Computing and Business Studies

In the Computing an Business Studies faculty we are constantly evaluating and improving the curriculum offer throughout Key Stage 3, 4 and 5 to ensure that the breadth of knowledge and experiences that are on offer meet the national curriculum needs as well as giving our students in Year 9 the skills and knowledge to succeed and be independent in their studies throughout all their GCSE subjects.

Vision

The aim of the computing curriculum is to provide children with an exciting and rigorous curriculum that addresses the challenges and opportunities offered by the technologically rich world in which we live. Pupils will gain secure knowledge and skills which will encourage them to use ICT and computing to create art, solve problems and develop computational thinking skills. Pupils will understand how computers work, how computer systems work, how to be a safe digital citizen and design and program robust solutions. Our vision follows the spiral curriculum model that is designed to allow students to progress at their own pace but build up knowledge and understanding every time we revisit a topic. This allows for a flowing process from Year 7 through the GCSE content by the end of Year 11.

Goal for every student

While students at primary school do have a KS1/2 national curriculum that they should be taught over their primary experience, the level of complexity and activities is very broad from one feeder school to another. To support the variation in abilities and experiences we have developed a 2 year KS3 curriculum that works on a spiral technique of knowledge dissemination across Year 7, 8 and 9. This allows for students to experience lessons where key aspects of the national curriculum are delivered to all and dependent on their previous experiences as learners experience differentiated resources and tasks to move them from emergent learners to mastery learners applying their understanding within different scenarios and contexts. By the end of the curriculum the goal for every student is to be:

- To be able to analyse problems in computational terms through the use of Abstraction and Decomposition.
- To develop logical thinking strategies
- To be able to think creatively to design solutions to problems
- To be able to debug programs
- To be able to see the bigger picture and understand the components that make up digital systems.
- To be able to discuss the impacts of digital technology to the individual and to wider society
- To inspire curiosity
- To help students focus and have attention to detail
- To develop their adaptation to difficult situations
- To build communicative skills that allow them to provide information to a wide audience
- To be given the same experience regardless of teacher in the faculty
- To be set stretch and challenge tasks included for more able

Pace

This is achieved by students completing the learning cycles of 5 topics over the year mapped against the national curriculum guidelines where at the start of each topic a student will complete a Cold task for staff to see their current knowledge on the topic. Followed by new content for the topic before retaking the Cold task as a Hot task plus GEM tasks as part of our learning cycles.

Over the three Key Stages we develop progressive skill development through various GEM cycles over a range of year groups which helps embedding before building on them to the next level.

Students experience one lesson a week with each topic consisting up to 10 lessons per topic. Learning cycles and GEM lessons are followed by all staff.

Impact

Students' skills are marked and tracked using the KS3 QLA's developed from the National Curriculum statements. This gives students the opportunity to explore a wide range of skills which prepares them for their GCSE course.

KS4 Computer Science/ICT

Vision

The aim of our spiral computing curriculum model is to provide children with exciting and rigorous learning experiences that addresses the demands and opportunities offered by the technologically rich world in which we live. Students will be challenged to gain secure theoretical knowledge and develop practical ICT and computational thinking skills whilst learning how to be safe a safe digital citizen.

Goal for every student

By the end of the curriculum the goal for every student is to be:

Computer Science

- To be able to analyse problems in computational terms through the use of Abstraction and Decomposition.
- To develop logical thinking strategies
- To be able to think creatively to design solutions to problems
- To be able to debug programs
- To be able to see the bigger picture and understand the components that make up digital systems.
- To be able to discuss the impacts of digital technology to the individual and to wider society
- To inspire curiosity
- To help students focus and have attention to detail
- To develop their adaptation to difficult situations
- To build communicative skills that allow them to provide information to a wide audience To be given the same experience regardless of teacher in the faculty
- To be set stretch and challenge tasks included for more able

ICT

- To be able to discuss the impacts of digital technology to the individual and to wider society
- To inspire curiosity
- To help students focus and have attention to detail
- To develop their adaptation to difficult situations
- To build communicative skills that allow them to provide information to a wide audience
- To develop transferable skills between software packages
- To be given the same experience regardless of teacher in the faculty
- To be set stretch and challenge tasks included for more able

Pace

Students receive 5 lessons a fortnight over Year 10 and 11.

Year 10 in computer Science is about delivering the exam content for component 2. Each topic lasts for around 1 half term with end of topic assessments and GEM activities completed as per the learning cycle process. Year 11 in computer science is about delivering the exam content for component 1 and revisiting revision sessions on Component 2. The same learning cycles with GEM activities are completed

Year 10 ICT is about delivering the knowledge and skills to complete the mandatory coursework project as well as exam content. Year 10 students sit a mock exam at the end of Year 10. Students complete a practice task with GEM Feedback before attempting independently the controlled assessment work. This is continued into Year 11 to complete the 2 remaining controlled assessment units

Impact

Assessments are based on end of topic tests created from practice and real exam questions.
GEM tasks are used based on diagnostic marking of topic tests
PLCs used to develop student impact of revision topics.

KS5 Computer Science

Vision

The aim of the KS5 Computing curriculum, is to provide learners with the next phase of their learning journey into the world of industry with an exciting and rigorous curriculum that addresses the challenges, skills and opportunities offered by the technologically rich world in which we live. Pupils will gain secure knowledge and skills which will encourage them to use ICT and computing knowledge to solve problems and develop computational thinking skills. This is a route in which students enjoy digging deeper into the concepts of Computational Thinking and apply their subject knowledge towards the industry they are aiming for.

Goal for every student

By the end of the curriculum the goal for every student is to be:
Computer Science

- To be able to analyse problems in computational terms through the use of Abstraction and Decomposition.
- To develop logical thinking strategies
- To be able to think creatively to design solutions to problems
- To be able to debug programs
- To be able to see the bigger picture and understand the components that make up digital systems.
- To be able to discuss the impacts of digital technology to the individual and to wider society
- To inspire curiosity
- To help students focus and have attention to detail
- To develop their adaptation to difficult situations
- To build communicative skills that allow them to provide information to a wide audience To be given the same experience regardless of teacher in the faculty
- To be set stretch and challenge tasks included for more able

Pace

Students receive 10 lessons a fortnight over Year 12 and 13

KS5 in computer Science is made up of 3 Components. Component 1 and 2 are delivered along side each other by expert specialists in those components. The AS content is delivered in Year 12 followed by the Component 3 NEA and A level content through Year 13

Impact

Assessments are based on end of topic tests created from practice and real exam questions.
GEM tasks are used based on diagnostic marking of topic tests
PLCs used to develop student impact of revision topics.

KS4 Business Studies

Vision

To help students understand and engage with the increasingly complex business world in which we live and to enable them to become informed, confident and passionate consumers, employees and entrepreneurs.

Goal for every student

At The John of Gaunt School we aim to develop young business people and entrepreneurs. The courses aims to provide a wider understanding of the legal, political, social and environmental context of business. This external environment is rapidly changing and our intention is to develop students into informed and adaptable individuals, who can make valuable contributions to society as employees, entrepreneurs and future leaders.

The specification we have chosen is aimed to give students the opportunity to explore real business issues and how businesses work. It has been designed with a clear and straightforward structure to enable students to access and engage with the world of business.

The specification for Business studies is broad but covers four main functional areas:

Business in the real world

Influences on business

Business operations

Human resources

Marketing

Finance

With a combination of developing knowledge, analysis and evaluation skills and independent research skills we hope to complement the employability skills that our students are developing in other subject areas.

Pace

Business is taught across the 2 years of KS4. We aim to deliver 4 units in Year 1 and 2 units in Year 2.

Students attend 5 lessons a fortnight over the two years with the GCSE curriculum topics spread out across the years as per the Learning cycles plan.

Impact

- Assessments are completed as specified on the learning cycles
- Exam style practice questions and past papers are used for end of topic/year assessments
- GEM work is based around Diagnostic testing combined with PLC's

KS5 Business Studies

Vision

Our vision is to for our Business students to develop knowledge and skills that will equip them to become successful entrepreneurs, leaders, innovators and employees. We hope to develop their knowledge of key business models and theories and be able to apply these to the contexts they experience and learn of in the real world. We learn about businesses from a variety of stakeholder perspectives, allowing our students to make well informed decisions, whether they hope to become employees, small business owners, corporate executives or decision makers in Government.

Goal for every student

- develop passion and enthusiasm for studying business
- gain holistic understanding of business in a range of contexts
- develop a critical understanding of organisations and their ability to meet society's needs and wants
- understand that business behaviour can be studied from a range of perspectives
- generate enterprising and creative approaches to business opportunities, problems and issues
- be aware of the ethical dilemmas and responsibilities faced by organisations and individuals
- acquire a range of relevant business and generic skills, including decision making, problem solving,
- challenge assumptions and develop critical analysis skills
- apply numerical skills in a range of business contexts.

Pace
Students receive 10 lessons a fortnight over Year 12 and 13 The final A Level is made up of 3 papers. The 3 papers each cover content from all 10 units and all 4 AOs.
Impact
Year 1: Understanding of unit sections is assessed through exam style questions in order to assess knowledge and understanding and develop exam practice. Followed by End of Unit exams, with questions in the same format as terminal exams. Full AS Papers are sat in Year 12 to assess understanding of all Year 1 content. Year 2: Understanding of unit sections is assessed through past exam questions in order to assess knowledge and understanding and develop exam practice. Followed by sitting full papers in the 2 Mock series. GEM tasks are used based on diagnostic marking of topic tests. PLCs used by students to identify areas of weakness and encourage managing own learning.