achieving 100% and the chosen students will each receive a certificate and free lunch voucher.

Winning is fun... Sure. But winning is not the point. Wanting to win is the point. Not giving up is the point. Never letting up is the point. Never being satisfied with what you've done is the point.

Pat Summitt

Perseverance doesn't always mean winning and losing. Perseverance means showing up and rising to the occasion and performing.

Michael Chiesa

Thank you for your support.

**Mr Kilgour
Principal**

T&L@SUTC

Our Year 13 engineering diploma students took part in a visit to Severfield this morning in order to find out more about what Severfield do and how they do it. The visit formed part of the Project Based Learning activity students are undertaking with Severfield as a part of their Material Science unit. Students were given a tour of the production line from raw material entering the building to the finished product exiting at the end. This was a unique opportunity to see a structural engineering production line, with the experience enjoyed by all. Many thanks to the Severfield team for coordinating and facilitating our visit.



TECHNICAL EXCELLENCE

News from Systems Control. This week students in year 12 and 13 have been doing some practical investigations for part of their unit 5 electrical and electronic design looking at Resistor capacitor networks used for timing and determining the relationship between voltage and current for a charging and discharging capacitor. With the Year 13 students on the electrical and electronic pathway, students then investigate amplification using transistors, with analysis of transistor 'biasing' - a feature which allows the transistor to be held so it is switched on or 'saturated' to the point where it will amplify or boost the full signal received. Without this feature - what happens is that only the strongest part of the signal is amplified, due to the transistor partially switching on and off. We also looked at resistor and capacitor filters which can be used together to create something to pass high or low

frequency signals. A frequency filter has many applications which as you can imagine is useful in security and authentication as well as in audio applications.

Year 10 have been doing some further work on Ohm's Law introducing the voltage divider and how it can usefully be used in sensor circuits. The fundamentals in systems control relate to the relationships with current (the flow of electrical charge in a circuit, measured in amps) resistance (the limiting force which affects the flow of charge) and the force which caused the current to flow called electromotive force which we commonly refer to as voltage. Voltage, Current and Resistance then are our building blocks for understanding this amazing 'unseen' invisible force which we see the effects of in the circuits we build and the analysis learners here make by using their solderless breadboards and multimeters or computer aided design. We are gradually building an understanding of these basic principles - both through practical work and with our low stakes quizzes and I am pleased that we are seeing some progress building understanding in what is for many a new subject.

Year 11 this week have been showing their understanding of circuit manufacture by creating their coursework printed circuit boards in the workshop. We use a photographic process, involving a lightbox, and a photo-resist chemical. Students use an 'artwork' version of their PCB design which is printed onto clear acetate from their computer aided design work. Once the printed circuit boards are 'developed' in class, they are then put into a spraying machine which jets a solution of sodium persulphate. $\text{Na}_2\text{S}_2\text{O}_8$ this then bonds (removes, taking it into solution) the exposed copper which is not part of the circuit, leaving the required copper circuit on the board which then requires drilling and soldering. Students have to do this all independently - which is fantastic to see at this point in the course. Alongside the practical success seen so far this week, I'd like to emphasise the importance of attending our engineering support sessions they are on to give all students an extra opportunity to put time into their engineering studies. Preparing for Summer 2022 started with the decision to come to Scarborough UTC, and we are uniquely set up to guide and support students on their journey to becoming Technically Excellent, Employable Graduates. I've spoken in lesson to Year 11, saying that as part of their summer preparation they should be building in preparation time to go over theory areas they are not confident with. I am using the term 'preparation' rather than revision, as the term revision for some looking back is too much associated with COVID and not being in lesson, and whilst we acknowledge that in Systems, I'm really wanting to support students with being forward focused and thinking of themselves in Summer 22 what do they want for themselves and what are they 'putting in' to the pot to make sure it happens? Have a great weekend, Mr Brown

ASSESSMENT AND CURRICULUM

All Years: All assessment information, Attendance, Professional values, behaviour and target information is published on the "My Child at school" app. This is a secure and personal portal that allows you to assess the progress of your child at any time. Invites for the portal have been issued. If there are any issues accessing the app, please report this to enquiries@scarboroughutc.co.uk for further assistance. Registering for the APP is vital as this is the primary method of regular communication to parents.

Behaviour and Safety

It is important to continue the highest standards of business dress policy and ensure that equipment, stationary and scientific calculators are checked regularly.

Maintaining 100% attendance is important to ensure we can continue to support progress effectively. Students are supported through tutor time with attendance challenges. Attendance is a very important focus for all students to ensure we can support attainment throughout the Autumn term. A hard-working environment is vital to ensure students feel safe and make continued progress.

Firstly, structures are in place to guarantee that all students gain best opportunity to meet high standards and are recognised for hard work in areas identified by **Professional Values and Employability Skills (PVES)**, these positive points are identified on your MCAS parental account. By tracking this information regularly, you will be able to identify areas of strength and development for your child

Curriculum, Feedback and Assessment

Year 10 & 12

The results of recent formative assessments are available on MCAS.

Year 11 & Y13

Formal pre-public exams have been completed and we are now looking forward to Year 11 and 13 progress evening on Thursday 2nd December. Thank you for booking your appointments on the **“My Child at School”** Parental account/ App.

Event Details: **Subject Progress Evening (Parents Evening) at the Scarborough UTC.**

Date: **Thursday 2nd of December 2021**

Time: **4:30pm to 7:00pm**

Refreshments available from 4:15pm in the restaurant area. Scheduled individual teacher appointments from 4:30pm to 7:00pm. Any issues before the evening please email enquiries@scarboroughutc.co.uk.

MATHEMATICS

Senior Maths Challenge

Over 82,000 students from across the UK took part in the annual UK Mathematics Trust Senior Maths Challenge for students in Years 11 to 13. The challenge is organised and produced by the UK Mathematics Trust (UKMT)*, a registered charity established in 1996, whose aim is to advance the education of children and young people in mathematics. The UKMT organises national mathematics competitions and other maths enrichment activities for 11-18 year old UK school pupils. The challenge involves answering 25 multiple choice questions in 90 minutes and is sat in school under normal exam conditions. The top 10% achieve Gold, next 20% achieve Silver and next 30% get Bronze.

SUTC students who took part achieved 1 Gold, 4 Silvers and 8 Bronzes in this year's challenge. Adam Hodgson in Year 11 achieved the Best in School Award and a Gold Award with 102 points and Kayden Zanelli in Year 12 and Ryan Sennett achieved Best in Year with 74 and 70 points respectively in addition to their Silver Awards.

The two students achieving Silver award were year 12 students Daniel Oakley with 67 points and Richard Sharp with 68 points. The eight students achieving Bronze Awards were Year 13 students Matthew Potts, Ethan Burnett, Alex Jenkin, Harvey Mosley and Ryan Pashby. Serhi Popov in year 12 and Year 11 students Ben Morris and Xavier Prior. Well done to all the students that took part.

*In the last academic over 600,000 pupils from 4,000 schools took part in the three individual challenges, (Senior, Intermediate and Junior) making it the UK's biggest national maths competition. Each challenge leads into a follow-on Olympiad round. UKMT also run mentoring schemes and

summer schools for high performing students as well as training a team of six to represent the UK in the International Mathematical Olympiad.

SIXTH FORM

Congratulations to those with the highest points for self-management in the sixth form: Blake Lancaster in Year 13 and Lucy Pashby in Year 12. Self-management is one area of our professional values and employability skills and is something that employers are keen for workers to have as a skill in the workplace. Meeting deadlines and completing independent study are key to success in the sixth form.

Parent's Evening will be on December 2nd for Year 13. This will take place from 4.30 – 6.30pm in the Hall. We look forward to speaking with you then about your child's work and progress.

UCAS deadline for UTC students to complete their applications and to pay and send on UCAS Hub is December 1st. The cost of one choice is £22 and five choices £26.50. All students have been given detailed feedback on their personal statements. They apply through UCAS Hub. Students applying to University in Year 13 have been given guidance on completing their applications on Wednesday mornings and on Friday afternoons.

Those applying for apprenticeships have been informed of the UCAS/Apprenticeships Discovery event that take place as a live online event on Tuesday 30th November. There are workshops from Rolls Royce, Dyson, PWC, Capgemini and Jaguar Land Rover. Students need to register themselves to attend part or all of the event that includes many different workshops and speakers. They can use this link to sign up: <https://www.ucas.com/events/ucasdiscovery-apprenticeships-fair-404796>

Students in Year 12 applying for The Social Mobility Project should ensure that they complete their applications by December 10th.

ETHOS

The theme of the week has been Internet Safety. Our assemblies have been led by PC Liam Carter from North Yorkshire Police on Cyber Crime and how to protect yourself against it. They were spoken to about the Computer Misuse Act and the legal penalties linked to cybercrimes. Students were also informed about how to increase security on their passwords for their internet devices.

Our Christmas appeal will launch next week and our student leaders would like to collect toys for the NYCC Children's Appeal and tins of food for The Rainbow Centre. If you are able to send in donations for these appeals.

The Lessons from Auschwitz Project started this week online with learning about the holocaust with a live online presentation and the background to this.

CAREERS

Mr Forster has led careers interviews with our Year 11 students this week.

Our company of the month is UNISON and our Year 10 and 12 students had a talk with Mr Lawson from the Company on Monday explaining the engineering work that the company do and informing students of the apprenticeship opportunities.

Our Year 11 students who are interested in Sixth Form Studies here at the UTC sampled taster lessons this week on Thursday morning. This started with an information assembly about our entrance

requirements and sixth form life. They participated well in all of the sessions that the staff offered for our courses. Students who would like a place here next year should apply online.

| DATES FOR YOUR DIARY | |
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| Professional development training day: | Friday 3 rd December 2021 |
| Christmas holiday: | Monday 20 th December 2021 to Monday 3 rd January 2022 |
| Professional development training day: | Tuesday 4 th January 2022 |
| First day of spring term for students: | Wednesday 5 th January 2022 |
| Spring Half term: | Monday 21 st February to Friday 25 th February 2022 |
| Easter holiday: | Monday 11 th April to Friday 22 nd April 2022 |
| Professional development training day: | Monday 25 th April 2022 |
| First day of summer term for students: | Tuesday 26 th April 2022 |
| Bank holiday: | Monday 2 nd May 2022 |
| Summer Half term: | Monday 30 th May to Friday 3 th June 2022 |
| Term ends: | Tuesday 26 th July 2022 |