KEITH GRAMMAR SCHOOL

SENIOR COURSE DESCRIPTORS

LEVEL 5

FEBRUARY 2020

Keith Grammar School….
Working together to be Aspirational, Respectful, Healthy and Responsible

ADMINISTRATION AND IT (National 5)

The Administration and IT Course consists of two units: Administration Theory in the Workplace and IT Applications. There is a theory examination (worth 50 marks) and an assignment (worth 70 marks). This examination and assignment are marked externally. The Administration and IT course aims to develop learners' administrative and IT skills and to enable learners to: - develop an understanding of administrative theory within the workplace and - develop IT skills and use them to perform administrative tasks.

ADMINISTRATION OFFICE SKILLS (NPA)

College course, information available on the Moray College Information Sheet.

ART & DESIGN (National 5)

The Art & Design course consists of three elements: Design, Expressive and Critical. During the Design element pupils are tasked with designing a piece of Stained Glass or Lighting; challenging their ability to answer a brief, problem solve and work with materials. The Expressive element requires observational drawing and media handling in response to a chosen theme and genre: Portraiture, Still Life or Townscape. Lastly, there is a written exam which relies on critical analysis of art and design.

BIOLOGY (National 5)

This course consists of 3 units:

- 'Cell Biology' which covers the key areas of cell structure; transport across cell membranes; producing new cells; DNA and the production of proteins; proteins and enzymes; genetic engineering; respiration and photosynthesis.

- 'Multicellular Organisms' which covers the key areas of cells, tissues and organs; stem cells and meristems; control and communication; reproduction; variation and inheritance; transport systems in plants and animals and lifestyle choices.

- 'Life on Earth' which covers the key areas of biodiversity and the distribution of life; energy in ecosystems; sampling techniques; adaptation, natural selection and evolution and human impact on the environment.

BUSINESS MANAGEMENT (National 5)

The Business Management course consists of three compulsory units that have assessments: (i) Understanding Business (ii) Management of People and Finance and (iii) Management of Marketing and Operations. There is also an assignment (worth 30marks = 25%) that researches a business of choice. This assignment is marked externally and finally an exam (worth 90 marks = 75%) marked externally. The course will assist pupils to develop a detailed understanding of the types of organisations within contemporary industry and how they operate and ensure their business is successful.

CHEMISTRY (National 5)

The Course enables learners to develop and apply knowledge and understanding of Chemistry. Learners develop an understanding of chemistry's role in scientific issues and relevant applications of chemistry, including the impact these could make in society and the environment.

The course offers opportunities for candidates to develop the ability to think analytically and to make reasoned evaluations. The course covers a variety of relevant contexts including the chemistry of the Earth's resources, the chemistry of everyday products and chemical analysis through the following units:

Chemical changes and structure - in this area, topics covered are: rates of reaction; atomic structure and bonding related to properties of materials; formulae and reacting quantities; acids and bases.

Nature's chemistry - In this area, topics covered are: homologous series; everyday consumer products; energy from fuels.

Chemistry in society - In this area, topics covered are: metals; plastics; fertilisers; nuclear chemistry; chemical analysis.

COMPUTING SCIENCE (National 5)

The Computing Science course consists of four units: (i) Computer Systems (including security precautions); (ii) Software Design and Development (design/develop solutions using Visual Basic); (iii) Web Design and Development (design/develop solutions using HTML, CSS and Javascript); (iv) Database Design and Development (design/develop solutions using Microsoft Access and SQL). All these units develop problem-solving skills through a range of practical and investigative tasks, allowing pupils to apply computational-thinking skills). There are two assessment components which include an exam and a practical assignment (both marked externally). The assignment contributes 31% of the overall grade.

COMPUTING SCIENCE

College course, information available on the Moray College Information Sheet.

CONSTRUCTION (Skills for Work Level 5)

College course, information available on the Moray College Information Sheet.

CYBER SECURITY

College course, information available on the Moray College Information Sheet.

DEVELOPING LEADERSHIP

College course, information available on the Moray College Information Sheet.

EARLY EDUCATION & CHILDCARE (Skills for Work Level 5)

College course, information available on the Moray College Information Sheet.

ENGLISH (National 5)

This course, particularly the external assessment element, can be extremely demanding. Building on their previous experiences in the broad general education and/or via National 4 and Level 5 Literacy, pupils will develop their skills across reading, writing, talking and listening. It is most appropriate for pupils who are working confidently within the fourth level by the end of S3.

Assessment for National 5 English is a combination of internal and external assessment.

There is one spoken language unit, which is internally assessed. Pupils must pass this to achieve the full National 5 award. In addition, there are two external exam papers which test close reading and critical reading.

Progression
Pathways for progression would include Higher English and Higher History or Modern Studies.

PRACTICAL ENGINEERING

College course, information available on the Moray College Information Sheet.

ENGINEERING SCIENCE

The course develops skills in three main areas as detailed below. Candidates are able to apply these skills through a range of contexts, within the broad discipline of engineering. The three areas are:

Engineering contexts and challenges
Students develop an understanding of engineering concepts by exploring a range of engineered objects, engineering problems and solutions. This allows them to explore some existing and emerging technologies and challenges and to consider the impact of engineering on society, the economy and the environment. They learn about the different types of engineers and the skills and knowledge they must use within their working lives. Other topics covered are: systems diagrams and energy and efficiency

Electronics and control
Candidates explore a range of key concepts and devices used in electronic control systems, including analogue, digital and programmable systems. They develop skills in problem-solving and evaluating through simulation, practical projects and investigative tasks in a range of contexts. The topics covered are: transistors, electrical circuits, electrical components' digital logic gates, flowcharts, micro controllers and programming.

Mechanisms and structures
Candidates develop an understanding of mechanisms and structures. They develop skills in problem-solving and evaluating through simulation, practical projects and investigative tasks in a range of contexts. The topics covered are: gear trains, pneumatics, structures and materials.

ESOL

College course, information available on the Moray College Information Sheet.

GEOGRAPHY (National 5)

There are 3 units in the National 5 Course.

- Unit 1 is called Physical Environments and topics include Glaciation, Coasts, Rural Land Use and Weather.
- Unit 2 is called Human Environments and topics include Rural Studies, Urban Studies, Development, Population and Migration.
- Unit 3 is called Environmental Interactions and topics include Health and Global Climate Change.

Pupils complete an Additional Value Unit Assessment which is written up under exam condition. This is an investigation based on the data collected during the field trip to Cairngorm Mountain. This is worth 20 marks and counts toward the final grade. There is an external exam in May which is marked out of 80.

Pupils focus on a number of skills including data handling, gathering information from sources such as maps and diagrams, recall of knowledge, field work techniques, research from texts and the Internet and ICT skills.

GRAPHIC COMMUNICATION (National 5)

This course provides progression mainly from the craft, design, engineering and graphics experiences and outcomes. Candidates broaden their skills in a creative environment and are encouraged to exercise imagination, creativity and logical thinking. The course allows candidates to develop an awareness of graphic communication as an international language and an understanding of how graphic communication technologies impact on society and the environment. Candidates initiate, develop and communicate ideas graphically, and develop spatial awareness and visual literacy through graphic experiences. They interpret graphic communications initiated by others, and use graphic communication equipment, software and materials effectively. The course also provides opportunities to build self-confidence and enhance skills in numeracy, ICT, planning and organising work tasks, and in working independently and in collaboration with others. Candidates develop skills in critical thinking, decision-making and communication.

The course develops skills in two main areas. Candidates are able to apply these skills to produce graphics that provide relevant visual impact and graphics that transmit information. 2D graphic communication Candidates develop creativity and skills within a 2D graphic communication context. They initiate, develop and communicate ideas using graphic techniques in straightforward and familiar contexts, as well as in some less familiar or new contexts. Candidates also develop 2D graphic spatial awareness. 3D and pictorial graphic communication Candidates develop creativity and skills within a 3D and pictorial graphic communication context. They initiate, develop and communicate ideas using graphic techniques in straightforward and familiar contexts, as well as in some less familiar or new contexts. Candidates also develop 3D graphic spatial awareness.

HISTORY (National 5)

In National 5, pupils study three different units:

- Scottish - The Wars of Independence 1286-1328 or The Era of the Great War, 1910-1928,
- British – The Atlantic Slave Trade 1770-1807 or Changing Britain, 1760-1914.
- European and World – Free at Last? Civil Rights in the USA 1918-1968.

Pupils will sit an exam at the end of the year covering all three areas. Pupils will work across the year learning the skills to critique sources of historical information, and apply their knowledge to source based questions in preparation for the internal course assessments and the exam. The external exam is worth 80 marks and there is also an Assignment in the course that allows pupils to apply the skills and knowledge they have learned to an area of History of their choice. This is worked on independently, checked by teacher and is completed under exam conditions and externally assessed and worth 20 marks.

HOSPITALITY: PRACTICAL COOKERY (National 5)

Practical activity

- Understanding of recipes and identification of skills required, service order and presentation details.
- Creation of a timed plan of work to allow for successful making and serving of dishes within time scale given.
- Making the dishes using the skills required at a pace to suit the time plan.

Examination topics to be covered

- Food safety and storage
- The use of ingredients
- Costing calculation
- Food sustainability
- Current Dietary Targets

Knowledge of command words to answer questions successfully.

HOSPITALITY: PRACTICAL CAKE CRAFT (National 5)

Practical activity

- Preparing a detailed design illustration for final decorated cake.
- Showing use of prescribed decoration techniques.
- Creation of a timed plan of work to allow for successful making and decoration cake
- Evaluating the finished cake

Examination topics to be covered

- Varieties of cakes
- The use of cake making and decoration ingredients
- Techniques in cake making and decoration.
- The stages of making and decorating a cake

Knowledge of command words to answer questions successfully.

PATHWAY TO HOSPITALITY

College course, information available on the Moray College Information Sheet.

MATHS (National 5)

The following provides a broad overview of the subject skills, knowledge and understanding developed in the course:

- understand and use mathematical concepts and relationships
- select and apply numerical skills
- select and apply skills in algebra, geometry, trigonometry and statistics
- use mathematical models
- use mathematical reasoning skills to interpret information, to select a strategy to solve a problem, and to communicate solution

The course is split into three units: Expressions and Formulae, Relationships and Applications. It is vital that all pupils work to their full potential and ensure that they are thoroughly prepared as this will allow for their success in presentation.

The course assessment has two components: Paper 1 (non-calculator) 1 hour 15 minutes and Paper 2 (calculator) 1 hour 50 minutes.

MENTAL HEALTH & WELLBEING

College course, information available on the Moray College Information Sheet.

MODERN LANGUAGES (National 5)

In **French / German** pupils continue to develop and extend their skills from their broad general education. They continue to develop the ability to read, listen, talk and write in the modern language, understand and use more detailed language and apply knowledge about how language works (grammar). Skills are developed through the four key contexts of society, learning, employability and culture.

Pupils will be provided with detailed assessment information for in-class assessments, the N5 Writing assignment and also the N5 exams (Prelim and Final exams) for all skills

MODERN STUDIES (National 5)

Modern Studies is a subject unique to the Scottish secondary school curriculum that is concerned with the study of local, national and international issues from a social, political and economic perspective.

Students study three topic areas: 1-Crime and the Law in the UK, 2-Democracy in Scotland, and 3-International Powers (USA). National 4 is a pass/fail course with no external exam. There is also an added value research task at National 4. National 5 is graded A-C. National 5 consists of an external exam worth 80 marks and an Assignment, a report on a chosen topic, worth 20 marks which is completed in class time but marked externally.

MUSIC (National 5)

The course contains three compulsory components:

Performing Skills on two instruments or one instrument and voice: Pupils will perform music in a range of styles by developing musical and technical skills, showing an understanding of the composers' intentions for the piece and identifying strengths and areas for improvement in their performing. Pupils will prepare a programme of music lasting eight minutes in total, performing a minimum of 2 contrasting pieces on each instrument. (A minimum of two minutes within the programme on either instrument). The minimum level of difficulty at National 5 is Grade 3 ABRSM. Performance makes up 50% of the final grade. This is externally assessed by a visiting examiner; the final practical exam can take place from mid-February to the end of March.

Composing Skills: Pupils will learn to create original music by identifying the compositional methods and music concepts used in given examples of music. Pupils will experiment and use music concepts and compositional methods to develop and create original music. Pupils will explore and develop musical ideas and create one complete piece of music. This must be completed by March and is externally assessed. A review of the composition and the process undergone to complete must also be included.

Understanding Music: Pupils will learn to recognise and identify music concepts and styles by identifying level- specific music concepts in excerpts of music, identifying the social and cultural influences which have influenced the distinctive sounds of specific music styles and by identifying and recognising the meaning of music signs, symbols and terms. Pupils will study a range of music genres, concepts, literacy and styles, and complete a variety of assessments throughout the course. The final assessment is a question paper of approximately 1 hour in length. The question paper makes up 35% of the final grade.

RURAL SKILLS (National Progression Award Level 5)

This school led course is a combination of school based learning and workplace learning with one day per week on an extended work placement. For this reason this course is only for those planning to leave at the end of the session in question.

This course has no external exam with assessment evidence gathered through practical experience on the farm and internal assignments in school.

PHYSICAL EDUCATION (National 5)

The PE course consists of a written portfolio assessment and two graded practical performances.

Practical Performance: each marked out of 30, totalling 60 marks (50% of the total marks available for course assessment).

The purpose of these performances is to assess the pupil's ability levels in two different activities. Pupils will be able to select the activities they wish to be assessed in. In the case of unusual or less mainstream activities being selected by pupils this will be at the discretion of the department. The context of the performances must be challenging, competitive and/or demanding, and each performance will be assessed during a single, one off event.

Portfolio: is a series of written questions which are designed to test the student's understanding of what makes a quality performance and how they have gone about improving their performance in one activity. The Portfolio is done at the same time as the practical activity with one supplying the information for the other. Students may choose to do their portfolio on any activity which they are involved in.

PHYSICS (National 5)

The National 5 Physics course content covers the following areas of physics:

- Dynamics
- Space
- Electricity
- Properties of Matter
- Waves
- Radiation

The course assessment comprises a written examination paper and a course assignment, both of which are marked and graded by Scottish Qualification Authority markers.

PSYCHOLOGY (National 5)

College course, information available on the Moray College Information Sheet.

SOCIOLOGY (National 5)

College course, information available on the Moray College Information Sheet.

TRAVEL & TOURISM (National Progression Award Level 5)

This course is offered to S5/6 students only and is designed to give an insight into general employability skills, including literacy, and skills specific to the Hospitality industry in its many forms. Currently all participants also get the opportunity, thanks to sponsorship from the DYW Moray Board, to complete World Host Training, an internationally recognised industry qualification.

This course has no external exam with assessment evidence gathered through practical experience simulating the work environment and internal assignments in school.

WEB DEVELOPMENT FUNDAMENTAL (National Progression Award Level 5)

College course, information available on the Moray College Information Sheet.

WOODWORK (National 5)

The Practical Woodworking course provides a broad introduction to practical woodworking. It is largely workshop-based, combining elements of theory and practical woodworking techniques. Candidates develop practical psychomotor skills (manual dexterity and control) in a universally popular practical craft. They are introduced to safe working practices and become proactive in matters of health and safety. They learn how to use a range of tools, equipment and materials safely and correctly. Candidates develop skills in reading drawings and diagrams, measuring and marking out, cutting, shaping and finishing materials. They learn how to work effectively alongside others in a shared workshop environment. Course activities also provide opportunities to build self-confidence and to enhance skills in numeracy, thinking, planning, organising and communicating — these are all valuable skills for learning, for life and for work. The course encourages candidates to become responsible and creative in their use of technologies and to develop attributes such as flexibility, enthusiasm, perseverance, reliability and confidence.

The course provides opportunities for candidates to gain a range of theoretical and practical woodworking skills relating to tools, equipment, processes and materials. They also develop skills in reading and interpreting working drawings and related documents as well as an understanding of health and safety. The course is practical, exploratory and experiential in nature. It engages candidates with technologies, allowing them to consider the impact that practical technologies have on our environment and society. Through this, they develop skills, knowledge and understanding of:

¨ woodworking techniques
¨ measuring and marking out timber sections and sheet materials
¨ safe working practices in workshop environments
¨ practical creativity and problem-solving skills
¨ sustainability issues in a practical woodworking context