ICT/COMPUTING – KS4

Teacher: Ross Fincham

ICT is also offered as an option to Key Stage 4 pupils, where at the end of Year 9 they can choose to study in more detail. During Year 10 they will explore key skills and develop their knowledge they have developed during Key Stage 3 so that they can enter the Pearson Edexcel (Exam Board) Functional Skills ICT Entry Level 3 exam, which is an online exam that allows them to use their skills to achieve a qualification in the subject. Once they have passed this qualification, they will then have the opportunity to move on and study in more depth to work on the Pearson Edexcel (Exam Board) Functional Skills Level 1 qualification.

Schemes of work:

YEAR 10 - OPTIONAL- EDEXCEL FUNCTIONAL SKILLS ENTRY LEVEL 3 UNITS OF STUDY

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Autumn One Autumn Two	Autumn Two Spring One	Spring Two	Summer One	Summer Two		
apply system setting about system setting about system setting. Learners create a fact so about system settings. Learners create a fact so about system settings. Learners create a fact so about system settings. It is in life/work contexts. Using devices and handling information Device types - desktop, laptop, mobile, smart, Connectivity - wired, wireless (Wi-Fi, Bluetooth), Features - input (keyboard, touchscreen, mouse, mousepad, scanner, microphone, camera), Features - output (monitor/screen, speaker, printer, camera) Using devices and handling information Uses - Communication (phone/video call, email, social media), Creating/editing documents, Media (images, text, video, audio, stream, livestream), Lifestyle (entertainment, games, health and fitness, social media) Online	Autumn Two apply system settings Learners create a fact sheet about system settings. Inavigate online content to locate required information ways they currently use the internet (online) to navigate and find information, etc online. carry out searches on the internet Learners use at bookmarks. use files to read and store information set up files and folders on shared network/Cloud for learners to find and retrieve files and information and download/resave. create files and save them in folders on shared network, on Cloud, on removable media — peer feedback on names chosen for files and where they are stored. Spring One Creating and editing Use a suitable application ether, edit and format text to provide a range of documents produced by the processing peace of information (text, images in a given context. They should know the purpose of a range of documents and presentation(s). Inavigate online content to to provide a range of documents produced by the processing peace of information (text, images in a given context. They should know the purpose of a range of documents and presentation(s). Inavigate online content to to provide a range of documents produced by the processing peace of information (text, images in a given context. They should know the purpose of a range of documents and presentation(s). Inavigate online content to to provide a range of documents produced by the processing peace of information (text, images information (text, i	Transacting Complete and submit an online form (including personal details) and comply with data validation. The focus on online forms used for a range of transactions. Know what is meant by a digital footprint, understand the implications of a digital footprint and know the range of digital activities that leave a digital footprint. know how to complete and submit and online form, complying with data validation and verification checks. Purpose of online forms: Registration Application Request a service Financial transaction Book and appointment Make an enquiry Report a problem Make an online purchase Comply with verification checks to complete an online transaction	Summer One safe and responsible online Understand the need to stay safe and respect others when using the internet and communicating online. Recognise the online risks and consequences. They will be able to take steps to respect others online and develop skills to avoid inappropriate behaviours. E SAFETY Stay safe Respect Internet Online communication' Online risks Hacking Personal data compromised or stolen Fraud Identity theft Phishing Pharming Malware Shoulder surfing Unauthorised access Links in unsolicited emails, message, pop-ups Communicate with appropriate language	 Summer Two Working with technology ensuring physical and mental wellbeing Know of and know how to minimise the effects of physical stress that may result from using devices Physical stress Pain (poorly positioned equipment or poor posture) Repetitive strain injury (RSI) Eye strain Headaches Ways to minimise stress Adjust position (not too close or too far away from device and peripherals (mouse and keyboard)) Adjust screen height and distance Adjustable chair Wrist support for peripherals (keyboard and mouse) Suitable lighting Regular breaks from the screen REVIEW OF KEY SKILLS AND SOFTWARE TYPES AND TOOLS TO ACHIEVE OUTCOMES: 1 - WORD PROCESSING SKILLS 2 - PRESENTATION: POWERPOINT SKILLS 3 - SPREADSHEET: EXCEL SKILLS 		

- Applications ()
- System settings
- Internet (menu, hyperlink, navigation controls, search criteria)
- Storage organize and retrieve information (files, folders, storage (local/remote))
- Problems (device and software - system errors
- Technical problems -files, sound, print, crash/freeze, internet connection
- System/user errors –
 restart/reboot, file
 name/location, sound,
 printer [paper, jam,
 connection], login details,
 internet connection
- the main features and uses of different types of devices
- Desktop, laptop, mobile, smart
- Wired, wireless (Wi-Fi, Bluetooth)
- Keyboard, touchscreen, mouse, mousepad, scanner, microphone, camera
- Monitor/screen, speaker, printer, camera
- Phone/video call, email, social media
 - Devices and connectivity
 - Device features
 - Communication
 - •Media
 - Lifestyle
 - Online transactions
- know what an application is and the main types of application software
- Email
- Web browser
- Mobile (lifestyle, social media, news, entertainment)
- Word processor
- Presentation software
- learners choose application software to present findings and learning about applications.

- highlight the importance of organization to aid retrieval.
- use files and folders to organise and retrieve information
- Learners will be able to identify storage on a range of devices.
- Know when there is a problem with a device or software and know the difference between system errors and user errors
- System errors:
 - Device freeze or crash
 - Slow response from a device
 - No connection to the internet
 - User error:
 - Incorrect credentials (login details including password)
 - Hardware incorrectly connected
 - Sound cannot be heard
- apply a solution to a simple technical problem
- create a simple presentation (using software of their choice) to list simple technical problems and possible solutions that they could apply. Problems should be defined as system or user.

- context for a specific purpose and ensure that the combination of the two is suitable for the audience.
- Capture digital media and view in a suitable application
- identify types of digital media.
 They will be able to capture images and video including a screenshot using a camera on a device where appropriate.
- Communicating information
- Create and edit details in a contacts list.
- Create new contact
- Edit existing contact
- Compose online communication email
- Text content
- Digital content
- Email (new, to, subject, reply, reply to all, message. greeting, close, send)
- Attachment document, image, video
- Compose and reply to online communications comprising text and other digital content to individual and multiple recipients
- take a screenshot of a final contacts list

everything they consider to 'personal details.

- Trolling
- o Offensive behaviour
- Harassing others online
- Know simple methods to protect personal information and privacy online
- Protect personal information
- Personal information –
 identifying an individual:
 name, date of birth,
 telephone number, home
 address, email address, bank
 details, photographs
- Methods to protect personal information:
- Padlock next to website address (URL)
- Website address includes 'https://'
- Sharing personal information for a specific purpose
- Minimize use of personal data across platforms
- Social Media profiles (private)
- Passwords (strong/hard to guess)
- Not sharing passwords
- Methods to protect privacy:
- Social Media profiles (private)
- o Pseudonyms
- Screen lock(s)
- Set up and use security features (including authentication methods) to access devices and online services.
- Security features
- Authentication methods
- Access devices
- Access online services
- Strong passwords:
- Mix of upper/lower case letters, numbers, special characters
- Unique
- Biometrics (fingerprint, facial or voice recognition)
- Pin codes
- Pattern unlock
- Screen lock(s)

	Understand the benefits of
	security software to protect against online risks.

YEAR 11 – OPTIONAL- EDEXCEL FUNCTIONAL SKILLS LEVEL 1 UNITS OF STUDY

Autumn One	Autumn Two	Spring One	Spring Two	Summer One	Summer Two
Functional Skills Level 1 Key Components To ensure that folder creation skills are secure – name, copy duplicate folders. To ensure that documents created on software are appropriately named and saved in correct place. To look at a question and ensure that it is identified and the identification details are added. To identify different ways of recording answersscreen printing -direct to document To use the evidence required part of an exam question to ensure tasks are completed to attain maximum marks. Demonstrate ways of organising and presenting documents created clearly for upload or printing. Explore what software is most appropriate to complete a task – identify which 'dts' is best fit for recording answers. Recap on converting data between programs. How to use copy and paste functions to move between documents.	 Spreadsheet formulas review for questions – identify the main operation formula use to solve a problem Spreadsheet formulas review for questions – identify the main text-based formulas use to work out totals, percentages and display details. Spreadsheet recap – how to select data and use the sort and filter tools: recap highlighting specific data and applying filters. Spreadsheet recap – how to select data and use the sort and filter tools: demonstrate removing or copying specific parts of a data set. Spreadsheet recap – how to select data and use the insert tools to create a graph or chart and format it as appropriate. Spreadsheet recap – how apply features to a graph or chart and add them to a new sheet or other document with format tools. Spreadsheet percentages create lists from sorted data using txt/word documents to 	Reviewing Skills 2 Use internet to locate and then present requested information. subscription costs and presenting details Presentation creation using provided details adding text from other locations Convert data from documents formulas to identify totals for amounts and formatting create charts to present information. demonstrate ways to protect specific documents show documents with saved names and locations. Locate directions to a specific location identify opening times and costs to present answer specific questions relating to a location. open a spreadsheet and create formulas for incomes calculate and present percentages by editing a spreadsheet create an if formula for displaying key data.	Reviewing Skills 3 Record information about a location using internet searches. present the data in a clear way for later use. use .txt file to create a spreadsheet create formulas to calculate costs create formulas to calculate percentages manipulate spreadsheet to show requested information create a filtered document showing items in a sale remove data as required. filter data and present key information create a newsletter for the location add presented details include created filtered spreadsheet details create an email mailing list generate emails with content and subject include attached and embedded information.	Reviewing Skills 4 Use internet to locate and then present requested information Convert a text document to a spreadsheet apply a formula to calculate % convert data to graphs as asked use details provided to create a newsletter apply created graphs to newsletter use a diagram to create a new document create a folder and store created documents email all evidence created as attachment locate and present a map as evidence and record key information apply map using email and details Use provided details and documents to create an advert for opening hours add provided data to a spreadsheet create formulas to calculate totals create graphs from spreadsheet as required apply password protection to files and demonstrate how this is done	Exam Series

 use created spreadsheet to sort and filter details generate lists and presenting them from data. 			
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Syllabus materials KS4:

Edexcel Digital Functional Skills | Pearson qualifications

Careers in ICT/computing:

1438 My Learning My Future Computer Science Final.pdf (careersandenterprise.co.uk)