# ACTS HOUSE OF EDUCATION FET SUBJECT GUIDELINES 2023



APPLICABLE TO NEW AND CURRENT STUDENTS
OF ACTS HIGH: FURTHER EDUCATION & TRAINING

## **Introduction to FET:**

Congratulations! You have made it to the FET Phase of Acts High and are now in the home stretch of finishing High School!

#### Hebrews 12:1

"Therefore, since we have so great a cloud of witnesses surrounding us, let us also lay aside every hindrance and the sin which so easily entangles us, and let us run with endurance the race that is set before us."

It is at this time of the year that students and parents are faced with one of the most challenging and exciting tasks of selecting the subjects for Grades 10-12. Only a small minority of Grade 9's will have an idea of the career path they might want to follow, and even for them this may still change before they matriculate. This document is intended to guide both students and parents in making informed subject choices. The information contained herein has been designed to give you as much information as possible regarding the National Senior Certificate and the general requirements for future study. It is not possible to include all the details pertaining to the various tertiary institutions in South Africa and therefore, it is imperative that independent research be conducted into individual study options. Subjects are weighted on a scale from 2-5. For this reason, the subject selection combinations at AHE will provide students with the maximum number of credits required for university entry (see APS ratings below, p 4-5).

#### **Students:**

In selecting a subject package, it is essential that both you and your parents are realistic and honest in assessing your interests and abilities. Take a good look at how you are performing in the subjects that you are taking in Grade 9. It is difficult to continue with any subject where performance and achievement is already poor at Grade 9 level. You must also consider your values, interests, skills and personality when choosing subjects, as these criteria will ultimately guide you in your chosen career one day. Use all the knowledge you have at your disposal to make informed choices, including the results of your Grade 9 Career Assessment.

#### **Parents:**

The first step to be taken in making a subject choice is to spend time talking about your child, with your child. It is beneficial to gain a good understanding of your child's needs, hopes, academic performance and interests. It is also essential to have insight into your child's aptitude and interests in various fields. It is strongly suggested to complete a Career Development Assessment in order for you to get a better view of your child's personal strengths and preferences. There are various sources of information online that can also assist you and your child in determining possible career paths that your child may be interested in. It is important to consider all factors in a balanced approach. We trust you will find the information included herein meaningful, and that you will use it purposefully.

## **Curriculum Development:**

Change in curriculum has defined South African education over the past 15 years. Even as an independent school we are required by law to implement the national curriculum statement, however, we do endeavour to challenge students to perform, think and interact with knowledge in a critical manner that will prepare them for tertiary education and life-long learning.

The National Senior Certificate (NSC) implies a fundamental shift from content knowledge to an ability to apply this knowledge in a variety of contexts and to think conceptually and critically about what is learnt. The curriculum will still

provide educators with content; however, the approach to teaching and learning as well as assessment will shift in order for students to demonstrate that they have achieved the required outcomes.

The National Senior Certificate (NSC) is regarded as a three-year study course and for this reason subject changes after Grade 10 have to be considered very carefully. We are not opposed to subject changes, but we are very cautious when making them, as we need to ensure that they are indeed going to benefit the student. Please bear this in mind when making subject choices and possible future subject changes. In order to obtain a pass in the NSC, the following applies:

| 7 SUBJECTS                             |   |
|--|---|
| 4 COMPULSORY SUBJECTS                  | MINIMUM PASS REQUIREMENTS                             |
| Two official languages:                | Obtain at least 40% in the required official language |
| One language at Home Language Level    | on Home Language level;                               |
| One language at First Additional Level | • Two other subjects at the 40% level;                |
| Mathematics or Mathematical Literacy   | • Four other subjects at the 30% level;               |
| Life Orientation                       | This means that a learner can fail 1 subject (accept) |
| + 3 choice subjects                    | home language) and still obtain a National Senior     |
|  | Certificate.  |

#### **Subject Change:**

A learner may only change a maximum of two subjects in Grade 10. The subject change must be discussed with the Head of Department and Deputy Principal of Acts High. Any changes are subject to approval. Grade 10 students failing Core Mathematics at the end of Term 2 will be required to take Mathematical Literacy. Core Mathematics is a compulsory requirement for taking Physical Science and/or Accounting. Physical Science and Accounting students changing from Mathematics to Mathematical Literacy will not be allowed to continue with Physical Science and Accounting and will have to select another subjects.

#### **Grade 12 Assessment:**

The assessment strategies for Grade 12 students are calculated as follows at the end of the academic year:

- 25% PORTFOLIO WORK: For each subject a portfolio of evidence is collected over the course of the year and includes tests, exams, homework tasks, assignments, etc.
- 75% FINAL EXAMINATION: In some cases, practical/performance assessments may contribute a further 25%, making the final examination in such cases worth 50%. This is particularly relevant in subjects such as Visual Art and Design and Dramatic Arts (Not yet offered).
- Life Orientation is assessed through a combination of a portfolio of evidence and subject specific practical assessments.
   There is NO external examination for Life Orientation. Students do have to acquire a minimum pass of 40% in LO in order to be awarded the NSC.

## **Recording & Reporting:**

There are seven levels of competence aligned to the marks structure:

| RATING CODE | RATING                  | MARKS  |
|-------------|-------------------------|--------|
| 7           | Outstanding achievement | 80-100 |
| 6           | Meritorious achievement | 70-79  |
| 5           | Substantial achievement | 60-69  |
| 4           | Adequate achievement    | 50-59  |
| 3           | Moderate achievement    | 40-49  |
| 2           | Elementary achievement  | 30-39  |
| 1           | Not achieved            | 0-29   |

Higher Grade and Standard Grade are no longer offered. All subjects are offered on one level. In order to gain entrance to university, students must not only have the correct subject combination for their field of study, but must also meet the required APS score (Admissions Point Score: Calculated using the rating code of all 6 academic subjects excluding LO), as well as write a national preliminary examination (entrance examination) prior to the final matric exam.

## What is required for Admission to Higher Education?

Tertiary institutions may require appropriate combinations of recognised NSC subjects and levels of achievement in those subjects for admission into specific courses. Subjects at Acts House of Education have already been combined to ensure the best outcomes in terms of tertiary credits. The following criteria must be fulfilled in order to meet the minimum requirements for these qualifications:

## **Higher Certificate**

The minimum admission requirement to further study is a National Senior Certificate.

## **Diploma**

The minimum admission requirement is a National Senior Certificate with an achievement rating of 3 (40 –49% or better) in 4 recognised NSC 20 credit subjects.

## **Bachelor's Degree**

The minimum admission requirement is a National Senior Certificate with an achievement rating of 4 (50 –59% or better) in 4 of the designated 20 credit NSC subjects offered by the school.

## Designated 20 credit subjects for entry into a BA degree:

| Subjects on offer     | Subjects on offer | Subjects not on offer         |
|-----------------------|-------------------|-------------------------------|
| English HL            | Physical Science  | Information Technology        |
| Afrikaans FAL         | Life Sciences     | Engineering Graphics & Design |
| Mathematics           | Economics         | Music                         |
| Mathematical Literacy | History           | Visual Arts/ Dramatic Arts    |
| Accounting            | Tourism           | Geography                     |
| Business Studies      |                   |                               |

## Non-Designated/Approved Subjects

Computer Application Technology, Sport Science, Design and all other subjects not listed above remain undesignated.

Designated and non-designated subjects both contribute to the APS score. Non-designated subjects however, cannot be used to fulfil the minimum admission requirements for a bachelor's degree i.e. 4 designated subjects. As long as a student has 50-59% in at least 4 designated subjects, an application to university can be made, bearing in mind of course, that the APS score meets the faculty requirement.

#### **Please Note:**

- Only 4 subjects need to be chosen from the designated subject list to qualify for a bachelor degree pass, the remaining subjects may come from the non-designated subject list. A student may however choose all seven from the designated list.
- Remember: LO does not qualify as a designated subject and does not contribute towards the APS.
   If LO is not passed however, the NSC will not be awarded.
- In the case of languages, a maximum of 2 languages may be taken.

## **Subjects Offered at Acts House of Education for 2023:**

## **Compulsory Subjects**

- English (HL)
- Afrikaans (FAL)
- Life Orientation
- Core Mathematics / Mathematics Literacy

#### **Choice subjects**

- Business Studies
- Economics
- Accounting
- Physical Science
- Life Science
- History
- Tourism

Mathematics, along with the 3 choice subjects are strongly influenced by the specific course of study and the requirements of the institution. It is imperative that you research the criteria for each faculty of interest to ensure that you are meeting the minimum requirements.

## **Acts House of Education Requirements:**

- Once the students enter the FET Phase of High School, they commit themselves to a specific subject combination and all subject combinations consist of seven subjects.
- All subject combinations must include two official languages: English and Afrikaans.
- Life Orientation and Mathematics are compulsory.
- The other three subjects are selected as a combination
- Students should attain a minimum of 50% in Natural Science (Physical Science and Biology) in their Grade 9 year to enable them to continue with these subjects in Grade 10.
- Students should attain a minimum of 50% in Mathematics in their Grade 9 year to enable them to continue with Mathematics in Grade 10. Students who achieve less than 50% should select Mathematical Literacy in Grade 10.
- Core Mathematics is required to take Physical Science and Accounting.

## **Detailed Choice Subject Information for 2023**

#### **CORE MATHEMATICS**

From 2006 the NSC curriculum required that either Mathematics or Mathematical Literacy be taken as one of the compulsory core subjects. These two options must be seen as two different subjects, with the subject "Mathematics" focusing on a more academic, theoretical approach to Mathematics, and the subject "Mathematical Literacy" focused on the practical application of mathematical principles and processes. We are aware that for many young students who would traditionally have dropped Mathematics, this is a daunting prospect. However, the School has implemented strategies to assist these students, enabling them to meet the necessary requirements. Students are able to change subjects at the end of their grade 10 year and we would recommend that any learner getting 30% or less at the end of Grade 10 change subjects to Mathematical Literacy. (A mark of 30% or more is considered a pass in both Mathematics and Mathematical Literacy in the NSC phase.) Students must please consult with the relevant subject Teacher as to how the choice of one of these two subjects will affect their future options regarding tertiary education.

#### **Definition**

The curriculum for Mathematics is based on the following view of the nature of the discipline. Mathematics enables creative and logical reasoning about problems in the physical and social world and in the context of Mathematics itself. It is a distinctly human activity practised by all cultures. Knowledge in the mathematical sciences is constructed through the establishment of descriptive, numerical and symbolic relationships. Mathematics is based on observing patterns; with rigorous logical thinking, this leads to theories of abstract relations. Mathematical problem solving enables us to understand the world and make use of that understanding in our daily lives. Mathematics is developed and contested over time through both language and symbols by social interaction and is thus open to change.

## **Purpose**

In an ever-changing society, it is essential that all students passing through the National Senior Certificate acquire a functioning knowledge of the mathematics that empowers them to make sense of society. A suitable range of mathematical process skills and knowledge enables an appreciation of the discipline itself. It also ensures access to an extended study of the mathematical sciences and a variety of career paths. The study of Mathematics contributes to personal development through a deeper understanding and successful application of its knowledge and skills, while maintaining appropriate values and attitudes. Competence in mathematical process skills such as investigating, generalising and proving is more important than the acquisition of content knowledge for its own sake. Mathematical competence provides access to rewarding activity and contributes to personal, social, scientific and economic development. It is understandable, therefore, that a variety of stakeholders in society exert demands on school Mathematics. These stakeholders include parents, students, educators, Mathematics educators, employers, professional mathematicians, tertiary institutions, and cultural and political organisations. Individual and collective engagement with Mathematics will provide valuable opportunities for the development of a variety of values, as well as personal and interpersonal skills.

#### Mathematics enables students to:

- Communicate appropriately by using words, graphs, symbols, tables and diagrams
- Use mathematical process skills to identify, pose and solve problems creatively and critically
- Organise, interpret and manage authentic activities in substantial mathematical ways that demonstrate responsibility and sensitivity to personal and broader societal concerns
- Work collaboratively in teams and groups to enhance mathematical understanding
- Collect, analyse and organise quantitative data to evaluate and critique conclusions
- Engage responsibly with quantitative arguments relating to local, national and global issues.

An important purpose of Mathematics in the National Senior Certificate is the establishment of proper connections between Mathematics as a discipline and the application of Mathematics in real-world contexts. Mathematical modelling provides students with the means to analyse and describe their world mathematically, and so allows students to deepen their understanding of Mathematics while adding to their mathematical tools for solving real-world problems. Mathematics can be used in a wide variety of physical, social and management sciences. An appreciation of the manner in which Mathematics has developed over time establishes its origins in culture and the needs of society.

#### **Educational & Career links**

Mathematics is an essential element in the curriculum of any student who intends to pursue a career in the physical, mathematical, computer, life, earth, space and environmental sciences or in technology. Mathematics also has an important role in the economic, management and social sciences. It is an important tool for creating, exploring and expressing theoretical and applied aspects of the sciences. Mathematics is also important for the personal development of any student. The learning achieved in Mathematics in the General Education and Training (GET) band provides an essential base from which to proceed into the demands of Mathematics in the National Senior Certificate. The essentials of numeracy developed in the General Education and Training band are taken further, working in more symbolic ways. The General Education and Training engagement with space and shape becomes more formalised. The methods and uses of statistics and probability are dealt with in greater depth. How Mathematics can contribute to an understanding of financial issues is taken beyond dealing with budgets. The emphasis on contexts and integration within Mathematics and across the curriculum is maintained, while mathematical modelling becomes more prominent. The subject Mathematics in the National Senior Certificate will provide a platform for linkages to Mathematics in Higher Education institutions. It will also provide for linkages to Mathematics of a complementary nature but specific to the needs of the individual, in appropriate National Senior Certificate sites of learning. Students proceeding to institutions of Higher Education should be mathematically literate, so that they are able to progress effectively in whatever discipline they decide to follow. Mathematics is being used increasingly as a tool for solving problems related to modern society. The financial aspects of dealing with daily life are informed by mathematical considerations. Mathematical ways of thinking are often evident in the workplace. If a student does not perceive Mathematics to be necessary for the career path or study direction chosen, the student will be required to take Mathematical Literacy.

#### MATHEMATICAL LITERACY

#### **Definition**

Mathematical Literacy provides pupils with an awareness and understanding of the role that mathematics plays in the modern world. Mathematical Literacy is a subject driven by life-related applications of mathematics. It enables pupils to develop the ability and confidence to think numerically and spatially in order to interpret and critically analyse everyday situations and to solve problems.

#### **Purpose**

South Africa has come from a past in which poor quality or lack of education resulted in very low levels of literacy and numeracy in our adult population. International studies have shown that South African pupils fare very poorly in mathematical literacy tests when compared to counterparts in other developed and developing countries. Pupils who could not do well mathematically in General Education and Training usually stopped studying Mathematics, thus contributing to the perpetuation of high levels of innumeracy. The inclusion of Mathematical Literacy as a fundamental subject in the National Senior Certificate curriculum will ensure that our citizens of the future are highly numerate consumers of mathematics. In the teaching and learning of Mathematical Literacy, pupils will be provided with opportunities to engage with real life problems in different contexts, and so to consolidate and extend basic mathematical skills. Thus, Mathematical Literacy will result in the ability to understand mathematical terminology and to make sense of numerical and spatial information communicated in tables, graphs, diagrams and texts. Furthermore, Mathematical Literacy will develop the use of basic mathematical skills in critically analysing situations and creatively solving everyday problems. In everyday life a person is continually faced with mathematical demands which the adolescent and adult should be in a position to handle with confidence. These demands frequently relate to financial issues such as hire-purchase, mortgage bonds, and investments. There are others, however, such as the ability to read a map, follow timetables, estimate and calculate areas and volumes, and understand house plans and sewing patterns. Situations, such as in cooking and the use of medicine, requiring the efficient use of ratio and proportion are encountered on a daily basis. Here, mathematical literacy is required by a self-managing person. The workplace requires the use of fundamental numerical and spatial skills in order to efficiently meet the demands of the job. To benefit from specialised training for the workplace, a flexible understanding of mathematical principles is often necessary. This numeracy must enable the person to, for example, deal with work-related formulae, read statistical charts, deal with schedules and understand instructions involving numerical components.

The National Senior Certificate subject, Mathematical Literacy, should enable the pupil to become a self-managing person, a contributing worker and a participating citizen in a developing democracy. Mathematical Literacy will ensure a broadening of the education of the pupil which is suited to the modern world. Mathematical Literacy contributes to the attainment of the Critical and Developmental Outcomes in that it enables pupils to:

- use mathematical process skills to identify, pose and solve problems creatively and critically
- work collaboratively in teams and groups to enhance mathematical understanding
- organise, interpret and manage authentic activities in substantial mathematical ways that demonstrate responsibility and sensitivity to personal and broader societal concerns

- collect, analyse and organise quantitative data to evaluate and critique conclusions
- communicate appropriately by using descriptions in words, graphs, symbols, tables and diagrams
- use mathematical literacy in a critical and effective manner to ensure that science and technology are applied responsibly to the environment and to the health of others
- demonstrate that a knowledge of mathematics assists in understanding the interrelatedness of systems and how they
  affect each other
- be prepared to use a variety of individual and cooperative strategies in learning mathematics
- engage responsibly with quantitative arguments relating to local, national and global issues
- be sensitive to the aesthetic value of mathematics
- explore the importance of mathematical literacy for career opportunities
- realise that mathematical literacy contributes to entrepreneurial success.

#### **Educational and Career Links**

The learning achieved in Mathematics in the General Education and Training band provides a base from which to proceed to the demands of Mathematical Literacy in the National Senior Certificate. The essentials of numeracy are taken further by working in contexts which become increasingly relevant. The engagement with space and shape becomes more practical. The methods and uses of statistics and chance are dealt with in greater depth. Pupils have to deal with more complex financial issues which directly affect their lives. The Learning Outcomes of Mathematical Literacy are designed to enable pupils passing through the National Senior Certificate to handle with confidence the mathematics that affects their lives and so be appropriately educated for the modern world. Students proceeding to Higher Education institutions will have acquired a mathematical literacy that will enable them to deal effectively with mathematically-related requirements in disciplines such as the social and life sciences. Mathematical Literacy should not be taken by those pupils who intend to study disciplines which are mathematically based, such as the natural sciences or engineering, develop knowledge and critical understanding of the changing nature and interrelatedness of human existence and the environment over space and time. This creates a frame of reference for asking and answering geographical questions, identifying and solving problems, and evaluating the consequences of alternative solutions and possible actions. Geography is in the unique position of drawing together aspects of natural sciences, humanities and indigenous knowledge systems in order to contribute to the understanding of spatial distribution, human-environment interactions, and sustainable development, prepare pupils to become informed, critical and responsible citizens who can make sound judgments and take appropriate action that will contribute to equitable and sustainable development of human society and the physical environment. Geography prepares pupils to become responsible and competent decision makers and agents, living and working in a complex world. It encourages them to challenge and address social and environmental injustices. Pupils will be guided to develop attitudes and values that will encourage them to take appropriate action, where possible, to address social and environmental problems and injustices.

#### ACCOUNTING

#### **Definition**

Accounting focuses on measuring performance, and processing and communicating financial information about economic sectors. This discipline ensures that ethical behaviour, transparency and accountability are adhered to. It deals with the logical, systematic and accurate selection and recording of financial information and transactions, as well as the compilation, analysis and interpretation of financial statements and managerial reports for use by interested parties.

## Purpose

Accounting develops students' knowledge, skills, values, attitudes and ability to make meaningful and informed personal and collaborative financial decisions in economic and social environments. By engaging in Accounting, students will be able to:

- Collect, select, record and/or capture, analyse and interpret financial and other relevant data in order to make informed decisions.
- Develop general and specific skills in accounting to integrate theory and practice and which could be used for compliance with generally accepted accounting practice.
- Present and/or communicate financial information effectively by using generally accepted accounting practice, developments and legislation.
- Develop and demonstrate an understanding of fundamental accounting concepts.
- Acquire skills, knowledge, attitudes and values that can contribute directly or indirectly to the improvement of standard of living, human development and productivity.
- Related skills, knowledge and values to real-world situations in order to ensure a balance between theory and practice, to enter the world of work and/or move to higher education, and to encourage self-development.
- Organise and manage your own finances and activities responsibly and effectively.
- Apply principles to solve problems in a judicious and systematic manner in familiar and unfamiliar situations, thus
  developing the ability to identify and solve problems.
- Develop critical, logical, and analytical abilities and thought processes to enable them to apply these skills to current and new situations.
- Deal confidently with the basic demands of an accounting occupation manually and/or electronically.

Accounting embraces the following features:

#### Financial accounting

Financial accounting includes the logical, systematic and accurate recording of financial transactions as well as the analysis, interpretation and communication of financial statements by understanding the fundamental concepts regarding basic accounting principles and practice.

## Managerial accounting

Managerial accounting includes concepts such as costing and budgeting. It puts emphasis on the analysis, interpretation and communication of financial and managerial information for decision-making purposes.

## Tools in managing resources

Tools in managing resources include basic internal controls and internal audit processes and code of ethics. This feature puts the emphasis on the knowledge, understanding and adherence to ethics in pursuit of human dignity, acknowledging human rights, values and equity, in financial and managerial activities.

#### **Educational & Career links**

The principles, concepts, skills, attitudes and values in Accounting articulate with business, economic, management, administration and financial outcomes in the General Education and Training band. These principles, concepts, skills, attitudes and values are recognised and broadened in the National Senior Certificate.

#### **ECONOMICS**

#### **Definition**

Economics is the study of how people and societies allocate resources to satisfy their numerous needs and wants in a manner that is efficient, equitable and sustainable.

#### **Purpose**

- Deals with everyday life. It teaches students how the decisions they make are affected by what is happening in the socio-political-economic scenarios in which they operate.
- Promotes the ability to think logically and analytically, holistically and laterally, and integrates well with other subjects.
- Acts as a sound springboard for tertiary education as it lays the foundation for many university courses, for future careers, and it helps to prepare the boys to become productive responsible citizens.
- Develop skills to apply demand and supply, and cost and revenue analysis to explain prices and production levels;
- Helps to understand reconstruction, growth, development and human rights concerns.
- Analyses and assesses the impact of local and global institutions on the South African economy, and
- Explains economic events and forecast their consequences or predict likely future outcomes

## **Educational & Career Links**

Students who enjoy analysis, inquiry, debate and critical thinking should choose Economics. It inspires rigorous thought, as the students are required to develop analytical and reasoning skills and the need to communicate effectively. Students taking this career path can benefit from careers in actuary, appraising, auditing, banking research, bond management, budget & business analysing, business consulting and a number of other financial and financial market related careers.

#### **BUSINESS STUDIES**

#### **Definition**

The subject Business Studies deals with the knowledge, skills, attitudes and values critical for informed, productive, ethical and responsible participation in the formal and informal economic sectors. The subject encompasses business principles, theory and practice that underpin the development of entrepreneurial initiatives, sustainable enterprises and economic growth.

#### **Purpose**

Economic growth and personal financial empowerment are largely dependent on the positive contribution of both business and individuals to the economy. Business takes place in an inherently complex context that requires informed, imaginative, participative, contributing and reflective business practitioners who can dynamically perform a range of interdependent business operations. The development of these business roles will put students in a position where they are able to effectively apply knowledge and skills to analyse and deal with different business environments (macro, micro and market), to initiate and carry out business ventures and successfully carry out business operations. These roles and operations can also be applied within other organisational structures such as public sector and non-profit organisations.

This subject will ensure that students:

- Acquire and apply essential business knowledge, skills and principles to productively and profitably conduct business in changing business environments
- Create business opportunities, creatively solve problems and take risks, respecting the rights of others and environmental sustainability
- Apply basic leadership and management skills and principles while working with others to accomplish business goals
- Be motivated, self-directed, reflective lifelong students who responsibly manage themselves and their activities while working towards business goals
- Be committed to developing themselves and others through business opportunities and ventures. In addition to being
  able to secure formal employment, students need to be in a position to pursue sustainable entrepreneurial and selfemployment career pathways.
- Business Studies also forms the foundation for further business learning opportunities.

#### **Educational & Career links**

The general principles, concepts and skills developed in the Economic and Management Sciences, are further developed in more complex contexts through the subject of Business Studies. The Learning Outcomes of this subject articulate with those of the Business, Commerce and Management field and with other related fields at both National Senior Certificate and Higher Education and Training levels. Achievement of the Business Studies Learning Outcomes equips students with a sound foundation to participate in future business, commerce and management studies, to enter business or to create self-employment.

## PHYSICAL SCIENCES

#### **Definition**

The subject Physical Sciences focuses on investigating physical and chemical phenomena through scientific inquiry. By applying scientific models, theories and laws it seeks to explain and predict events in our physical environment. This subject also deals with society's desire to understand how the physical environment works, how to benefit from it and how to care for it responsibly.

## Purpose

The Physical Sciences plays an increasingly important role in the lives of all South Africans due to its influence on scientific and technological development, which underpins our country's economic growth and the social well-being of our community. It underpins many of the technologies that we take for granted – the homes we live in, the food we eat, the clothes we wear, the materials we use, medical diagnosis and treatment, computers and other information technologies. There is every reason to expect that the knowledge, skills and values people learn in the Physical Sciences will make even more of an impact on our lives as we move into the twenty-first century. The application of Physical Sciences knowledge has a profound impact on world-wide issues and events — economic, environmental, ethical, political, social and technological. An understanding of scientific perspectives will enhance participation by citizens when they are called upon to exercise their rights in deciding on and responding to the directions of science and technology. The subject fosters an ethical and responsible attitude towards learning, constructing and applying Physical Sciences, and accommodates reflection and debate on its findings, models and theories. South Africa has a legacy in which the poor quality and/or lack of education in certain sectors resulted in limited access to scientific knowledge and the devaluing of indigenous scientific knowledge. Therefore, the curriculum of Physical Sciences must ensure increased access to scientific knowledge and scientific literacy.

The study of Physical Sciences is aimed at correcting some of these historical limitations by contributing towards the holistic development of students in the following ways:

- Giving students the ability to work in scientific ways or to apply scientific principles which have proved effective in
  understanding and dealing with the natural and physical world in which they live
- Stimulating their curiosity, deepening their interest in the natural and physical world in which they live, and guiding them to reflect on the universe
- Developing insights and respect for different scientific perspectives and a sensitivity to cultural beliefs, prejudices
  and practices in society (this aspect should also include the mobilising of African indigenous scientific knowledge
  and practices, particularly as these relate to solving social and environmental challenges in Africa)
- Developing useful skills and attitudes that will prepare students for various situations in life, such as selfemployment and entrepreneurial ventures
- Enhancing understanding that the technological applications of the Physical Sciences should be used responsibly towards social, human, environmental and economic development both in South Africa and globally

## **Educational & Career links**

The study of Physical Sciences draws upon and builds on the knowledge and understanding, skills, and values and attitudes developed in the study of Natural Sciences in the General Education and Training band. The study of the Natural Sciences focuses on four areas of knowledge areas – Life and Living, Earth and Beyond, Matter and Material, and Energy and Change.

The students in the General Education and Training band are encouraged to use concepts in a variety of contexts including scientific investigations, constructing science knowledge, and science, society and the environment.

In the National Senior Certificate, a number of science subjects build on the foundation laid by the Natural Sciences. The Physical Sciences is one of these subjects. It builds on the Earth and Beyond, Matter and Material, and Energy and Change knowledge areas of the Natural Sciences. The Learning Outcomes for the Physical Sciences and Life Sciences subjects ensure continuity by linking directly with the General Education and Training Learning Outcomes. The same organising principles and design features have been used in this subject as in the National Curriculum Statement Grades R-9 (Schools). The nature of science forms the basis from which learning outcomes have been developed. This allows for the smooth progression of students. The Physical Sciences curriculum will not only deepen the knowledge base laid in the General Education and Training band; it will also provide students with deeper general knowledge, specialised knowledge and skills. This will enable them to enter Higher Education and Training or to follow various career pathways, and to take their place in society as informed and responsible citizens. Science process skills and the creative mind developed through the problem-solving activities also allow students to follow career paths other than those directly related to science; for example, higher education courses such as Computer Sciences, Mathematics and health-related fields.

Students who have studied Physical Sciences will have access to:

- Academic courses at institutions such as universities and colleges to study science and science-related programmes,
   which can lead to science-based studies (e.g. sciences, engineering, bio-technology and environmental degrees)
- Professional career paths related to applied science courses and engineering (e.g. science teachers, nurses, medical doctors, veterinarians, radiographers, dentists, chemical engineers, mechanical engineers and pharmacists)
- Vocational career paths (e.g. technicians, technologists and beauty therapists)

## LIFE SCIENCES (Biology)

#### **DEFINITION**

The subject Life Sciences involves the systematic study of life in the changing natural and human-made environment. This systematic study involves critical inquiry, reflection, and the understanding of concepts and processes and their application in society.

#### **PURPOSE**

The study of the Life Sciences enables pupils to explore those concepts that are essential for understanding basic life processes and the interrelationship and interdependence of components of the living and the physical world. Pupils will develop inquiry, problem solving, critical thinking and other skills, and will use them to interpret and use Life Sciences concepts in explaining phenomena. They will be able to apply scientific knowledge in their personal lives and as responsible citizens in ways that will contribute to a healthy lifestyle and the sustainable management of resources. Through the study of the Life Sciences, pupils can develop an understanding of the nature of science, the influence of ethics and biases, and the interrelationship of science, technology, indigenous knowledge, environment and society. The subject Life Sciences enables pupils to understand biological, physiological, environmental, technological and social processes that impact on the environment (e.g. food production, distribution and consumption, health promotion, conservation, sustainable living and genetic engineering). All these have implications for the socio-economic and technological advancement of society. A study of concepts and processes in the Life Sciences uses contributions from the past to inform the present, and therefore promotes construction of new knowledge. Exploring indigenous knowledge systems related to science exposes pupils to different worldviews and allows them to appreciate, compare and evaluate different scientific perspectives. Life Sciences will be accessible to pupils with special learning needs, ensuring that pupils with diverse abilities, interests and learning styles are given equal opportunities to achieve success.

## EDUCATIONAL AND CAREER LINKS

Life Sciences builds on the foundation laid by the Natural Sciences Learning Area in the General Education and Training band. The Natural Sciences Learning Area has three Learning Outcomes which focus on (i) scientific investigations, (ii) constructing science knowledge, and (iii) science, technology, environment and society. The subject Life Sciences likewise has three Learning Outcomes which build on these. In the Natural Sciences Learning Area, achievement of Learning Outcomes is mediated through four themes: (a) life and living; (b) energy and change; (c) earth and beyond; and (d) matter and materials. Life Sciences focuses on one of these themes – that is, life and living. The subject Life Sciences prepares pupils for additional education and training, vocational careers, and the world of work and self-employment. The scope of Life Sciences in the National Senior Certificate is deeper and broader, and covers more advanced knowledge and skills than those in the General Education and Training band. This allows pupils to choose different directions in lifelong learning. The subject informs the choices pupils make when pursuing Higher Education and different career pathways in various specialisations. It caters for careers such as medicine, bioengineering, psychology, nursing, education, marine biology, and environmental science.

#### **HISTORY**

#### **DEFINITION**

History is the study of change and development in society over time and it enables the pupils to understand how past human action impacts on the present and influences the future.

#### **PURPOSE**

A study of History builds the capacity of the pupils to make informed choices and teaches them to debate using a broad range of evidence. It enables the pupils to examine with greater insight and understanding the prejudices involving race, class, gender, ethnicity that still exist in society and which must be challenged and addressed. History promotes non-discrimination, raises debates, confronts issues and builds capacity in individuals to address current social and environmental concerns.

The study of History also provides a critical understanding of socio-economic systems in their historical perspective and their impact on people and supports the view that historical truth exists of a multiplicity of voices expressing varying and often contradictory versions of the same history.

It engenders an appreciation and an understanding of the democratic values of the constitution and encourages civic responsibility and responsible leadership. It also fosters an understanding of identity as a social construct, preparing future citizens for local, regional, national and global citizenship.

#### EDUCATIONAL AND CAREER LINKS

History in the National Senior Certificate further develops the foundations laid in the General Education and Training band, paying particular attention to the contested nature of History. In this band, pupils build on the enquiry skills acquired in the General Education and Training band.

The study of History provides a sound vocational preparation for a wide range of jobs and careers, including those which call for analysing and seeking solutions to many present-day problems. Training in historical study teaches one to analyse evidence, to organise ideas and to construct coherent arguments. The skills acquired enable those with an historical background to assess issues in the light of considerable and often conflicting amounts of data and to present complex sources of information accurately in writing or orally. By providing a breadth of vision that goes beyond narrow specialisations, historical study nurtures effective communication, which is an essential life and professional skills in the contemporary world. History qualifications can, therefore, lead to future careers in management and administration, marketing, public relations and the media. Because of their skills development capacity, history qualifications should be highly valued.

#### **TOURISM**

## **DEFINITION**

Tourism is the study of the activities, services and industries that deliver a travel experience to groups or individuals.

#### **PURPOSE**

It is the study of the expectations and behaviour of tourists, and the economic, social and environmental impact of tourism on South Africa

The list below indicates the main topics in the Tourism curriculum:

- 1. Tourism sectors
- 2. Map work and tour planning
- 3. Tourism attractions
- 4. Sustainable and responsible tourism
- 5. Domestic, regional and international tourism (in and out of South Africa)
- 6. Culture and heritage tourism
- 7. Foreign exchange
- 8. Communication and customer care
- 9 Marketing

## In the subject Tourism learners will study

- different types of tourists and the purpose of their travelling;
- the different tourism sectors, with special reference to transport, hospitality, travel organising and support services, and the attraction sector;
- map work;
- foreign exchange concepts and the buying power of different foreign currencies;
- the influence of world time zones on travel;
- South Africa and the SADC countries as tourism destinations;
- world famous icons and World Heritage Sites;
- sustainable and responsible tourism;
- marketing of tourism products;
- technology in tourism;
- customer care and the value of service excellence; and
- tour planning

## **EDUCATIONAL AND CAREER LINKS**

Jobs directly related to a tourism degree include:

- Air cabin crew
- Holiday representative
- Hotel manager
- Tour manager
- Tourism officer
- Tourist information centre manager
- Travel agency manager

Jobs where your degree would be useful include:

- Conference centre manager
- Customer service manager
- Event manager
- Marketing executive
- Passenger transport manager
- Sales executive
- Outdoor activities/education manager

## FET ACADEMIC ACCOMMODATIONS

In accordance with the Constitution and the policy guiding education, students with certain permanent or temporary physical difficulties or intrinsic specific learning difficulties may apply to the Gauteng Department of Education for accommodations. Examination accommodations are granted to enable students with specific barriers to learning to demonstrate their true ability in the examinations without changing the construct of the assessment. These are students with at least average ability. Barriers to learning are significant long-term disabilities that compromise examination performance. Accommodations must not give a student an advantage over other students. The GDE will consider in its absolute discretion applications from students who experience barriers to learning. The decision as to whether an accommodation will be granted lies with the GDE and its accommodations panel, not with the practitioner who conducted the assessments or with the school.

Accommodations will not be granted to students who experience difficulty with the language medium of learning because the language of assessment is different to the home language.

Accommodation applications require a holistic profile of the student and must include the following:

- A full psycho-educational assessment and report that thoroughly assesses the barrier to learning, and a
  comprehensive clinical history of the student. The battery of tests must include: A cognitive assessment and
  educational assessment (reading, spelling, decoding and writing tests). These tests must be conducted using the
  prescribed GDE assessment material.
- All medical reports from the relevant practitioners
- Supporting historical evidence (e.g. occupational therapy, speech therapy, remediation etc.)
- Teacher reports commenting on the academic ability, performance and skills of the student in the classroom and testing situations
- Most recent school report
- School samples of work that support the accommodation being applied for i.e. handwriting

It is the responsibility of the parent to arrange the psycho-educational assessment and to provide all medical reports to the school. The school will compile the application form and forward it to the GDE.

The following barriers to learning may constitute accommodation applications:

#### Visual barriers & impaired vision

- Deafness and hard of hearing
- Physical barriers
- Learning difficulties
- ADHD
- Autism
- Anxiety disorders
- Psychiatric disorders
- Medical conditions e.g. epilepsy & diabetes

Depending on the severity of the presenting problem, the following accommodations may be awarded at the discretion of the GDE and its accommodations panel:

## Additional time (5-15 min per hour)

- Amanuensis (reader and scribe)
- Computer
- Enlarged print
- Handwriting
- Food intake
- Practical assistant
- Prompter
- Rest breaks
- Separate venue
- Specific equipment

## **CLOSING**

We look forward to venturing with our FET students through the final stages of their Basic Education journey and commit to preparing them to the best of our ability.

Please select and complete the following form for your subject choice for next year.

For any further inquiries, please contact Mr Flip Jacobs or Mr Shervin Reddy during office hours or alternatively email them at:

Mr Jacobs - fjacobs@actshouse.com

Mr Reddy - sreddy@actshouse.com



## **Grade 10 Subject Choices for 2023**

| Full | Name & Surname of Student      | :                                      |         | Date: |  |
|------|--------------------------------|--|---------|-------|--|
| Cor  | npulsory Subjects:             |  |         |       |  |
|      | ct all & enter grade)          |  |         |       |  |
|      | English (HL)                   | Term 2 Grade:                          | %       |       |  |
|      | Afrikaans (FAL)                | Term 2 Grade:                          | %       |       |  |
|      | Core Mathematics               | Term 2 Grade:                          | %       |       |  |
|      | Mathematics Literacy           |  |         |       |  |
|      | Life Orientation               | Term 2 Grade:                          | %       |       |  |
| Cho  | oice Subject Combinations:     |  |         |       |  |
| (Cl  | noose any 4 subjects)          |  |         |       |  |
|      | Business studies               | ☐ Life Sciences                        |         |       |  |
|      | Economics                      | ☐ History                              |         |       |  |
|      | Accounting                     | ☐ Tourism                              |         |       |  |
|      | Physical Sciences              |  |         |       |  |
| Par  | ental Consent:                 |  |         |       |  |
| Here | eby, I/we acknowledge and give | consent to the subject choices for FET | Γ 2023. |       |  |
|      |                                |  |         |       |  |
|      |                                |  |         |       |  |
| Nar  | ne and Signature of Father/Gu  | ardian 1                               |         |       |  |
|      |                                |  |         |       |  |
| Nar  | ne and Signature of Mother/G   | uardian 2                              |         |       |  |
| Apj  | proval: Mr Jacobs (Deputy I    | Principal)                             |         |       |  |